

#### 1.350.000 Units

each unit consisting of two shares of common stock and one redeemable public warrant to purchase one share of common stock

This is a public offering of securities of Flight Safety Technologies, Inc. Our securities are being offered in units, each unit consisting of two shares of our common stock and one public warrant to purchase one share of our common stock. The public warrants will trade only as a part of a unit for 30 days following the effective date of this offering unless the representative of the underwriters determines that separate trading of the public warrants should occur earlier. Each public warrant will entitle its owner to purchase one share of our common stock for \$3.30 per share subject to adjustment, including anti-dilution provisions for corporate events such as stock splits. Each public warrant may be exercised at any time after 30 days from the effective date of this offering or such earlier date as the public warrants become separately tradable and thereafter for five years after the effective date of this offering unless we have redeemed them. At any time after the first anniversary of the date of this offering, we may redeem some or all of the public warrants at a price of \$0.25 per warrant, upon 30 days' notice so long as the last reported sales price per share of our common stock as reported by the principal exchange or trading market on which our common stock trades equals or exceeds \$10.00 for twenty consecutive trading days ending on the tenth day prior to the date we give notice of redemption.

Before this offering, our common stock traded on the National Association of Securities Dealers Over-the-Counter Bulletin Board under the symbol "FSFY." Immediately after effectiveness of this offering, our common stock, units and public warrants have been approved for listing on the American Stock Exchange under the symbols "FLT," "FLT.u," and "FLT.ws," respectively.

The public offering price will be \$6.00 per unit. Unless otherwise indicated, all shares and per-share information in this prospectus gives retroactive effect to a 1-for-3 reverse split of our common stock that was effective December 31, 2003. The public offering price of the units is based on various factors, including the reported sales price per share of our common stock as reported on the Over-the-Counter Bulletin Board, and has been determined by negotiations between us and The Shemano Group, Inc., the representative of the underwriters.

Investing in these units involves significant risks. We urge you to read carefully the "Risk Factors" section beginning on page 6 where we describe specific risks you should consider before buying these units.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Unit	Total
Public offering price	\$6.00	\$8,100,000
Underwriting discount	\$0.45	\$ 607,500
Proceeds to us, before expens	ses \$5.55	\$7,492,500

We expect total cash expenses for this offering to be approximately \$499,500. This does not include a non-accountable expense allowance of 3% of the gross proceeds of this offering payable to The Shemano Group, Inc., as the representative of the underwriters. The units are being offered on a firm commitment basis. The underwriters expect to deliver the units to purchasers on February 4, 2004. We have granted the underwriters a 45-day option to purchase up to 202,500 additional units to cover over-allotments. We have also agreed to sell to the representative underwriters' warrants to purchase up to an additional 135,000 units.

The Shemano Group, Inc. [LOGO]

Prospectus dated January 30, 2004.

# YOUR RELIANCE ON INFORMATION CONTAINED IN THIS PROSPECTUS

We have not authorized anyone to provide you with information different from that contained in this prospectus. These securities may be sold only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the securities. You must not consider that the delivery of this prospectus or any sale of the securities covered by this prospectus implies that there has been no change in our affairs since the date of this prospectus or that the information contained in this prospectus is current or complete as of any time after the date of this prospectus.

# FORWARD-LOOKING INFORMATION

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 prospectus, 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 prospectus should be construed as a guarantee or assurance of future performance or results. These forward-looking statements involve risks and uncertainties, including those discussed in the "Risk Factors" section of this prospectus, which include risks and uncertainties associated with, among other things, the outcome of an informal inquiry by the SEC that appears to be in connection with certain analysts reports about us and our press releases. 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 prospectus 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.
SOCRATES (TM) and UNICORN (TM) are trademarks of ours. This prospectus also refers to trademarks and trade names of other companies and organizations.
PROSPECTUS SUMMARY
You must read the following summary together with the more detailed information regarding us and the securities being offered for sale by means of this prospectus and our financial statements and notes to those statements appearing elsewhere in this prospectus. The following summary highlights information contained elsewhere in this prospectus.
Unless the context indicates otherwise, all references in this prospectus to "we", "our", "us", "FST" or the "company" refer on a consolidated basis to Flight Safety Technologies, Inc., a Nevada corporation, or to its former subsidiary, Flight Safety Technologies Operating, Inc., a Delaware corporation (sometimes referred to as "FSTO") that was merged into FST on June 27, 2003.

Overview

We are developing two proprietary technologies designed to enhance aviation safety and reduce airport delays on which we have received United States and foreign patents.

Using our technology, known as SOCRATES <u>Sensor for Optically Characterizing Remote Atmospheric Turbulence Emanating Sound</u>), we are currently working on development of a sensor to detect and track air disturbances known as wake vortex turbulence, created by departing and arriving aircraft in the vicinity of airports. We are developing this sensor to be a component of a wake vortex advisory system, known as WVAS, that the National Aeronautics and Space Administration, or NASA, is developing. We believe that our SOCRATES wake vortex sensor, upon completion and deployment in concert with other components of WVAS, can:

	Improve	the safety	of aircraft	arrivals	and	departures;
--	---------	------------	-------------	----------	-----	-------------

- ☐ Streamline the air traffic control process;
- ☐ Reduce passenger delays; and
- Generate substantial cost savings for the airline industry and other airport users.

A "proof of principle" test of our SOCRATES wake vortex sensor was conducted at JFK International Airport in May 1998. We completed controlled testing of an expanded and improved SOCRATES wake vortex sensor, using a NASA Boeing 757 as the source aircraft, at Langley Air Force Base in December 2000. In September 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.

We have conducted research, development, and testing of our SOCRATES wake vortex sensor in conjunction with Lockheed Martin Corporation pursuant to a ten-year teaming agreement dated May 1, 1997 under which we are the prime contractor.

We also are developing a collision avoidance and ground proximity warning system for small aircraft based on our technology referred to as UNICORN <u>Universal Collision Obviation and Reduced Near-Miss</u>). We recently received a frequency assignment from the Federal Communications Commission for experimental purposes and development of UNICORN and have signed a contract with Georgia Tech Applied Research Corporation, or GTARC, under which GTARC has commenced work on the construction of our UNICORN antenna elements. We plan to integrate the antenna with electronics, displays, and processing elements into a collision alerting and ground proximity warning system aimed at the general aviation market. We also have begun exploring the application of this technology to unmanned air vehicles and other specialized commercial and government flight operations.

We have been awarded three successive contracts from various federal government agencies aggregating approximately \$13 million for research, development and testing of our SOCRATES wake vortex sensor. We have not had any revenues from commercial sales and we do not expect such sales for several years.

Our principal office is located in Mystic, Connecticut, and our phone number is (860) 245-0191.

### The Offering

Units offered in this offering 1,350,000 units, each unit consisting of two shares of our common

stock and one public warrant to purchase one share of our common stock. The public warrants will trade only as part of a unit for 30 days following the effective date of this offering unless the representative of the underwriters determines that separate trading

of the public warrants should occur earlier.

Common stock to be outstanding after this

offering

8,002,068 shares

Public warrants to be outstanding after this

offering

Public warrants to purchase up to 1,350,000 shares of common

stock.

Term of public warrants The public warrants are exercisable at any time after 30 days from

the effective date of this offering (or such earlier date as the public warrants become separately tradable) until they expire five years from the effective date of this offering, unless earlier redeemed.

Exercise price of public warrants \$3.30

Redemption of public warrants At any time after the first anniversary of the date of this offering,

we may redeem some or all of the public warrants at a price of \$0.25 per warrant, upon 30 days' notice so long as the last reported sales price per share of our common stock as reported by the principal exchange or trading market on which our common stock trades equals or exceeds \$10.00 (subject to certain adjustments) for twenty consecutive trading days ending on the tenth day prior to

the date we give notice of redemption.

American Stock Exchange symbols Common stock: "FLT"

Units: "FLT.u" Public warrants: "FLT.ws"

Risk factors Investing in these securities involves a high degree of risk. As an

investor, you should be able to bear a complete loss of your investment. You should carefully consider the information set forth

in the "Risk Factors" section of this prospectus.

Use of proceeds For general corporate purposes, including working capital, research

and development, product development,

certification/commissioning, marketing and distribution, and new

product development. Please see "Use of Proceeds.'

Unless the context indicates otherwise, all share and per-share information in this prospectus (i) is based on 5,302,068 shares of our common stock outstanding as of January 28, 2004, (ii) assumes no exercise of the public warrants, the over-allotment option to purchase up to 202,500 units, warrants to purchase up to 135,000 units granted to the representative in connection with this offering, outstanding options and warrants to purchase a total of 734,008 shares of common stock, which have a weighted average exercise price of \$6.00 per share, and (iii) gives retroactive effect to a 1-for-3 reverse split of our common stock that was effective December 31, 2003.

4

# **Summary Financial Information**

In the table below, we provide you with historical selected consolidated financial data for the two years ended May 31, 2003 and 2002, derived from our audited consolidated financial statements included elsewhere in this prospectus. We also provide below financial data for, and as of the end of, our second fiscal quarters of 2004 and 2003, derived from our unaudited financial statements included elsewhere in this prospectus. Historical results are not necessarily indicative of the results that may be expected for any future period. When you read this historical selected financial data, it is important that you read along with it the historical consolidated financial statements and related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operation" included elsewhere in this prospectus.

# Six Months Ended

 Year Ended May 31,
 November 30,
 November 30,

 2002
 2003

 2002
 2003 (unaudited)

(unaudited)

(in thousands)

Revenues	\$ 490	\$ 1,093	\$ 40	\$ 1,294
Gross profits	\$ 30	\$ 294	\$ 16	\$ 383
Operating loss	\$ (823)	\$ (948)	\$ (567)	\$ (445)
Net loss	\$ (809)	\$ (944)	\$ (564)	\$ (442)

The table below sets forth a summary of our consolidated balance sheet data as of May 31, 2003, derived from our audited consolidated financial statements included elsewhere in this prospectus. We also provide below financial data for, and as of the end of, our second fiscal quarter of 2004, derived from our unaudited financial statements included elsewhere in this prospectus on an actual basis and on an as adjusted basis. As adjusted data assume the receipt of approximately \$6,750,000 in net proceeds from this offering (excluding proceeds for any election of the overallotment option).

May 31, 2003	<b>November 30, 2003</b>			
	Actual (unaudited)	As adjusted (unaudited)		
	(in thousands)			

#### **Balance Sheet Data:**

Cash, cash equivalents and marketable securities	\$ 1,040	\$ 1,904	\$ 8,654
Working capital	\$ 905	\$ 1,979	\$ 8,729
Total assets	\$ 1,520	\$ 3,025	\$ 9,775
Total stockholders' equity	\$ 1,146	\$ 2,422	\$ 9,172

5

# RISK FACTORS

Investment in our securities involves a high degree of risk. You should carefully consider the risks described below together with all of the other information included in this prospectus before making an investment decision. The risks and uncertainties described below are not the only ones we face. If any of the following risks actually occurs, our business, financial condition or results of operations could suffer. In that case, the trading price of our securities could decline, and you may lose all or part of your investment.

# Risks Related to Our Business

# Our limited operating history and lack of commercial operations make it difficult to evaluate our prospects.

Since we began operations in 1997, we have generated limited revenues solely from three SOCRATES technology research and development contracts with agencies of the federal government that fund, administer, and oversee these contracts. The federal government has funded these contracts from earmarked U.S. Congressional appropriations to agencies that have awarded these contracts to us on a sole source basis without competitive bidding. Under these contracts, we are reimbursed for certain allowable research and development costs and are paid a fee calculated as a percentage of costs.

We have not as yet received any revenue from the sale of any products. We do not anticipate receiving any such revenue unless and until our SOCRATES or UNICORN-based products become operational, which could take several years. Our estimates of the market size for the products we are developing are based on many assumptions and uncertainties. These estimates have not been evaluated by an independent party. The actual markets and price we can charge for our products, if and when we successfully complete their development, could be substantially less and our costs could be greater than our estimates. It therefore is difficult to assess our prospects for commercial sales,

revenues and profitability.

#### We have incurred and, for the next several years, can be expected to incur operating losses.

To date, we have incurred significant net losses, including net losses of \$943,974 for our fiscal year ended May 31, 2003 and \$442,362 for the six months ended November 30, 2003. On May 31, 2003, we had an accumulated deficit of \$2,460,023. We anticipate that we may continue to incur significant operating losses for at least the next several years. We may never generate material revenues or achieve or maintain profitability. Substantially all our revenues have been devoted to payment of costs incurred in the research, development, and testing of our SOCRATES or UNICORN technology. Our ability to achieve, maintain, and/or increase profitability will depend in large part upon the successful further development and testing of our SOCRATES or UNICORN-based products, our ability to procure Congressional appropriations and obtain federal research and development contracts for SOCRATES, our ability to obtain additional financing, FAA approval of our SOCRATES or UNICORN-based products and systems by various agencies of the federal government, acquisition of our products and systems by the FAA, airports and the aviation industry, and the availability of funding to finance such acquisitions.

6

# Lack of future funding from the federal government to complete research and development of our SOCRATES wake vortex sensor could adversely affect our business

Without notice to, or opportunity for prior review by us, the John A. Volpe National Transportation Systems Center of the U. S. Department of Transportation's Research and Special Programs Administration, or Volpe, circulated a draft report in October 2001 which recommended curtailing further government expenditure on our SOCRATES wake vortex sensor due to a high risk assessment of achieving operational feasibility. Because of this report and the events of September 11, 2001, the government did not fund our SOCRATES research and development contract from December 15, 2001 to November 19, 2002. Together with our major subcontractor, Lockheed Martin Corporation, we vigorously disputed and extensively discussed its assertions with Volpe and NASA. To our knowledge, Volpe did not issue a final report, and Volpe and NASA requested and we submitted a proposal for approximately \$2.2 million of additional SOCRATES technology research, development and testing with an immediate objective of better characterizing the wake acoustics and background noise. In November 2002, Volpe approved and funded a work order in the amount of \$1,229,650 for the first phase of this proposal, and in March 2003, a second work order was approved and funded in the amount of \$991,418. On September 19, 2003, we received notice of our third successive sole source contract from Volpe, titled Phase III SOCRATES, for an aggregate of \$3,975,000.

We believe the federal government has indicated a long-term interest in the development of a wake vortex advisory system and our SOCRATES wake vortex sensor for inclusion in such a system. However, the U.S. government may terminate our 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 has in the past delayed or reduced and may in the future delay, reduce, or eliminate funding for research and development of our SOCRATES wake vortex sensor or the wake vortex advisory system as a result of, among other things, a reduction in support or opposition from supervising agencies or the U.S. Congress, changes in budgetary priorities, fiscal constraints caused by federal budget deficits, or decisions to fund competing systems or components of systems. If this occurs, it will reduce our resources available for research and development of our proprietary technologies, new products or enhancements to SOCRATES or UNICORN technologies and to market our products. Reduction of contract funding from the federal government could delay achievement of or increases in profitability, if any, 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.

# The government will not pay us for SOCRATES research and development if we do not perform on our contract.

We perform our government contracts pursuant to specific work orders from the government. Such work orders include, but are not limited to, analysis of data, research, development of our SOCRATES technology, planning and conduct of testing, and preparation of various reports. If we do not perform the contracts in accordance with their terms, the government may withhold payment on our bills that we submit monthly. Furthermore, if at any point the government considers a test to be a failure, it may cease to approve further work orders or fund further contracts. Loss of funding on our SOCRATES contract would have a material adverse effect on our business, financial condition, and results of operations.

# Our success depends on our successful product development and testing.

Our future success will depend upon our ability to successfully complete the development, testing, and commercialization of our technologies and our ability to develop and introduce new products and services to meet industry, government, and client requirements. We are planning to eventually develop a number of products, based on our SOCRATES and UNICORN technologies. The process of developing such products contains significant technological and engineering hurdles and is extremely complex and expensive. In 2001, Volpe and associated federally funded research centers prepared reports which concluded it was unlikely SOCRATES would result in a sensor that could be used for any operational procedure and even for research because of technical unknowns relating to an understanding of wake vortices and the need to obtain acceptance of WVAS by controllers and pilots. We believe this conclusion was premature and based on an incomplete understanding of SOCRATES and its operational potential. In our opinion, the testing and analysis we have conducted has increasingly supported this potential and resulted in the continuation of funding for our government contracts for research, development and testing of our SOCRATES technology. However, there still are technical, engineering and program integration hurdles we must meet to develop SOCRATES into an operational sensor, including, but not limited to, expanding the sensor to at least 16 laser beams, integrating the sensor into and with the other components of WVAS, and developing operating protocols for WVAS that define how it would be used by air traffic controllers and pilots. In the case of UNICORN, we must successfully overcome development, engineering and testing hurdles to produce an operational product and obtain FAA approval of this product. Furthermore, we will need to extend the term of the experimental license the FCC has granted us and, ultimately, obtain a permanent license from the FCC for the operation of UNICORN. We might not successfully complete the developm

In addition, certain of our products will require customized installation to address unique characteristics of their environments. Customization could place an additional burden on our resources or delay the delivery or installation of products which, in turn, could have a material adverse effect on our relationship with clients, our business, financial condition, and results of operations.

# Our success depends on federal government approval of our products and related systems.

The airport and aviation industry is subject to extensive government oversight and regulation. To introduce our SOCRATES and UNICORN-based products for commercial sale, we must successfully complete research, development, and testing and obtain necessary governmental approvals for their installation. Upon approval by the Federal Aviation Administration, or FAA, our SOCRATES wake vortex sensor would be part of a multi-component wake vortex advisory system that also will require government approvals before it can be deployed. Any factor that delays or adversely affects this approval process, including delays in development or inability to obtain necessary government approvals, could have a material adverse effect on our business, financial condition, and results of operations.

# Our business relies on a strategic alliance with Lockheed Martin Corporation and others to develop a complete system.

In May 1997, we signed a Teaming Agreement with Lockheed Martin Corporation to jointly develop and market SOCRATES-based products. This agreement will expire in May 2007, unless certain earlier termination provisions occur or the agreement is extended by mutual agreement. The agreement stipulates that we serve as prime contractor and Lockheed Martin Corporation as subcontractor in the development and any deployment of our SOCRATES wake vortex sensor. Although to date we have generally worked in close cooperation with Lockheed Martin Corporation, there is no assurance that this relationship will be sustained. Future disagreements as to work scope, revenue share, profit margins, ownership of intellectual property, or technical, marketing, or management philosophy, could adversely impact the relationship. Since we view our strategic partnership with Lockheed Martin Corporation as a vital element of our business plan, any erosion of this relationship could have a negative impact on our business and future value.

8

# We may need to raise additional capital.

Given the uncertainties of research and development and the timing of commercialization of our SOCRATES and UNICORN-based products, the availability and level of government funding, the FAA approvals required for our products, and the long sales cycle from initial customer contact to actual, if any, revenue generation, we might not be able to generate sufficient, if any, revenue or investment capital to fund our operations over the period of years we believe are required to commercialize our products. In each of our last three fiscal years, we have suffered substantial operating losses which we have funded, in part, with equity capital that we raised from new investors.

We will continue to incur significant expenses for research and development and testing of our SOCRATES and UNICORN technology and may continue to suffer such losses prior to commercialization and thereafter. If we cannot achieve commercialization of our SOCRATES and UNICORN technologies with the proceeds of this offering or if we are unable to generate sufficient working capital from revenue from government funding or private contracts for these purposes, we would need to seek additional capital. In addition, other unforeseen costs and research and development costs of later generation SOCRATES and UNICORN-based products also could require us to seek additional capital. We do not have any credit facilities in place and, should the need for additional capital arise, we may not be able to obtain sufficient, if any, additional capital or raise such capital on acceptable terms. If we need to obtain additional debt or equity capital, it may include our entry into joint ventures or issuance of additional securities, which may cause dilution to our current capital structure and stockholders' ownership. Additional securities also could have a greater priority as to dividends, distributions and other rights than our common stock.

For the life of the public warrants, underwriter's warrants, and existing warrants, the holders thereof are given the opportunity to profit from a rise in the market for our common stock, with a resulting dilution in the interest of all other stockholders. So long as these warrants are outstanding, the terms on which we could obtain additional capital may be adversely affected. The holders of these warrants might be expected to exercise them at a time when we would, in all likelihood, be able to obtain any needed capital by a new offering of securities on terms more favorable than those provided by these warrants.

# Loss of key personnel could adversely affect our business.

Our future success depends to a significant degree on the skills, experience and efforts of our executive officers, Samuel A. Kovnat, Chairman of the Board and Chief Executive Officer, William B. Cotton, President and Director, Frank L. Rees, Executive Vice President and Director, and David D. Cryer, Chief Financial Officer, Treasurer and Secretary. The sustained unavailability of any one or more of those individuals for any reason could have a material adverse impact on our operations and prospects. We anticipate hiring additional executive officers in the future. We may not be able to complete the hiring of these additional officers in a timely manner or at all. We also depend on the ability of our executive officers and other members of senior management to continue to work effectively as a team.

### Government regulation could adversely affect our business.

As a result of receiving contract funding from the federal government and our involvement in the field of aviation, 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, or DCAA. To date, we have incurred four audits by the DCAA, and reports have been issued to our government customer which have stated that we are performing in accordance with Federal Acquisitions Regulations. There is no assurance that any of the results or contents of any future audits will portray us favorably. These rules and regulations are complex in nature and sometimes difficult to interpret or apply. Adherence to these rules is reviewed by participating agencies of the federal government. If such agencies suspect or believe that violations of procurement or accounting rules and regulations have occurred, they may refer such matters to other enforcement divisions of the federal government, such as the U.S. Attorney's Office or the Inspector General's office. If we violate these rules and regulations, even if unintentionally, we may have to pay fines and penalties or, in severe cases, could be terminated from receiving further funding from the federal government. If we market, sell and install our products in foreign countries, the laws, rules and regulations of those countries, as well as certain laws of the United States, will apply to us. Existing as well as new laws and regulations of the United States and foreign countries which regulate aviation and airports could also adversely affect our business.

# Our success depends on our ability to protect our proprietary technology.

Any failure by us to protect our intellectual property could harm our business and competitive position. For example, although we have sought patent protection for our technologies, the steps we have taken or intend to take with regard to protecting our technologies may not be adequate to defend and prevent misappropriation of our technology, including the possibility of reverse engineering and the possibility that potential competitors will independently develop technologies that are substantially equivalent or superior to our technology. Furthermore, any patent we have obtained or may obtain may subsequently be invalidated for any of a variety of reasons. In addition, even if we are issued a patent, we may not be able to gain any commercial advantage from such patent. Existing United States laws afford only limited intellectual property protection.

We intend to use a combination of patent, trade secret, copyright and trademark law, nondisclosure agreements, and technical measures to protect our proprietary technology. We intend to enter into confidentiality agreements with and obtain assignments of intellectual property from all of our employees, as well as with our clients and potential clients, and intend to limit access to and distribution of our technology, documentation and other proprietary information. However, the steps we take in this regard may not be adequate to deter misappropriation or independent third-party development of our technology. In addition, the laws of some foreign countries do not protect proprietary technology rights to the same extent as do the laws of the United States. If we resort to legal proceedings to enforce our intellectual property rights, the proceedings could be burdensome and expensive and could involve a high degree of risk to our proprietary rights if we are unsuccessful in such proceedings. Moreover, our financial resources may not be adequate to enforce or defend our rights in our technology. Additionally, any patents that we apply for or obtain may not be broad enough to protect all of the technology important to our business, and our ownership of patents does not in itself prevent others from securing patents that may block us from engaging in actions necessary to our business, products, or services.

# Other companies may claim that we infringe their intellectual property or proprietary rights.

If our proprietary technology violates or is alleged to violate third party proprietary rights, we may be required to reengineer our technology or seek to obtain licenses from third parties to continue offering our technology without substantial reengineering. Any such efforts may not be successful or if successful could require payments that could have a material adverse effect on our profitability and financial condition. Any litigation involving infringement claims against us would be expensive and time-consuming, and an adverse outcome may result in payment of damages or injunctive relief that could materially and adversely affect our business.

10

# We have received notice claiming that our name infringes upon the trademark rights of another company.

We have received notice, from counsel at another company, claiming that our name infringes upon the trademark rights of the other company regarding its name. Our patent and trademark counsel has reviewed this claim and believes it is without merit. Our counsel has notified the other company of our position, the reasons that support our position, and that we do not intend to change our name. We have not received any response. We believe that if the other company pursues this claim, we may be able to favorably resolve it and, if it is necessary to litigate the claim, we believe the result would be favorable to us. However, any such litigation could be costly to us and divert management's time and attention away from our business. Furthermore, we cannot exclude the possibility of an adverse outcome that could require us to pay damages and change our name.

# Our future customers, including the FAA, may not accept the price of or be able to finance our products.

At present, we cannot precisely fix a price for the sale and installation of an initial SOCRATES wake vortex sensor at airports or UNICORN-based collision avoidance systems in small aircraft. We estimate that the cost of our SOCRATES wake vortex sensor will be \$6 million to \$15 million per airport installation, depending on, among other things, the number and configuration of runways, and the wholesale price of a UNICORN-based system will be approximately \$10,000 per aircraft. Because we have not completed the research, development, and testing of either product or received final approvals for either of them from the federal government, we have not commenced production or marketing efforts. We currently do not anticipate having these products ready for commercial sale for at least several years. We therefore are not yet in a position

to gauge the reaction of potential customers to the pricing of these products or future products and whether such potential customers will be able to afford and finance our products.

We believe that the increase in efficiency and safety to airports, airlines, and private aircraft resulting from our products will justify the substantial anticipated cost of sales and installation of these products. However, our customers' ability to afford such costs will depend, in part, on the health of the overall economy, the financial condition and budget priorities of the federal government, particularly the FAA and NASA, profitability of airports, airlines, and aircraft manufacturers, and the availability of private and government sources of funding to finance the sales and acquisition of our products. While a variety of potential funding sources exist, inability of the FAA, airlines or airports to access or obtain funding for purchase and installation of our products could have a material adverse impact on sales of our SOCRATES or UNICORN-based products.

### We may experience long sales cycles.

We expect to experience long time periods between initial sales contacts and the execution of formal contracts for our products and completion of product installations. The cycle from first contact to revenue generation in our business involves, among other things, selling the concept of our technology and products; developing and implementing a pilot program to demonstrate the capabilities and accuracy of our products; negotiating prices and other contract terms; and, finally, installing and implementing our products on a full-scale basis. We anticipate this cycle will entail a substantial period of time, on average between seven to twelve months, and the lack of revenue experienced during this cycle and the expenses involved in bringing new sales to the point of revenue generation would put a substantial strain on our resources.

### Our success will depend on our ability to create effective sales, marketing, production and installation forces.

At present and for the near future, we will depend upon a relatively small number of employees and subcontractors to complete the research and development of our SOCRATES wake vortex sensor and pursue research and development of other SOCRATES and UNICORN-based products. The marketing and sales of these products will require us to find additional capable employees or subcontractors who can understand, explain, market, and sell our technology and products to airports, airlines, and airplane manufacturers. We also will need to assemble new personnel and/or contractors for production and installation of our products. Upon successful completion of research and development, these demands will require us to rapidly increase the number of our employees, vendors, and subcontractors. There is intense competition for capable personnel in all of these areas, and we may not be successful in attracting, integrating, motivating, or retaining new personnel, vendors, or subcontractors for these required functions.

11

### Our business could be adversely affected if our products fail to perform properly.

Products and systems as complex as ours may contain undetected errors or "bugs," which result in system failures, or failure to perform in accordance with industry expectations. Despite our plans for quality control and testing measures, our products including any enhancements may contain such bugs or exhibit performance degradation, particularly during the early stages of installation, and deployment. Product or system performance problems could result in loss of or delay in revenue, loss of market share, failure to achieve market acceptance, adverse publicity, injury to our reputation, diversion of development resources and claims against us by governments, airlines, airline customers, and others.

# We could be subject to liability claims relating to malfunction of our technology.

Sale of our products will depend on their ability to improve airport, airline, and airplane safety and efficiency. We will take great care to test our products and systems after installation and before actual operation to insure accuracy and reliability. The FAA acquires air traffic control equipment for U.S. airports, and typically assumes the principal product liability risk for such equipment. However, unforeseen problems, misuse, or changing conditions could cause our products and systems to malfunction or exhibit other operational problems. Such problems could cause, or be perceived to cause, airplane accidents, including passenger fatalities. We may receive significant liability claims if governments, airlines, airports, passengers and other parties believe that our systems have failed to perform their intended functions. Liability claims could require us to spend significant time and money in litigation, pay substantial damages, and increase insurance premiums, regardless of our responsibility for such failure. Although we plan to maintain liability insurance, such coverage may not continue to be available on reasonable terms or be available in amounts sufficient to cover one or more large claims, and the insurer may disclaim coverage as to any claim.

# We face significant competition from other companies.

The air safety systems and air traffic control industries are already highly competitive. Other industry participants could develop or improve their own systems to achieve the cost efficiencies and value that we believe our products will provide upon successful completion of research and development. Additional companies may enter the market with competing systems as the size and visibility of the market opportunity increases. Many of our potential competitors have longer operating histories, greater name recognition, substantially greater financial, technical, marketing, management, service, support, and other resources than we do. Therefore, they may be able to respond more quickly than we can to new or changing opportunities, technologies, standards, or customer requirements.

New products or technologies will likely increase the competitive pressures that we face. Increased competition could result in pricing pressures, reduced margins, or the failure of our products to achieve or maintain market acceptance. The development of competing products or technologies by market participants or the emergence of new industry or government standards may adversely affect our competitive position. As a result of these and other factors, we may be unable to compete effectively with current or future competitors. Such inability would likely have a material adverse effect on our business, financial condition, or results of operations.

# Rapid technological change could render our systems obsolete.

Our business in general is characterized by rapid technological change, frequent new product and service introductions and enhancements, uncertain product life cycles, changes in customer requirements, and evolving industry standards which make us susceptible to technological obsolescence. The introduction of new products embodying new technologies, the emergence of new industry standards, or improvements to existing technologies could render our products and systems obsolete or relatively less competitive. Our future success will depend upon our ability to continue to develop and introduce a variety of new products and to address the increasingly sophisticated needs of our customers. We may experience delays in releasing new products and systems or enhancements in the future. Material delays in introducing new products and systems or enhancements may cause customers to forego purchases of our products and systems and purchase products and systems of competitors instead.

12

# Failure to properly manage growth could adversely affect our business.

To implement our strategy, we believe that we will have to grow rapidly. Rapid growth may strain our management, financial, and other resources. To manage any future growth effectively, we must expand our sales, marketing, production, installation, and customer support organizations, invest in research and development of new products or enhancements to existing systems that meet changing customer needs, enhance our financial and accounting systems and controls, integrate new personnel or contractors, and successfully manage expanded operations. We may not be able to effectively manage and coordinate our growth so as to achieve or maximize future profitability.

# We must hire and retain skilled personnel.

Our success depends in large part upon our ability to attract, train, motivate, and retain highly skilled employees, particularly sales and marketing personnel, scientists, engineers, and other technical support personnel. Our failure to attract and retain the highly trained technical personnel that are integral to our direct sales, product development, installation, support, and professional services may limit the rate at which we can generate sales or develop new products or system enhancements, which could have a material

adverse effect on our business, financial condition, or results of operations.

#### Any acquisition we make could disrupt our business and harm our financial condition.

We may attempt to acquire businesses or technologies that we believe are a strategic fit with our business. We currently have no commitments for any acquisition. Any future acquisition may result in unforeseen operating difficulties and expenditures, and may absorb significant management attention that would otherwise be available for ongoing development of our business. Since we may not be able to accurately predict these difficulties and expenditures, these costs may outweigh the value we realize from a future acquisition. Future acquisitions could result in issuances of equity securities that would reduce our stockholders' ownership interest, the incurrence of debt, contingent liabilities, amortization of expenses related to other intangible assets and the incurrence of large, immediate write-offs.

You should carefully read and evaluate this entire prospectus including the risks it describes and not consider or rely upon any statement, information or opinion about us that is not contained in this prospectus.

Certain statements, information and opinions about us have appeared and may continue to appear in published news reports, analysts reports, other media sources and our web site. Some of the information contained in these reports or sources was not material to understanding our business or was out of date, erroneous or inconsistent with that disclosed in this prospectus. In making a decision to invest in the units, you should not rely upon any of these statements, information or opinions and should only rely upon, consider and carefully evaluate the information and risks contained in this prospectus.

### We currently are involved in an informal SEC investigation.

We recently learned that the staff of the SEC is conducting an informal investigation that appears to be looking into certain analyst reports about us and our press releases. To date, the SEC staff has not asserted that we have acted improperly or illegally. We have voluntarily agreed to cooperate fully with the staff's informal investigation. We believe that we have acted properly and legally with respect to these analyst reports and our press releases. However, we can neither predict the length, scope, or results of the informal investigation nor its impact, if any, on us or our operations. An adverse outcome, which we cannot predict, could negatively impact the market value of any securities we offer and sell under this prospectus and could divert the efforts and attention of our management team from our ordinary business operations.

13

### Risks Related to Investment in Our Securities

#### The price of our securities could be volatile and subject to wide fluctuations.

The market price of the securities of a pre-commercial, research and development stage aviation technology company, such as ours, can be especially volatile. Thus, the market price of our securities could be subject to wide fluctuations. In fact, the trading volume and price of our shares have fluctuated greatly. Subject to the information set forth in this prospectus, we are unaware of any specific reasons for this volatility and cannot predict whether or when it will continue.

If our revenues do not grow or grow more slowly than we anticipate, we are unable to procure federal contracts for our SOCRATES wake vortex sensor research and development, we encounter technical or engineering obstacles to the successful commercial development of SOCRATES or UNICORN, operating or capital expenditures exceed our expectations and cannot be adjusted accordingly, or if some other event adversely affects us, the market price of our securities could decline. In addition, if the market for aviation technology stocks or the stock market in general experiences a loss in investor confidence or otherwise fails, the market price of our securities could fall for reasons unrelated to our business, results of operations, and financial condition. The market price of our securities also might decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. Furthermore, the sale in the open market of recently sold securities or newly issued securities, which we may sell from time to time to raise funds for various purposes, and securities issuable upon the exercise of purchase rights under existing options and warrants may place downward pressure on the market price of our securities.

Speculative traders may anticipate a decline in the market price of our securities and engage in short sales of our securities. Such short sales could further negatively affect the market price of our securities.

Companies that have experienced volatility in the market price of their stock have been the subject of securities class action litigation. If we were to become the subject of securities class action litigation, it could result in substantial costs and a diversion of management's attention and resources.

# The representative has limited experience as a managing underwriter.

Although certain officers of the representative have experience working on public offerings and other corporate finance matters, the representative has limited experience serving as a managing underwriter. Since the representative's experience in underwriting a firm commitment public offering is limited, there can be no assurance that the lack of experience will not adversely affect our securities and the subsequent development, if any, of a trading market in such securities.

# An active trading market for our securities may not be developed or sustained which could limit the liquidity of an investment in our securities.

There is a limited trading market for our securities. From January 2002 through January 29, 2004, our common stock traded on the OTC Bulletin Board, an inter-dealer automated quotation system for equity securities. The units, shares and public warrants we sell in this offering, together with the shares that formerly traded on the OTC Bulletin Board, have been approved for listing on the American Stock Exchange. There is no assurance that we will be able to continue to meet the listing requirements and that our securities will remain listed on the American Stock Exchange. If we are delisted from the American Stock Exchange, an investor could find it more difficult to dispose of, or to obtain accurate quotations as to the market value of, our securities. Additionally, regardless of which exchange our securities may trade on, an active and liquid trading market may not develop or, if developed, may not be sustained, which could limit securityholders' ability to sell our securities at a desired price.

# If any of our securities are delisted from the American Stock Exchange, we may be subject to the risks relating to penny stocks.

If any of our securities were to be delisted from trading on the American Stock Exchange and the trading price of such security remains below \$5.00 per share on the date such security was delisted, trading in such security would also be subject to the requirements of certain rules promulgated under the Securities Exchange Act of 1934. These rules require additional disclosure by broker-dealers in connection with any trades involving a security defined as a penny stock and impose various sales practice requirements on broker-dealers who sell penny stocks to persons other than established customers and accredited investors, generally institutions. The additional burdens imposed upon broker-dealers by such requirements may discourage broker-dealers from effecting transactions in our securities, which could severely limit the market price and liquidity of such securities and the ability of purchasers to sell our securities in the secondary market. A penny stock is defined generally as any non-exchange listed equity security that has a market price of less than \$5.00 per share, subject to certain exceptions.

### A large number of shares may be sold in the market following this offering which may cause the price of our securities to decline.

Sales of a substantial number of shares of our common stock or other securities in the public markets, or the perception that these sales may occur, could cause the market price of our common stock or other securities to decline and could materially impair our ability to raise capital through the sale of additional securities. After this offering, we will have 8,002,068 shares of our common stock outstanding (including shares of our common stock comprising a part of the units that are the subject of this offering but excluding shares of our common stock issuable upon exercise of the public warrants comprising a part of those units), or 8,204,568 shares (including shares of our common stock comprising a part of the units that are the subject of this offering but excluding shares of our common stock issuable upon exercise of the public warrants comprising a part of those units) if the underwriters' over-allotment is exercised in full. We anticipate 5,703,581 of the shares will have been registered and eligible for public trading. The 1,350,000 units sold in this offering, or 1,552,500 units if the underwriters' over-allotment is exercised in full, will be freely tradable without restriction or further registration under the federal securities laws unless purchased by our affiliates. Not included in the foregoing are 125,677 shares of our common stock that we may register for certain of our stockholders.

Of the remaining 5,302,068 shares of our common stock outstanding after this offering, based upon shares currently outstanding, and assuming no exercise of options or warrants outstanding as of such date prior to completion of this offering, 1,179,295 shares are subject to contractual lock-up agreements with The Shemano Group, Inc., pursuant to which the holders of such shares have agreed not to sell their shares for 90 days after the effective date of this offering. Of the remaining shares, unless held by "affiliates," 1,021,150 will be freely tradable after September 1, 2004 and 98,042 will be freely tradable after June 27, 2005.

# Certain events could result in a dilution of your ownership of our common stock.

We currently have 5,302,068 shares of common stock outstanding and 734,008 common stock equivalents outstanding, including warrants and options. The exercise price of all common stock equivalents is \$6.00 per share. Some of these warrants and options may provide antidilution protection to their holders which would result in our issuance of shares in addition to those under the warrant or option, upon the occurrence of sales of our common stock below certain prices, stock splits, redemptions, mergers, and other similar transactions. Furthermore, from time to time we may issue additional shares of common stock in private or public transactions to raise funds for working capital, research and development, acquisitions, or other purposes. If one or more of these events occurs, the number of outstanding shares of our common stock would increase and dilute your percentage ownership of our common stock.

15

# If we do not maintain an effective registration statement or comply with applicable state securities laws, you may not be able to exercise the public warrants.

For you to be able to exercise the public warrants, the shares of our common stock underlying the public warrants must be covered by an effective and current registration statement and qualify or be exempt under the securities laws of the state or other jurisdiction in which you live. We cannot assure you that we will continue to maintain a current registration statement relating to the shares of our common stock underlying the public warrants or that an exemption from registration or qualification will be available throughout their term. This may have an adverse effect on demand for the public warrants and the prices that can be obtained from reselling them.

# The public warrants may be redeemed on short notice. This may have an adverse impact on their price.

We may redeem the public warrants for \$0.25 per warrant, subject to adjustment in the event of a stock split, dividend or the like, upon 30 days' notice so long as the last reported sale price per share of our common stock as reported by the principal exchange or trading market on which our common stock trades equals or exceeds \$10.00 (subject to adjustment) for twenty consecutive trading days ending on the tenth day prior to the date we give notice of redemption. If we give notice of redemption, holders of our public warrants will be forced to sell or exercise the public warrants they hold or accept the redemption price. The notice of redemption could come at a time when, under specific circumstances or generally, it is not advisable or possible to sell or exercise the public warrants.

# Our officers, directors and 5% stockholders will exercise significant control over us.

Our current officers, directors and 5% stockholders, in the aggregate, control approximately 35.5% of our outstanding common stock prior to this offering (including common stock issuable to such person or group within 60 days after January 28, 2004). As a result, these stockholders acting together will be able to exert significant control over matters requiring stockholder approval, including the election of directors, approval of mergers, and other significant corporate transactions. This concentration of ownership could delay, prevent, or deter a change in control, and could deprive our stockholders of an opportunity to receive a premium for their stock as part of a sale of us and could affect the market price of our stock.

# We do not intend to pay cash dividends.

We have never paid cash dividends on our stock and do not anticipate paying any cash dividends in the foreseeable future.

# We may spend the offering proceeds in ways with which our stockholders may not agree.

The use of proceeds from this offering reflects our current planning and is only an estimate that is subject to change in our discretion. Furthermore, a substantial portion of the net proceeds from this offering is not allocated for specific uses. Consequently, our management can spend offering proceeds in ways with which our stockholders may not agree. We cannot predict that the proceeds will be invested or otherwise utilized to yield a favorable return. See "Use of Proceeds."

We expect to use the net proceeds of this offering approximately as follows:

Use of Proceeds		Approximate Amount	Approximate Percentage of Net Proceeds
Research and development		\$1,350,000	20%
Product development		1,250,000	19%
FAA certification/commissioning		1,250,000	19%
Marketing and distribution		400,000	6%
New product development		400,000	6%
Other working capital/general corporate purposes		2,100,000	30%
	TOTAL:	\$ <u>6,750,000</u>	<u>100%</u>

We intend to use the net proceeds of this offering to develop our proprietary SOCRATES technology as follows:

- Acceleration of research and development to reach the operation readiness date for our SOCRATES wake vortex sensor sooner than with government funding alone;
- Integration of our SOCRATES wake vortex sensor with other weather measurement, prediction and alerting tools into a full wake vortex advisory system;
- Performance of operational trials of a wake vortex advisory system required for FAA commissioning and site adaptation of such systems, including our SOCRATES wake vortex sensor, for individual airport sales;
  - □ Worldwide promotion and marketing of a wake vortex advisory system containing our SOCRATES wake vortex sensor; and
  - Investigation and preliminary design of other new products employing our SOCRATES technology, for both aircraft and airport use.

We intend to use the net proceeds of this offering to develop our proprietary UNICORN technology as follows:

- Acceleration of research and development to reach FAA certification sooner than with presently available funding;
- ☐ Integration of our UNICORN antenna subsystem with existing and new displays and alerting devices, and threat logic software;
- ☐ Performance of FAA tests required for certification of a UNICORN-based product for general aviation aircraft;
- ☐ Internal efforts plus partnering arrangements with avionics and aircraft manufacturers; and
- Shared funding efforts with government agencies to develop our UNICORN technology for unmanned air vehicles and other specialized government applications.

The above amounts are our current estimate of the allocation of the net proceeds. Because the future of our business is difficult to predict, it is likely that the actual amounts used for these purposes will vary significantly from our current estimates. Also, we may use offering proceeds for purposes not listed above in response to cash requirements or business opportunities that we do not now anticipate. In particular, we may use offering proceeds to acquire other businesses or technologies. Any such use could reduce proceeds available for the uses described above. Although we evaluate potential acquisitions in the ordinary course of business, we have no specific understandings, commitments or agreements to make any acquisition or investment at this time.

We anticipate that the net proceeds of this offering, together with projected government contract funding, will be sufficient to fund our operations and capital requirements for at least 24 months following this offering. We cannot assure you, however, that such funds will not be expended earlier due to unanticipated changes in economic conditions or other circumstances that we cannot foresee. In the event our plans change or our assumptions change or prove to be inaccurate, we could be required to seek additional financing sooner than currently anticipated.

Until we use the net proceeds of this offering in our business, we intend to invest the funds in short-term, investment grade, interest-bearing securities. We cannot predict whether the proceeds invested will yield a favorable return.

17

# DIVIDEND POLICY

restrictions, business prospects, and other factors that our Board of Directors considers relevant.

#### CAPITALIZATION

The following table sets forth our capitalization as of May 31, 2003, derived form our audited consolidated financial statements found elsewhere in this prospectus. The table also sets forth our capitalization as of November 30, 2003, derived from our unaudited consolidated financial statements found elsewhere in this prospectus on an actual basis and on an as adjusted basis. As adjusted data assume the receipt of \$6,750,000 in net proceeds from this offering.

May 31, 2003	<b>November 30, 2003</b>					
	Actual (unaudited)	As adjusted (unaudited)				
(in thousar	ıds, except per s	hare data)				

Notes Payable	\$ <u> </u>		\$ 
Stockholders equity (deficit)			
Preferred stock, \$0.001 par value; 5,000,000 shares authorized; no shares issued and outstanding Common stock, \$0.001 par value; 50,000,000 shares authorized; 4,919,035 and 5,300,413 shares issued and outstanding at May 31, 2003 and November 30, 2003, respectively	15	5	8
Additional paid-in capital	3,687	5,398	12,145
Deferred compensation	(96)	(79)	(79)
Accumulated deficit	(2,460)	(2,902)	(2,902)
Total stockholders' equity	<u>1,146</u>	2,422	<u>9,172</u>
Total capitalization	\$ <u>1,146</u> \$	2,422	\$ <u>9,172</u>

# DILUTION

Purchasers of units in this offering will experience immediate and substantial dilution in the net tangible book value of the common stock from the public offering price, without ascribing any value to the warrant included in a unit. Net tangible book value per share represents the amount of our tangible assets reduced by the amount of our total liabilities, divided by the number of shares of common stock outstanding.

As of November 30, 2003, our net tangible book value (unaudited) was \$2,277,897, or approximately \$0.42 per share of common stock then outstanding. As of November 30, 2003, our pro forma net tangible book value (unaudited), as adjusted for the sale of the 1,350,000 units offered in this offering and application of the net proceeds of \$6,750,000 (at the public offering price of \$6.00 per unit and after deducting the underwriting discounts and commissions and estimated offering expenses), would have been approximately \$2.50 per share, without ascribing any value to the warrant included in a unit.

This represents an immediate increase in net tangible book value of \$0.71 per share to existing shareholders and an immediate and substantial dilution of \$1.87 per share or approximately 62.3% to new investors purchasing common stock in this offering.

18

The following table illustrates this per share dilution:

	Per Share of Common Stock
Public offering price per share of common stock	\$3.00
Net tangible book value (unaudited) as of November 30, 2003	0.42
Increase attributable to new investors	0.71
Pro forma net tangible book value (unaudited) after this offering	<u>1.13</u>
Dilution of net tangible book value to investors in this offering	\$ <u>1.87</u>

The following table summarizes on a pro forma basis, as of January 28, 2004 (giving retroactive effect to our 1-for-3 reverse stock split that was effective December 31, 2003), (i) the number of shares of common stock purchased from us, (ii) the total consideration paid for such shares (without ascribing any value to the warrant included in a unit) and (iii) the average price per share paid by existing holders of our common stock, and investors in this offering, assuming the sale of all 2,700,000 shares offered by this prospectus of common stock at the price indicated above and before deducting any underwriting discounts and offering expenses payable by us.

	Share	<b>Shares</b>		<b>Total Consideration</b>		
	<u>Number</u>	Percent	Amount	Percent	<u>per Share</u>	
Existing Shareholders New Investors Total	5,302,068 <u>2,700,000</u> <u>8,002,068</u>	66.26% 33.74% 100.00%	\$ 5,403,556 <u>8,100,000</u> \$ <u>13,503,556</u>	40.02% 59.98% 100.00%	\$1.02 3.00 \$1.69	

TTL - -1----- d!-----!-- --- d z-1-1-- ----1--d--

The above discussion and tables exclude:

- 202,500 shares of common stock issuable upon exercise of the underwriters' over-allotment option;
- 1,485,000 shares of common stock issuable upon the exercise of public warrants and the underwriters' warrants; and
- 734,008 shares of common stock reserved for issuance upon exercise of outstanding warrants and options.

# MARKET FOR COMMON STOCK AND RELATED STOCKHOLDER MATTERS

# **Market Information**

On January 14, 2002, our common stock became eligible to trade on the NASD Over-the-Counter Bulletin Board, or OTCBB, under the symbol RELS. No reported trades of the stock on the OTCBB occurred prior to July 21, 2002. Effective September 6, 2002, the symbol changed to FLST. Effective December 31, 2003, the symbol changed to FSFY as a result of our 1-for-3 reverse stock split that was effective December 31, 2003. As of January 28, 2004, we had 5,302,068 shares of common stock outstanding, of which 3,003,581 shares traded on the OTCBB and in Europe on the Berlin Stock Exchange under the symbol "FLH." We have sent notice to the Berlin Stock Exchange to delist our shares from that exchange and intend to achieve this de-listing as soon as practical. The following chart shows the high and low sales price of our common stock for each of our fiscal quarters since public trading started as quoted on the OTCBB and for the period ending on the day prior to the date of this prospectus (giving retroactive effect to the reverse stock split):

Fiscal Quarter/Period Ended	High	Low
8/31/02	\$10.50	\$5.25
11/30/02	\$6.90	\$4.23
2/28/03	\$6.72	\$2.70
5/31/03	\$3.00	\$1.74
8/31/03	\$18.72	\$2.22
11/30/03	\$9.90	\$6.36
1/29/04	\$7.95	\$3.00

19

The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission, and may not represent actual transactions.

As of January 28, 2004, we had 120 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**

The table below provides information relating to our equity compensation plans as of January 28, 2004.

Plan category	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			
Equity compensation plans not approved by security holders	632,951	\$6.00	(a)

(a) The equity compensation plan not approved by shareholders is comprised of individual common stock option agreements issued to directors, consultants and employees of ours, as summarized below. 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 all current outstanding options is \$6.00 per share. Since these options are issued in individual compensation arrangements, there are no options available under any plan for future issuance.

Options issued to:	Number of options	Exercise price	Vesting dates	Expiration dates
Employees	104,167	\$6.00	2002	2005
Consultants	278,784	\$6.00	2002	2005
Directors	<u>250,000</u>	\$6.00	2002-2005	2005-2008
Total issued	632,951			

# SELECTED CONSOLIDATED FINANCIAL DATA

In the table below, we provide you with historical selected consolidated financial data for the two years ended May 31, 2003 and 2002, derived from our audited consolidated financial statements included elsewhere in this prospectus. We also provide below financial data for, and as of the end of, our second fiscal quarter of 2004, derived from our unaudited financial statements included elsewhere in this prospectus on an actual basis and on an as adjusted basis. As adjusted data assume the receipt of approximately \$6,750,000 in net proceeds from this offering. Historical results are not necessarily indicative of the results that may be expected for any future period or for a full year. When you read this historical selected financial data, it is important that you read along with it the historical consolidated financial statements and related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

(in thousands)

_		

	<u>Ye</u>	ar Ende	ed May	<u>v 31,</u>		<u>Six Montl</u> November		_
	_2	002		003_		<u>etual</u> udited)		<u>djusted</u> udited)
Statement of Operations Data:								
Revenues	\$	490	\$	1,093	\$	1,294	\$	1,294
Gross profits	\$	30	\$	294	\$	383	\$	383
Operating loss	\$	(823)	\$	(948)	\$	(445)	\$	(445)
Net loss	\$	(809)	\$	(944)	\$	(442)	\$	(442)
	<u>N</u>	<u> Iay 31, 2</u>	<u>2003</u>		No	vember 30	, 2003	
				(u	Actual naudite			<u>ljusted</u> udited)
<b>Balance Sheet Data:</b>								
Cash, cash equivalents and marketable securities	\$		1,040	\$		1,904	\$	8,654
Working capital	\$		905	\$		1,979	\$	8,729
Total assets	\$		1,520	\$		3,025	\$	9,775
Total stockholders' equity	\$		1,146	\$		2,422	\$	9,172

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

You should read the following discussion of our financial condition and results of operations in conjunction with the financial statements and the notes to those statements included elsewhere in this prospectus. This discussion may contain forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, such as those set forth under "Risk Factors" and elsewhere in this prospectus.

# Overview

Our current operations, including those previously conducted by FSTO, our former subsidiary, have been funded substantially by U.S. Congressional appropriations resulting in three 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 known as WVAS, that the FAA and NASA are developing. We estimate the appropriations to the FAA totaled approximately \$9.6 million in our fiscal years 1997 through 2000 for research and development of our SOCRATES wake vortex sensor; and NASA appropriations for research and development of our SOCRATES wake vortex sensor totaled approximately \$13.5 million in our fiscal years 2001 through 2003. From these amounts, we have received three contracts aggregating approximately \$13 million. As of November 30, 2003, we have recognized an aggregate of approximately \$9.2 million of contract revenue, of which we have been paid \$8.8 million. Our current SOCRATES government contract backlog is approximately \$3.9 million.

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 costs plus a fixed fee for that month and typically receive payment by electronic wire transfer within two weeks of invoicing. Certain costs we incur, such as (1) lobbying, product development, and business development expenses that are not allowable under these contracts, (2) research and development costs we incur over certain cost caps set by the U.S. government, or (3) costs incurred between contract fundings (collectively hereinafter referred to as "Non-contract Costs"), are not reimbursable under our government contracts. We have funded these Non-contract Costs primarily by proceeds of two private equity placements.

21

Without notice to, or opportunity for prior review by us, Volpe circulated a draft report in October 2001 which recommended curtailing further government expenditure on our SOCRATES wake vortex sensor due to a high risk assessment of achieving operational feasibility. Together with our major subcontractor, Lockheed Martin Corporation, we vigorously disputed and extensively discussed its assertions with Volpe and NASA. To our knowledge, Volpe did not issue a final report, and Volpe and NASA requested and we submitted a proposal for approximately \$2,221,068 of additional SOCRATES wake vortex sensor research, development and testing with an immediate objective of better characterizing the wake acoustics and background noise. In November 2002, Volpe approved and funded a new work order in the amount of \$1,229,650 for the first phase of this proposal and in March 2003, a second work order was approved and funded in the amount of \$991,418. Included in the funding is a 7% fixed fee over and above our research and development costs plus overhead, general and administrative costs. The statement of work continued our previous contract to develop and test our SOCRATES wake vortex sensor. This funding ended an 11-month period, from December 15, 2001 to November 19, 2002, without government funding to develop our SOCRATES wake vortex sensor.

On September 30, 2003, we received our third successive sole source contract from Volpe, titled Phase III SOCRATES, for an aggregate of \$3.975 million. This contract initially will be funded from a U.S. fiscal year 2003 Omnibus Appropriation of \$4.5 million to the NASA budget for research, development and testing of our SOCRATES wake vortex sensor as part of a NASA/Department of Transportation/FAA development of WVAS for use at major airports.

For U.S. fiscal year 2004, an additional \$5 million NASA appropriation specifically for continued work on project SOCRATES has been enacted into law. If and when our sponsoring agencies approve an extension of our contract, statements of work and appropriate work orders, we expect we would receive a contract extension for a substantial portion of this funding which would include a major airport test of an expanded 8 to 16-beam, and possibly 32-beam, SOCRATES wake vortex sensor.

We believe the federal government has indicated a long-term interest in the development of a wake vortex advisory system and our SOCRATES wake vortex sensor for inclusion in such a system. However, the federal government has in the past delayed or reduced and may in the future delay, reduce, or eliminate funding for research and development of our SOCRATES wake vortex sensor or the wake vortex advisory system as a result of, among other things, a reduction in support or opposition from supervising agencies or the U.S. Congress, changes in budgetary priorities, fiscal constraints caused by federal budget deficits, or decisions to fund competing systems or components of systems. If this occurs, it will reduce our resources available for research and development of our proprietary technologies, new products or enhancements to SOCRATES or UNICORN technologies and to market our products. Reduction of contract funding from the federal government could delay achievement of or increases in profitability, if any, 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.

We have experienced significant losses from our inception. The net loss for our fiscal year ended May 31, 2003 of \$943,974 compares unfavorably to the net loss of \$809,100 in our fiscal year ended May 31, 2002. For our fiscal year ending May 31, 2004, net losses for the three month and six month periods ended November 30, 2003 were \$215,721 and \$442,362. The loss for our fiscal year 2003 was caused primarily by three factors: (1) the delay in government contract funding for SOCRATES research and development; (2) rate ceilings; and (3) unallowable expenses. As described below, the loss for the first six months of our fiscal year 2004 ended November 30, 2003 was caused primarily by two of the foregoing factors: (1) rate ceilings and (2) unallowable expenses. We received our third consecutive government contract on September 30, 2003. This contract does not include rate ceilings. Although we will continue to incur certain unallowable expenses, this is a significant change in our contract terms and conditions.

22

### **Critical Accounting Policies and Estimates**

The discussion and analysis of our financial condition and results of operations are based on our financial statements that have been prepared according to accounting principles generally accepted in the United States. In preparing these financial statements, we are required to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosures of contingent assets and liabilities. We evaluate these estimates on an on-going basis. We base these estimates on historical experiences and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. Our management has discussed these estimates and assumptions with our finance and audit committee. At this point in our operations, subjective judgments do not have a material impact on our financial statements. We refer you to the footnotes to our financial statements for additional information on application of accounting methods and procedures to our financial statements.

# **Results of Operations**

# For the periods ended November 30, 2003 and November 30, 2002

Revenues. To date, our revenues have consisted almost entirely of revenues earned from our three successive SOCRATES wake vortex sensor research and development contracts with the federal government. Revenues under our government contracts are booked as contract sales when earned.

On September 30, 2003, we received our third government contract for \$3,975,004. Revenues for the three month period ending November 30, 2003 were \$762,252 which was a 43% increase over revenues of \$532,215 for the three month period ending August 31, 2003. This increase is the result of the new government contract we received in the second quarter of our fiscal year 2003. Contract revenue for the three month and six month period ending November 30, 2003 was \$762,252 and \$1,294,467, respectively. This is a significant increase compared to the contract revenue of \$39,832 for both the three and six month periods ending November 30, 2002 and is due to the lack of government contract funding for SOCRATES during the eleven month period ending November 19, 2002. As of November 30, 2003, our contract receivables against our government contracts are \$359,289.

Direct Contract Costs. Subcontractor, consultant and direct labor expenses comprise our direct contract costs. Direct contract costs for the three and six month period ending November 30, 2003 were \$552,928 and \$911,812, respectively, compared to \$24,090 for the three and six month periods ending November 30, 2002. These results principally reflect the lack of government contract funding during the six month period ending November 30, 2002.

When our government contract is funded, changes in direct costs do not generally impact our operating income because each contract covers its own direct costs. However, during periods when our government contract is not funded, any such costs we may incur are not reimbursable and must be funded from our own resources.

Operating Expenses. Government contractors are required to categorize operating expenses as overhead expenses or general and administrative expenses. These two indirect "cost pools" are then divided by their appropriate "direct cost base" combinations of direct contract cost, which determines the contractors overhead and general and administrative rates. These rates, for our first two government contracts, have been subject to ceilings, which were set at 70% for overhead and 20% for general and administrative. Our third contract is not limited by rate ceilings. Instead, we have negotiated provisional billing rates of 73% for overhead and 28% for general and administrative which we based on forecasted direct and indirect costs. Starting with the end of our fiscal year 2004 our actual rates, based on actual allowable costs incurred, will be submitted to the government for audit at the end of our fiscal year. When our actual rates have been audited, we will adjust our government contract billings higher or lower to reflect the audited actual rates versus the previous estimated provisional billing rates. Our historical rates are shown below.

	For Year Ended	For Year Ended	For Six Months Ended
	<u>5-31-02</u>	<u>5-31-03</u>	<u>11-30-03</u>
Overhead Rates	73%	89%	71%
General and Admin, Rates	67%	67%	44%

The above rates for each of the previous periods include only allowable operating expenses and have fluctuated over time. We believe these rates will improve and approach our current provisional billing rates of 73% for overhead and 28% for general administration during the third and fourth quarter of our fiscal year 2004.

Non-contract costs include: 1) expenses considered unallowable per Federal Acquisition Regulations (FAR), such as lobbying and financing costs, 2) over ceiling expenses, or 3) operating expenses incurred during periods without government contract funding. These non-contract costs are not reimbursable under our U.S. government contracts and must be paid from other sources, primarily proceeds from the private placement of our equity securities to date. To date, non-contract costs have been the primary use of this source of liquidity and have had a significant impact on our operating loss and liquidity. Non-contract costs are detailed below:

### For the 6 Months Ending (Unaudited)

	<b>November 30, 2003</b>	<b>November 30, 2002</b>
Unallowable Expenses (1) & (2)	\$213,441	\$ 153,048
Over-ceiling Expenses	245,578	7,263
Operating Expenses During Unfunded		200.450
Period 6-1-02 / 11-19-02	0	390,160
Total	\$ <u>459,019</u>	\$ <u>550,471</u>

# For the 3 Months Ending (Unaudited)

	<b>November 30, 2003</b>	<b>November 30, 2002</b>
Unallowable Expenses (3) & (4)	\$81,720	\$ 98,809
Over-ceiling Expenses	145,843	7,263
Operating Expenses During Unfunded		
Period 9-1-02 / 11-19-02	0	193,008
Total	\$ <u>227,563</u>	\$ <u>299,080</u>

### Notes:

- (1) Includes \$16,792 of stock based compensation expense for the 6 months-ended 11-30-03.
- (2) Includes \$12,276 of stock based compensation expense for the 6 months-ended 11-30-02.
- (3) Includes \$8,396 of stock based compensation expense for the 3 months-ended 11-30-03.
- (4) Includes \$6,138 of stock based compensation expense for the 3 months-ended 11-30-02.

Our total selling, general and administrative expenses consist of allowable and unallowable expenses and for the three month and six month periods ended November 30, 2003 were \$348,157 and \$712,577, respectively, compared to \$303,722 and \$538,728 for the same periods in 2002.

Unallowable selling, general and administrative expenses for the three month period ending November 30, 2003 were \$81,720 and decreased from \$98,809 over the three month period ending in 2002 primarily due to decreased lobbying expenses which were \$21,546 for that period in 2003, compared to \$34,605 for that period in 2002. Unallowable expenses for the six months ended November 30, 2003 were \$213,441 resulting in a \$60,393 increase over the six month period ending in 2002. This increase was primarily due to increased lobbying expenses, which were \$82,534 for that period in 2003 compared to \$66,869 for that period in 2002 and general unallowable expenses which were \$79,068 for that period in 2003 compared to \$35,399 for that period in 2002. The increase in general unallowable expenses primarily was a result of company car expenses, labor in support of preparation of this offering registration statement and travel and entertainment, which in the aggregate increased by a total of \$59,334.

24

Allowable selling, general, and administrative expenses for the three and six month period ended November 30, 2003 totaled \$266,437 and \$499,136 respectively, compared to \$204,913 and \$385,680 respectively, for the three and six month period ended November 30, 2002. The reason for this increase primarily was due to an increase in legal fees from \$27,684 to \$77,094 for the three months ended November 30, 2002 and 2003, respectively, and from \$50,070 to \$145,178 for the six months ending November 30, 2002 and 2003, respectively. This increase reflects the SEC periodic reporting requirements associated with operating as a public company.

Over-ceiling expenses of \$245,578 for the six month period ending November 30, 2003 represents 49% of the allowable overhead and general administrative expenses. The remaining 51% of overhead and general administrative expenses for the period, \$253,558, were absorbed and billed as part of our costs on our government contract. There was no absorption of these expenses during the same quarter last year as this was an unfunded period.

Over-ceiling expenses and operating expenses during unfunded periods fluctuate from period to period due to the timing of unfunded periods. We expect to be funded through August 31, 2004 which should eliminate the operating expenses during unfunded period category for all of our fiscal year that ends May 31, 2004. We are no longer subject to rate ceilings which should eliminate the over-ceiling expense category during the third quarter of our fiscal year 2004 and for all of the fourth quarter of our fiscal year 2004.

# For the Years Ended May 31, 2002 and May 31, 2003

The net loss for our fiscal year 2003 of \$943,974 compares unfavorably to the net loss of \$809,100 in our fiscal year 2002 and to the net loss of \$521,951 in our fiscal year 2001. Our increased net losses for our fiscal years 2003 and 2002 resulted primarily from an 11-month delay, including approximately five and one-half months during fiscal year 2003 and five and one-half months during our fiscal year 2002 in government contract funding for our SOCRATES wake vortex sensor research and development. This delay was caused, in part, by the draft Volpe report as well as the general slow down in the federal bureaucratic process which followed the national tragedy that occurred on

September 11, 2001. These results are explained in more detail by the following factors.

Revenues. To date, our revenues have consisted almost entirely of revenues earned from two of our three successive SOCRATES wake vortex sensor research and development contracts with the federal government. Revenues under our government contracts are booked as contract sales when earned.

Contract revenue for our fiscal year ended May 31, 2003 was \$1,093,097. This was a significant increase compared to \$490,031, which included a reduction of \$185,005 of accrued contract revenue for our fiscal year ended May 31, 2002. These results principally reflect the lack of government contract funding for the SOCRATES wake vortex sensor during the eleven month period ending November 19, 2002 and a larger amount of contract work that we completed and billed in our fiscal year 2003.

Direct Contract Costs. Subcontractor, consultant and direct labor expenses comprise our direct contract costs. We resumed work on our SOCRATES wake vortex sensor government contract on November 20, 2002. For the 12 months ended May 31, 2003, direct contract costs of \$799,259 compare to \$460,244 of such costs for the 12 months ended May 31, 2002. These results principally reflect the 11-month delay in funding under our second government contract and a larger amount of contract work that we completed and billed in our fiscal year 2003.

When our government contract is funded, changes in direct costs do not generally impact our operating income because each contract covers its own direct costs. However, during periods when our government contract is not funded, any such costs we may incur are not reimbursable and must be funded from our own resources.

25

Operating Expenses. Government contractors are required to categorize operating expenses as overhead expenses or general and administrative expenses. These two indirect "cost pools" are then divided by their appropriate "direct cost base" combinations of direct contract cost, which determines the contractors overhead and general and administrative rates. These rates were subject to ceilings established within our current government contract, which are set at 70% for overhead and 20% for general and administrative. Our historical rates are shown below.

	For Year Ended	For Year Ended	For Year Ended
	<u>5-31-01</u>	<u>5-31-02</u>	<u>5-31-03</u>
Overhead Rates	72%	73%	89%
General and Admin. Rates	29%	67%	67%

The above rates for each of our fiscal year ends include only allowable operating expenses and have fluctuated over time. We believe these rates will improve and approach our current proposed, SOCRATES Phase III, rates of 73% for overhead and 28% for general administration during our fiscal year 2004.

Non-contract costs include: (1) expenses considered unallowable per Federal Acquisition Regulations, such as lobbying and financing costs, (2) over-ceiling expenses, and (3) operating expenses incurred during periods without government contract funding. These non-contract costs are not reimbursable under our U.S. government contracts and must be paid from other sources, primarily proceeds from the private placement of our equity securities to date. To date, non-contract costs have been the primary use of this source of liquidity and have had a significant impact on our operating loss and liquidity for our fiscal years 2002 and 2003 to date. Non-contract costs are detailed below:

# For the 12 Months Ended

	<u>05-31-03</u>		<u>05-31-02</u>
	<u>(Una</u>	udited)	
Unallowable Expenses	\$ 293,198	\$	157,012
Over-ceiling Expenses	335,763		140,942
Operating Expenses During Unfunded Periods:			
6-1-02 to 11-19-02	390,160		0
12-15-01 to 5-31-02	0		361,317
Total	\$ 1,019,121	\$	659,271

Unallowable expenses for the 12-month period ended May 31, 2003 increased over those for the same period ending in 2002 because of increased lobbying and public relations expenses and an increase in stock-based compensation in our fiscal year 2003 (\$65,146) compared to our fiscal year 2002 (\$24,522). Lobbying expenses were \$104,818 in our fiscal year 2003 compared to \$65,696 of such expenses in our fiscal year 2002 and public relations expenses were \$81,119 in our fiscal year 2003 compared to \$0 in our fiscal year 2002. The increases reflect our focus on acquiring appropriate research and development funding from the federal government, as well as the expenses associated with operating as a public company. Unallowable expenses include \$65,146 and \$24,522 of stock-based compensation expense for the 12 months ended May 31, 2003 and May 31, 2002.

Over-ceiling expenses during unfunded periods fluctuate from period to period due to the duration and timing of unfunded periods. While funded and unfunded periods in our fiscal years 2003 and 2002 were approximately the same, we experienced a \$194,821 increase in over-ceiling expenses in our fiscal year 2003 over our fiscal year 2002 due to increased legal and professional expenses (\$202,832 in 2003 compared to \$74,052 in 2002) and general and administrative salaries and wages (\$174,293 in 2003 compared to \$126,763 in 2002). Both of these increases are due to SEC reporting requirements and stockholder relations activities.

Operating expenses during unfunded periods reflect fixed overhead and they are approximately the same for our fiscal year 2003 (\$390,160) and our fiscal year 2002 (\$361,317). We expect our federal contract to be funded through May 31, 2004, which should eliminate the latter expense category through the end of our fiscal year 2004.

#### Liquidity and Capital Resources

Our sources of liquidity, which we define as our ability to generate cash to fund our operations, are primarily provided by revenue from our government contracts and proceeds from the sale of our equity securities.

Our funded contract backlogs with Volpe on our second and third contracts as of November 30, 2003 are \$145,366 and \$3,781,450 respectively. Our third contract, titled Phase III SOCRATES, is the third successive contract that we have received to continue work on our SOCRATES wake vortex sensor. The Phase III SOCRATES contract was initially funded at \$3,975,004 and will be used to expand our current SOCRATES wake vortex sensor from its present four beam configuration (which was recently tested at the Denver International Airport) to eight or more beams plus other improvements. The funds were provided to Volpe from NASA's Aeronautical Research Program which is aimed at improving aviation safety and capacity. These funds were part of a Congressional Appropriation for U.S. fiscal year 2003. Funds under the Phase III contract are made available to us pursuant to work orders approved by Volpe and other interested federal agencies.

As of November 30, 2003 and November 30, 2002, our cash was, respectively, \$1,904,284 and \$1,186,679. The increase in cash on hand as of November 30, 2003 over November 30, 2002 was attributable to \$1,700,000 of proceeds from exercise of 850,000 common stock warrants, less the operating losses for the period from December 1, 2002 to November 30, 2003 and capital additions in the six month period ending November 30, 2003. This capital addition consisted primarily of the purchase of four company cars for our executive officers that aggregated \$150,000.

As of November 30, 2003, we had other current assets of \$243,912 compared to \$17,936 as of November 30, 2002. The increase is primarily due to \$196,775 of prepaid expenses related to this offering.

As of November 30, 2003, we had total current liabilities, including accounts payable, of \$603,218 compared to \$273,110 of current liabilities as of November 30, 2002. Accounts payable as of November 30, 2003 were \$471,872, which included \$191,363 to our subcontractor, Lockheed Martin Corporation and \$106,032 for legal expenses in support of this offering compared to accounts payable as of November 30, 2002 of \$165,382, which included \$5,925 to Lockheed Martin Corporation and \$0 for legal fees related to this offering. The increase in current liabilities and accounts payables primarily are attributable to increases in direct costs and our public offering expenses.

We anticipate that our funded contract balance for our second and third contracts of \$3,926,816 as of November 30, 2003 will fund our direct contract costs and allowable operating expenses until approximately August 31, 2004, without factoring in the proceeds of this offering. During this period, we have budgeted and expect to incur approximately \$275,000 in non-contract costs. Assuming we operate within budget, as to which we can make no guaranty or assurance, at the end of such time, we estimate our available cash, excluding the proceeds of this offering, should be approximately \$1,625,000. Any acceleration or delays in the performance of these contracts by us or our subcontractors could, respectively, exhaust or extend our contract funding prior to or after August 31, 2004. In either event, we might be required to draw upon our cash before we anticipate which would reduce the foregoing estimate. These projections do not consider any additional contract funding we may receive from a \$5 million appropriation to NASA for project SOCRATES contained in the recently enacted U.S. FY 2004 Consolidated Appropriations Bill. We expect to receive a substantial portion of this appropriation if and when our sponsoring agencies extend our contract, approve a statement of work and issue appropriate work orders to us.

We anticipate that the net proceeds of this offering, together with projected government contract funding, will be sufficient to fund our operations and capital requirements for at least 24 months following this offering. We cannot assure you, however, that such funds will not be expended earlier due to unanticipated changes in economic conditions or other circumstances that we cannot foresee. In the event our plans change or our assumptions change or prove to be inaccurate, we could be required to seek additional financing sooner than currently anticipated.

27

From time to time, we may consider and execute strategic investments, acquisitions, or other transactions that we believe could benefit us and could require use of some or all of our liquidity. To facilitate such transactions and enhance our liquidity position for these and other purposes, such as working capital for research and development, we also may conduct from time to time various types of equity offerings, including, but not limited to, public or private offerings of common or preferred stock based on a negotiated fixed share value, or floating market price of our publicly traded shares. If we encounter delays in, or are unable to procure, contract funding from the U.S. government for further research development and testing of our SOCRATES wake vortex sensor, incur costs over budget, or make a strategic investment, our cash resources will be reduced more rapidly than we presently anticipate. In such event, we may need to obtain additional capital to maintain operations. There can be no guaranty or assurance of our future ability to obtain capital for any of the foregoing purposes and, if obtained, the terms and conditions of such capital may dilute our present shareholders' ownership.

On December 12, 2003, Public Law 108-176 was passed authorizing FAA funding for U.S. fiscal years 2004 through 2007. The new law, designated "Vision 100 - Century of Aviation Reauthorization Act," authorizes the FAA to spend from its \$3 billion Air Navigation Facilities & Equipment annual budget such funds as may be necessary in each of the next four U.S. fiscal years for the development and analysis of a wake vortex advisory system (WVAS). Continued successful testing and acceptance by the government will be required to integrate the SOCRATES wake vortex sensor into WVAS. There is no assurance as to whether or when these funds will be appropriated, whether our wake vortex sensor will be a part of any such system, how these funds will be allocated among us, participating agencies, and other parties presently or in the future involved in development of the wake vortex advisory system, or what portion of these funds, if any, we ultimately may receive.

# Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Effective October 3, 2002, we terminated our then current accountant, Quintanilla, a Professional Accounting Corporation, and engaged Kostin, Ruffkess & Company, LLC, which has offices in Farmington and New London, Connecticut, as our principal independent public accountant. The decision to engage Kostin, Ruffkess & Company, LLC was made by our Finance and Audit Committee in accordance with Section 301 of the Sarbanes-Oxley Act of 2002. The decision was based on a relocation of our principal place of business from California to Connecticut.

Quintanilla's reports on our financial statements since our inception on May 21, 2001 did not contain any adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope or accounting principles.

In connection with the audit for our fiscal year ended December 31, 2001, and up to the date of termination, there were no disagreements with Quintanilla on any matters of accounting principles or practices, financial statement disclosure of auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Quintanilla would have caused Quintanilla to make reference to the subject matter of the disagreement(s) in connection with its report on our financial statements.

We had not previously consulted with Kostin, Ruffkess & Company, LLC regarding the application of accounting principles to a specific completed or contemplated

nsaction, or the type of audit opinion which might be rendered on our financial statements, and no written or oral advice was provided to us concluding there was an portant factor to be considered by us in reaching a decision as to an accounting, auditing, or financial reporting issue. Neither did we discuss with Kostin, Ruffkess & mpany, LLC any accounting, auditing, or financial reporting issue that was a subject of disagreement between us and Quintanilla, our previous independent accountants, as re were no such disagreements.					
	28				

#### **Business**

#### Overview

We are developing two proprietary technologies designed to enhance aviation safety and reduce airport delays on which we have received United States and foreign patents. Using our opto-acoustic technology, known as SOCRATES (<u>Sensor for Optically Characterizing Remote Atmospheric Turbulence Emanating Sound</u>), we are currently working on development of a sensor to detect and track air disturbances known as "wake vortex turbulence," created by departing and arriving aircraft in the vicinity of airports. We are developing this sensor to be a component for inclusion in a wake vortex advisory system, known as WVAS, that NASA is developing. We believe that our SOCRATES wake vortex sensor, upon completion and deployment in concert with other components of WVAS, can:

- Improve the safety of aircraft arrivals and departures;
- ☐ Streamline the air traffic control process;
- Reduce passenger delays; and
- Generate substantial cost savings for the airline industry and other airport users.

A "proof of principle" test of our SOCRATES wake vortex sensor was conducted at JFK International Airport in May 1998. We completed controlled testing of an expanded and improved SOCRATES technology, using a NASA Boeing 757 as the source aircraft, at Langley Air Force Base in December 2000. 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 expect to further develop and test the operational viability of our SOCRATES wake vortex sensor in a series of tests at one or more major airports over the next several years.

We have conducted research, development, and testing of our SOCRATES wake vortex sensor in conjunction with Lockheed Martin Corporation pursuant to a ten year teaming agreement dated May 1, 1997 under which we are the prime contractor. Under the teaming agreement, we generally have subcontracted to Lockheed Martin Corporation primary responsibility for 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 have operated 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 worked with us in analyzing test data itself. Our payments to Lockheed Martin Corporation under the teaming agreement have averaged approximately \$680,000 per each of our fiscal years and 48% of our average annual contract revenue. The teaming agreement anticipates that upon full approval and deployment of our SOCRATES wake vortex sensor, we would continue to subcontract these responsibilities and services to Lockheed Martin Corporation.

We also are developing a collision avoidance and ground proximity warning system for small aircraft based on our technology referred to as UNICORN <u>Universal Collision Obviation and Reduced Near-Miss</u>). We recently received a frequency assignment from the Federal Communications Commission for experimental purposes and development of UNICORN and have signed a contract with Georgia Tech Applied Research Corporation, or GTARC under which GTARC has commenced work on the construction of our UNICORN antenna elements. We plan to integrate the antenna with electronics, displays, and processing elements into a collision alerting and ground proximity warning system aimed at the general aviation market. We also have begun exploring the application of this technology to unmanned air vehicles and other specialized commercial and government flight operations.

Since our inception, our primary source of funding has been three successive contracts with the federal government aggregating approximately \$13 million for research, development and testing of our SOCRATES wake vortex sensor. We have not had any revenues from commercial sales of either SOCRATES or UNICORN, and we do not expect such sales for several years. We have incurred cumulative losses of \$2,460,023 as of May 31, 2003 which we have funded with the proceeds of two private equity offerings. We may need to raise additional capital to complete our future research and development. 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.

29

# 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., or 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.

In September 2002, we consummated a share exchange with the stockholders of FSTO. FSTO originally commenced operations in 1997 as a Wyoming corporation. FSTO 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 our 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. Since then, FSTO has received two additional contracts for the continuation of research and development of our SOCRATES technology. On November 3, 2000, FSTO completed a private placement of preferred stock arranged by Spencer Trask Securities Incorporated which resulted in net proceeds to it 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 the share exchange.

The share exchange was facilitated by Dunhill Venture Partners Corp., a Vancouver 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. The financial information contained in this prospectus reflects the consolidated results of our operations and those of FSTO.

# **Principal Products Under Development and Market Opportunities**

### SOCRATES Technology

Genera

Based on testing to date, we believe our SOCRATES technology will provide sensor information for a ground-based wake vortex advisory system, or WVAS, to detect dangerous air turbulence that:

30

- ☐ Is designed to operate in all weather conditions;
- Is accurate, and can detect even weak disturbances;
- Provides early warnings to pilots and air traffic controllers of hazards they may encounter;
- Does not require the presence of large atmospheric particles such as rain or ice crystals to detect disturbances: and
- ☐ Is cost-effective and easy to implement.

SOCRATES is our proprietary opto-acoustic technology designed to detect, locate and track forms of air turbulence, including clear air 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 certain natural atmospheric phenomena, such as windshear and microbursts.

Air turbulence creates patterns of low-frequency sound waves something like the ring patterns that form in a body of water after a pebble has been tossed into it or a boat has cut through it. These low-frequency sound waves typically travel for long distances through the atmosphere without impediment. As currently developed, our SOCRATES wake vortex sensor uses low power lasers to project light beams 50 to 100 meters across the ground in the vicinity of airport approach and departure corridors. Reflector devices direct the beams back to a receiver. SOCRATES measures changes in the speed of the light waves of the laser beams. These changes indicate that the laser has interacted with sound waves emanating from air disturbances. Based on these changes, we believe SOCRATES technology, upon completion of research, development and testing, will enable a WVAS to remotely sense the presence of atmospheric turbulence.

Unlike radar technologies, we believe SOCRATES will be effective without need for the presence of rain, ice crystals, or other aerosols because SOCRATES uses lasers to detect interaction with sound waves, not with atmospheric particles.

We believe SOCRATES-based WVAS's will be relatively cost-effective and easy to implement because they typically will not require airports to build large towers, acquire additional land on their peripheries, or engage in potentially lengthy and costly environmental negotiations with residential communities, as is required to install Terminal Doppler Weather Radar, or TDWR, systems. In addition, SOCRATES may offer all-weather capability.

Alternate technologies for detecting air turbulence phenomena can be unreliable, inaccurate, expensive, difficult to implement, or incapable of providing sufficiently early warnings for pilots to take appropriate action. We believe the products we are developing and intend to develop based on SOCRATES may mitigate many of the shortcomings associated with these types of technologies.

# SOCRATES Wake Vortex Sensor

Whenever an airplane is in flight, and especially when flying slowly, as during takeoff, approach, and landing, the wing flaps and wings create wake vortices, which are similar to horizontal tornadoes trailing back from the wing tips. If another plane enters this vortex, even several minutes after the first plane has passed, the pilot's control of the aircraft may be compromised. To address these hazards, the FAA, for decades has set spacing requirements between airplanes as they land and take-off. In 1996, the FAA expanded its requirements for plane separations by introducing a new category for separation behind B-757 aircraft. The increased space between planes has translated into even more time in the air, which causes flight delays and increases in fuel and flight crew costs.

Our initial focus for SOCRATES is development of a wake vortex sensor to detect, locate and track wake vortex turbulence. The sensor will include a low power laser transmitter and receiver, a reflector and special computer electronics designed to translate changes in laser transmissions into data on the presence and location of wake vortex turbulence. We believe wake vortices will be detected at sufficient range to provide pilots with advanced warning of the nature and location of these potential hazards. We are designing our sensor so that upon successful completion of development and FAA approval, it will be a component in a WVAS to be used by air traffic controllers in establishing safe separation between successive arriving and departing aircraft. To complete development of a prototype operational sensor, we must, among other things, expand the present 4 beam sensor to 16 to 32 beams, integrate the sensor with other components of WVAS, and develop operating protocols for WVAS and the sensor that define how they would be used by air traffic controllers and pilots. NASA and the FAA are planning for the integration of other components of WVAS including advanced weather sensors, prediction software for both the vortex movement and the persistence of existing wind conditions, adaptive spacing procedures and communication links between the sensors and the air traffic control towers. WVAS still faces technical hurdles and, furthermore, must be accepted by a variety of constituencies involved in the National Air System, including, but not limited to, air traffic controllers and pilots. We can make no assurance whether and when the FAA will implement WVAS, with or without our SOCRATES wake vortex sensor.

We expect our SOCRATES wake vortex sensor will generate information that will assist pilots and air traffic controllers to determine more precisely when it is safe for a plane to land or take off. This may enable the FAA to decrease aircraft spacing, thereby increasing airport capacity, reducing flying time and saving money. Our SOCRATES wake vortex sensor also would increase safety by issuing an alert to controllers in instances where a standard separation may not have given sufficient time for a wake vortex to dissipate or move out of the way. A "proof of principle" test of our SOCRATES wake vortex sensor that operated with 2 laser beams was conducted at JFK International Airport in May 1998. We completed controlled testing of an expanded and improved SOCRATES wake vortex sensor that operated with 4 laser beams, using a NASA Boeing 757 as the source aircraft at Langley Air Force Base in December 2000.

In September 2003, we completed a three-week test of an improved SOCRATES wake vortex sensor that operated with 4 laser beams at Denver International Airport. This experiment was part of a NASA-sponsored wake acoustics test and is part of NASA's continuing efforts to improve aviation safety and capacity. Our SOCRATES wake vortex sensor was set up together with a microphone array provided by the German Aerospace Corp. (D.L.R.). NASA and U.S. Department of Transportation (Volpe) used a larger, 252 microphone array together with Continuous Wave and Pulsed Lidar systems and an array of supporting meteorological sensors to study the sound emitted from wake vortices. The principal purpose of this NASA-sponsored test was to acquire adequate field data using carefully calibrated microphone arrays to develop a firm scientific basis for the use of sound in detecting, tracking, and characterizing wake vortices created by arriving aircraft. The operation of our SOCRATES wake vortex sensor recorded acoustic emissions generated by wake vortices from over 1,000 aircraft, including Boeing 737 and 757 aircraft, Airbus A319 and A320 aircraft, and even smaller regional jets. The sensor recorded these emissions directly above our sensor at an elevation of approximately 500 feet above ground level. We performed a preliminary analysis of the results and provided a "quick-look" report to NASA and Volpe in October 2003. Based upon our analysis of initial data, this test demonstrated a major increase in the capability and reliability of the sensor.

As a result of our Denver test, we now plan to expand our SOCRATES wake vortex sensor to 8 to 16 beams and test this expanded sensor in the middle of 2005 or earlier. Our goal in the test of our expanded sensor is to detect and track wake vortices at ranges up to 2.5 nautical miles and altitudes up to 1,500 feet above the sensor site. We have performed analysis based on phased array radar and sonar systems which we believe indicate that this goal should be achievable. If this test is successful, we believe that we will be able to produce a prototype of an operational SOCRATES wake vortex sensor in 2006 or 2007. If and when the FAA approves our sensor and proceeds with the implementation of WVAS, we anticipate that the FAA will include our sensor in the installation of WVAS at major U.S. airports. Each of these airports will require a system customized for its particular runway layout and topography. At this time, we do not know if we can successfully develop 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 WVAS at all or with the inclusion of our SOCRATES wake vortex sensor.

32

# SOCRATES Wake Vortex Sensor Market Opportunity

The FAA is the federal agency in charge of airport safety and air traffic control. In this role, it acquires, owns and is responsible for operating the equipment that monitors and controls the National Airspace System, including the equipment deployed at airports and in all air traffic control towers. As such, the FAA would be our primary customer for our SOCRATES wake vortex sensor.

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 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 for inclusion in a WVAS. 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 belief 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 sensor as part of a WVAS. For example, the International Federation of Airline Pilots Associations, or 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 supports the development of systems that can safely reduce the current wake vortex-related spacing requirements. 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 a WVAS, which we believe could include our SOCRATES wake vortex sensor, through increased safety and efficiencies and a reduction in fuel costs attributable to delays.

Factors contributing to industry support include:

- ☐ Airline traffic delays from all causes at busy airports. The Air Transport Association estimated that delays attributable to the air traffic control system cost the industry and its passengers and shippers a record \$6.5 billion in 2000. These costly delays could be reduced if landings and take-offs were optimally spaced based on actual vortex behavior.
- Resistance to building additional runways to alleviate airport congestion Airports do not want to bear the expense, which can run in the billions of dollars, and surrounding communities do not want to suffer the adverse environmental and aesthetic effects, of adding runways.
- Dublic pressure on governmental agencies to promote aviation safety. Recent aviation catastrophes and near-disasters, especially those with unexplained or turbulence-related causes, have focused public attention on air safety.

The target market for our SOCRATES wake vortex sensor will include 142 of the busiest airports worldwide. We initially will focus on U.S. airports with closely spaced parallel runways, such as the San Francisco, Anchorage, Newark, Boston Logan, Philadelphia, St. Louis, and Los Angeles International Airports. To improve safety and reduce delays, many of these airports are planning to adopt Simultaneous Offset Independent Approaches, or SOIA, a new set of landing procedures for parallel runway airports that address the problems of wake vortex turbulence under heavy traffic and inclement weather conditions. We believe that our SOCRATES wake vortex sensor will be instrumental in helping the FAA and airports to achieve approval and implementation of SOIA procedures.

33

Based upon installations at 142 airports worldwide, we estimate the market size for our SOCRATES wake vortex sensor as part of a WVAS at approximately \$1 to \$2 billion. Our estimate is based on, among other things: our assumption of successful product development and FAA certification; estimates we performed of the number of airports that would benefit from the implementation of WVAS; the number and configuration of runways; a long-term projection of the cost of manufacturing, installing, and testing our SOCRATES wake vortex sensor; and the cost of our current four-beam SOCRATES wake vortex sensor scaled up to an operational 16-beam sensor at each end of the runway. We estimate the price of our SOCRATES wake vortex sensor to be between \$6 to \$15 million per airport installation. These projections do not include any revenue from field service which we plan to provide if appropriate arrangements can be made with specific airports and the FAA. These estimates have not been reviewed or validated by any third party. We have not updated and have no plans to update these projections.

These estimates also assume the availability of funding from the FAA, airports and other sources for purchase and installation of our SOCRATES wake vortex sensors as part of WVAS. While we hope the FAA and U.S. government will support such purchase and installation of our SOCRATES wake vortex sensors, when and if a WVAS becomes operational, we do not have any commitment or assurance from the FAA or other branches of the U.S. government to support us in this regard.

# UNICORN Technology

### General

The purpose of our UNICORN technology is 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. We are also investigating the application of our UNICORN-based "see and be seen" collision avoidance technology for unmanned air vehicles, or UAVs, including military, other government, and commercial operations.

Our UNICORN technology uses a unique implementation of existing radar technology in an airborne system to detect and track nearby aircraft and detect the ground below and ahead of the airplane. Fixed element antennas on the top and bottom of the aircraft provide full spherical coverage for threat detection. The 50 elements on each antenna provide directionality in 30 degree beams in the horizontal plane and at 45 degree elevation above and below the horizontal, plus single beam polar coverage. Interpolation of radar returns between beams provides for even more precise directionality. The range of this low-powered radar is designed to be at least four nautical miles, providing alerting times on all threat aircraft equivalent to resolution advisories standards for the Traffic Collision Avoidance System, or TCAS, for commercial airliners. Pilots would be alerted to a potential collision threat by both aural and visual means, and the locations of the threat aircraft would be shown on either an existing or dedicated cockpit display.

Following a recommendation from the FAA, in September 2002, the 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 August 2004. Extensions of the approval are available by application.

In August 2003, we signed a contract with Georgia Tech Applied Research Corporation, or GTARC, under which GTARC has commenced work on the construction of our UNICORN antenna elements. Design trade-off testing of these antenna elements should enable construction and testing of the full antenna in 2004. In 2005, we plan to integrate the antenna with electronics, threat software and displays and perform ground-based demonstrations of full functionality. In 2006, we plan to produce an airborne UNICORN warning system. We plan to perform flight certification testing in 2007. We are also exploring the application of this technology to collision avoidance for unmanned air vehicles and other specialized commercial and government flight operations. Once prototypes have been developed and satisfactorily tested, the FAA certification process is expected to take a protracted period of time before operational use anywhere in the domestic airspace of the U.S. will be approved, if at all. Certification and approval to sell to the foreign general-aviation market is likely to take even longer.

34

We acquired the UNICORN technology from Advanced Acoustic Concepts, Inc., or 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.

# UNICORN General Aviation Collision Alert and Ground Proximity Warning System

Our UNICORN product for the general aviation market will consist of three parts: a subdivided radar antenna mounted on the top and underside of the aircraft; computerized electronics; and an audio alert and visual display. The antenna will transmit and receive radar signals to obtain omni-directional coverage within a sphere of safety out to about four nautical miles. Computerized electronics will process reflected radar signals through a decision logic that will calculate estimated ranges and closure rates of other aircraft and/or the ground. An audio alert signal will be triggered when approaching aircraft or proximity to the ground constitutes a threat within defined parameters that are consistent with those currently used by more expensive systems such as TCAS. There also will be a visual display that locates and tracks other aircraft and the surrounding terrain.

# UNICORN UAV Collision Avoidance System

We are also in preliminary discussions with NASA about the possible use of UNICORN technology on Unmanned Air Vehicles, or UAV's, to perform the "see and avoid" function required of the pilot in all manned aircraft. 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. Existing systems like TCAS cannot detect aircraft operating without transponders. We believe that our UNICORN technology has the potential to meet this emerging need.

A UNICORN-based UAV collision avoidance system would contain an antenna and computerized electronics that are similar in concept to those used in the general aviation products. 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 will 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.

NASA has issued a set of criteria for applicants to enter into a cost-sharing arrangement aimed at development of UAV technology. We are currently working on a response to this invitation, and believe that our technology is well positioned for adaptation to UAVs. We also believe that the frequency assignment that we have received from the FCC through the FAA will provide us with a competitive advantage in this application.

# UNICORN Technology Market Opportunity

Our target market for this product will be individual and corporate owners of smaller, general aviation aircraft, which the FAA estimates numbered approximately 211,000 in the United States in 2001. Collision warning and ground proximity systems currently available for small aircraft are generally priced at retail between \$20,000 and \$50,000 and, as a result of their high price, have a very low penetration of the general aviation marketplace. We believe our UNICORN technology will enable us to use a more autonomous design to produce a system with similar and some superior capabilities to those of currently available alternatives at a lower cost. Based on anticipated component and labor costs, we estimate a wholesale price for our UNICORN product of about \$10,000 per system.

### Sales and Marketing

# SOCRATES Wake Vortex Sensor

We believe that, upon successful completion of research, development, testing of our SOCRATES wake vortex sensor and the WVAS, the FAA will approve use of our SOCRATES wake vortex sensor and implement the WVAS 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-based products for use in airports will include:

35

- □ Closely coordinating with the FAA, which will acquire and deploy WVAS including SOCRATES technology at United States airports;
- Assisting airports to apply for the allocation of airport improvement grants to acquire WVAS;
- Targeting the 100 busiest airports in the world with a campaign including informational seminars and direct marketing; and
- Dublicizing the advantages of our SOCRATES wake vortex sensor in promoting advanced air safety and airport productivity to members of Congress, aircraft manufacturers, commercial airlines, and air travel trade industry groups.

### UNICORN Technology

We believe that, upon completion of research, development, testing and FAA certification, our UNICORN technology will be able to penetrate the aviation industry due to the growing demand for relatively inexpensive collision warning and ground proximity systems and the advantages of our technology over existing alternatives. Our strategies for selling UNICORN-based products to the general aviation markets will include:

- ☐ Forming relationships with established distributor networks for general aviation avionics to address the retrofit market; and
- Building a market for the installation of UNICORN-based products in new general aviation planes by forming alliances with small plane manufacturers such as Cessna, Gulfstream, Raytheon and Piper.

### **Potential New Product Development**

We believe that upon completion of research, development and testing of our SOCRATES wake vortex sensor, SOCRATES technology may be extended to enable the detection, location, and tracking of potentially deadly air turbulence phenomena other than wake vortex turbulence, which include:

- □ Windshear. Thunderstorms and other highly unstable atmospheric events can cause windshear, a sudden, rapid change in wind velocity or direction. The most dangerous form of windshear is a microburst, which occurs when the cold air high in cumulus clouds or thunderstorms falls rapidly to the ground and fans out in all directions. A plane approaching a microburst experiences increasing headwinds and a turbulent altered flight path, and, as it flies further into the microburst, it may experience increasing tailwinds and loss of lift.
- Clear-Air Turbulence. One of the most common aviation hazards and sometimes the most damaging is clear-air turbulence, or CAT, which can occur even when no rain or other adverse weather conditions are present. One form of CAT occurs near the ground when a windstorm passes down a steep, rough mountainside forming a layer of air that often turns suddenly upwards and begins to rotate in circles. As these "rotors" multiply they form a series of more violent, spinning air masses, and the waves above them can rise up to altitudes of 30,000 feet or more, about the normal cruising height for most airliners.

Products addressing these atmospheric hazards may include:

Airport Area Weather Hazard Surveillance System. This product would expand SOCRATES technology to enable the detection, location and tracking of other types of weather hazards such as clear air turbulence, windshear and microbursts, in addition to airplane wake vortices. We will need to perform significant additional research, development and testing of our SOCRATES technology to expand it to an all-weather hazard area surveillance system.

36

Airborne En-Route Turbulence Warning System. This product would use our SOCRATES technology in an aircraft-based system for detecting dangerous air turbulence throughout a flight. To develop this system, we will need to study ways to use naturally occurring airborne particles that are present regardless of weather conditions, as reflectors for the lasers used in our SOCRATES technology. We also intend to develop models and computer software to interpret return signals, as well as pilot-friendly cockpit display and alerting systems. This system will require substantial additional research and development and testing to determine its commercial viability, which we estimate could cost in the range of \$50 million or more. We therefore view it as a long-term development project and expect to focus primarily on our other products in the near future.

# Competition

# SOCRATES Wake Vortex Sensor

The aviation and airport safety business is very competitive. We expect competition in hazardous weather applications to intensify as air travel and airport congestion continue to increase worldwide, and as public scrutiny of aviation safety heightens. Although we are not aware of any other company or organization developing technologies such as ours, it is possible that others could develop or improve their systems to achieve similar results. 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. The chart below describes these alternative ground-based technologies.

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

37

Terminal Doppler Weather Radar ("TDWR")	☐ Ground-based system ☐ Detects hazardous atmospheric conditions in the airport terminal area ☐ Detects changing winds to give early warning of hazardous conditions ☐ Highly reliable and accurate	□ Requires tall towers to be installed 8-12 miles away from airport, which are expensive and often encounter resistance from residential communities □ Does not capture small phenomena like wake vortices	Raytheon	Limited Installations
Minix Winglet	Solid, light wing tip attachment made of Kevlar and carbon Eliminates vortex pressure around wings Increases speed Reduces fuel consumption Allows aircraft to carry more weight	☐ May not address the dominant wake vortices created by the outer tip of the main flap ☐ May adversely affect the lift-to-drag ratio of the aircraft	None	Research and Development

We believe our SOCRATES wake vortex sensor will offer many advantages over the products and technologies provided by these competitors, although further research, development, and testing are needed to complete this sensor and make it operational. We believe that once our SOCRATES wake vortex sensor is fully developed and operational, these advantages will 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 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

We believe our UNICORN-based products will offer important advantages over currently available alternatives. We anticipate a system based on this technology would utilize a unique arrangement of radar antennae to provide pilots with visual and aural warnings of approaching aircraft at a much lower cost than alternative systems. The UNICORN technology involves aviation aircraft transmitting a radar signal that creates a minimum "sphere-of-safety" around the aircraft and selectively receives and determines the direction of any radar echo from potential threat aircraft entering that coverage area or territory. This differs from the current FAA Traffic Collision Avoidance System, or TCAS, that utilizes a radar transponder interrogator located on the commercial aircraft it is intended to protect. Theoretically, for TCAS to be truly effective, every potential large or small threat aircraft would be required to carry a radar beacon transponder to respond to the commercial aircraft's interrogation. UNICORN technology is

Technology	<u>Description</u>	<u>Limitations</u>	<u>Mfr.</u>	<u>Status</u>	
Transponder	9900BX Traffic Advisory System	☐ Only detects transponders; ☐ Relatively expensive	Ryan	In production	
Transponder	Monroy ATD-200	☐ Only detects transponders; ☐ Does not provide time to collision	Monroy	In production	
Transponder	L3-Goodrich Skywatch Traffic Advisory System	Only detects transponders	Goodrich	In production	
TCAS	Traffic Alert & Collision Avoidance System	☐ Only detects transponders; ☐ Relatively expensive	Rockwell/Honeywell	In production	

# 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 and UNICORN-based products;
- ☐ Obtaining FAA approval of our SOCRATES wake vortex sensor and UNICORN 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 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.

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 able to respond more quickly than we can to new or changing opportunities, technologies, standards or customer requirements. 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**

Substantially all 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 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 \$13 million in contract funding to date, have been earmarked by Congress for the procuring federal agencies, FAA and NASA, which are responsible for funding, monitoring and administering the development of technology to enhance airport and airline safety.

In February 2003, the President signed into law as part of the Fiscal Year 2003 Omnibus Appropriation Bill, an addition to the NASA budget for our SOCRATES wake vortex sensor. From these funds, we have received a contract for approximately \$3.975 million for continued research, development, and testing of our SOCRATES wake vortex sensor as part of a NASA/FAA development of a wake vortex advisory system for use at major airports. This contract funds an expansion of our SOCRATES wake vortex sensor from four beams to at least eight beams.

Proposed federal legislation entitled "Flight 100 - Century of Aviation Reauthorization Act" has been released by a Senate/House conference committee. The original House language specified up to \$20 million per year which could be used by the FAA in US fiscal years 2004-2007 to demonstrate and document the operational benefits of WVAS. The conference committee language does not include a specific funding amount but continues the authorization with the following language: "such sums as may be necessary for each of fiscal years 2004 through 2007 may be used for the development and analysis of wake vortex advisory systems." We are aiming to complete development of our SOCRATES wake vortex sensor for inclusion in any such system which NASA is currently developing. The government must successfully test and accept WVAS and our SOCRATES wake vortex sensor for integration into any such system. The proposed legislation has been approved by both the Senate and House and must be signed by the President before it becomes enacted into law. Also, funds can only be made available for each year by appropriation legislation and pursuant to contract and work orders between us and the procuring federal agency.

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 WVAS 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 WVAS and culminating in development of wake turbulence capability at selected airports and integration with controller tools. The mission needs statement 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 required 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. 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.

The U.S. government may terminate our 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 WVAS 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. If this occurs, it will reduce our resources available for research and development of our proprietary technologies, new products or enhancements to our SOCRATES or UNICORN technologies and to market our products. Reduction of funding from the federal government could delay 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 6,034,760 A issued on March 7, 2000). We have pending patent applications abroad relating to our SOCRATES technology. However, there can be no assurance any patent will issue from these pending applications. We also may apply to federally register various copyrights in our software and documentation with the United States Copyright Office and abroad.

40

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 filed corresponding patent applications, based upon the United States application, for a patent on our SOCRATES technology in Canada, Japan, China, Israel, Australia, New Zealand, South Korea, Saudi Arabia, and throughout the United Kingdom and Europe. Our contract with the federal government expressly preserves our exclusive rights to our SOCRATES technology.

# UNICORN Technology

We also have received a United States patent relating to our UNICORN technology (US 6,211,808 B1 issued on April 3, 2001). We have filed corresponding patent applications, based upon the United States application, for a patent on our UNICORN technology in Canada, Japan, Australia, New Zealand and countries throughout the United Kingdom and Europe. However, there can be no assurance any patent will issue from these pending applications. We also may apply to federally register various copyrights in 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.

# 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 our SOCRATES wake vortex sensors in airports or installation of UNICORN technology in small aircraft. For our SOCRATES wake vortex sensors, the FAA must commission WVAS for use in the National Airspace System. As UNICORN technology is an airborne system, it 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 incurred four 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 January 28, 2004, we had five full-time and three 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.

41

# **Legal Proceedings**

We are not a party to any pending legal proceeding. However, we recently learned that the staff of the SEC is conducting an informal investigation that appears to be looking into certain analyst reports about us, and our press releases. The SEC staff has not asserted that we have acted improperly or illegally. We have voluntarily agreed to cooperate fully with the staff's informal investigation. We believe that we have acted properly and legally with respect to these analyst reports and our press releases. However, we can neither predict the length, scope, or results of the informal investigation nor its impact, if any, on us or our operations.

#### **Properties**

Our primary office, located in Mystic, Connecticut, is leased on a yearly basis at an annual rate of \$18,600 until March 31, 2004. 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; (ii) Chicago, Illinois is space provided without charge by our president and director, William B. Cotton; and (iii) New London, Connecticut leased from Kildare Corporation at \$100 per month. We believe that our facilities are adequate to satisfy our projected requirements and that additional space will be available if needed.

### MANAGEMENT

# **Executive Officers and Directors**

The following table presents information about each of our executive officers and directors as of the date of this prospectus:

<u>Name</u>	Age	<u>Position</u>
Samuel A. Kovnat	71	Chairman, Chief Executive Officer
William B. Cotton	63	Director, President
Frank L. Rees	72	Director, Executive Vice President
Jackson Kemper, Jr.	68	Director
Stephen P. Tocco	56	Director
Joseph J. Luca	56	Director
Larry L. Pressler	61	Director
Kenneth S. Wood	51	Director
David D. Cryer	55	Chief Financial Officer, Secretary, Treasurer

Kenneth S. Wood was appointed to our board of directors on July 14, 2003; Joseph J. Luca was appointed to our board of directors on October 25, 2002; former Senator Larry L. Pressler was appointed to our board of directors on December 4, 2002; and David D. Cryer was appointed to his position as Chief Financial Officer on October 3, 2002 and as Secretary and Treasurer on June 10, 2003. Other current directors and executive officers were first appointed to their positions effective September 1, 2002.

Samuel A. Kovnat serves as our Chairman and Chief Executive Officer. Mr. Kovnat co-founded FSTO, our former subsidiary, in 1997 and worked there until he joined us in September, 2002. From 1995 to 2001, Mr. Kovnat was also a consultant and program development manager for the parametric Airborne Dipping Sonar at the Sonetech Corporation and the Kildare Corporation. During that same period, Mr. Kovnat was a venture partner of Allied Venture Associates whose primary focus was in the Internet security and biotechnology arenas. From 1982 through 1988, Mr. Kovnat was a principal in Tower Capital Corp., an asset management firm based in New York, New York. In 1987, Tower Capital Corp. and its principals, including Mr. Kovnat, were sued by a client and the United States Department of Labor for certain alleged civil violations of the Employee Retirement Income Security Act of 1974, as amended, or ERISA. Mr. Kovnat settled this suit. As a part of the settlement, Mr. Kovnat was enjoined from acting as a manager of ERISA funds in the future. Mr. Kovnat graduated from the University of Miami with a B.S. degree in both Mathematics and Physics. Mr. Kovnat serves on our compliance, disclosure and ethics oversight committee and executive committee.

42

Captain William B. Cotton serves as our President and as a Director. He began work with FSTO, our former subsidiary, in November, 2000 and worked there until he joined us in September, 2002. Prior to that, Captain Cotton was a United Airlines pilot from 1967-2000, and from 1986-2000 he was Manager of Air Traffic and Flight Systems at United Airlines. During his tenure as Manager of Air Traffic and Flight Systems, he led United Airlines' efforts to improve air traffic control industry-wide, as well as initiatives to upgrade the company's aircraft for safety and efficiency. From 1997-2000, Captain Cotton also served as Chairman of the Board of ATN Systems, Inc., a consortium of airlines developing aeronautical telecommunications network (ATN) products in cooperation with the Federal Aviation Administration. ATN is a worldwide data network intended to support data communication connectivity between mobile platforms, airlines, providers of aeronautical communications services and government providers of air traffic control and flight information services. Captain Cotton is an independent director of Sensis Corporation, a privately held company located in Syracuse, New York, and also consults for NASA and a national science foundation panel on the future of aviation. Captain Cotton received a B.A. degree and an M.A. degree in Aeronautical and Astronautical Engineering from the University of Illinois and the Massachusetts Institute of Technology, respectively. Captain Cotton serves on our compliance, disclosure and ethics oversight committee and executive committee.

Frank L. Rees serves as Executive Vice President and as a Director. Mr. Rees co-founded FSTO, our former subsidiary, in 1997 and worked there until he joined us in September, 2002. In 1993, Advanced Acoustic Concepts, Inc. acquired GR Associates, a small consulting firm owned by Mr. Rees and Samuel Kovnat. Following this acquisition, Mr. Rees remained an employee of Advanced Acoustic Concepts, Inc. for a period of approximately one year. Mr. Rees is the inventor of our SOCRATES and UNICORN technologies. Mr. Rees holds an M.A. in Mathematics from the University of Maryland, an M.A. in Electronic Engineering from Borough Polytechnic in London, England, as well as a British equivalent of a B.S.E.E summa cum laude in Electronic and Electrical Engineering from South East Essex Technical College in Essex, England. Mr. Rees serves on our compliance, disclosure and ethics oversight committee and executive committee.

**Jackson Kemper, Jr.** is the Chairman and Chief Executive Officer of the Kemper Group, Inc., a government relations organization, located in Washington D.C., where he has worked since 1995. Mr. Kemper graduated from Drexel University with a B.S. degree in Engineering.

Stephen P. Tocco is the President and CEO of ML Strategies, LLC, a business consulting and government relations group headquartered in Boston, Massachusetts, where he has worked since 1997. Since 1999, Mr. Tocco has also served as a Chairman of the Massachusetts Board of Higher Education. From August 1993 to January 1997, Mr. Tocco served as executive director and CEO of the Massachusetts Port Authority, which includes Boston's Logan International Airport. Mr. Tocco earned a B.S. degree in Chemistry from the Massachusetts College of Pharmacy. Mr. Tocco serves on our compliance, disclosure and ethics oversight committee.

Joseph J. Luca is the owner of Joseph J. Luca, CPAs, a regional public accounting firm which he founded in 1974 where he has worked since that time. From 1993 to 1999,

Mr. Luca also served as the CFO and Director of Administration and Finance of The Massachusetts Port Authority. Mr. Luca is a Certified Public Accountant. Mr. Luca earned a B.S.B.A. degree from Northeastern University and a Masters of Science in Taxation from Bentley College. Mr. Luca serves as chair of our finance and audit committee and is a member of our compensation committee and compliance, disclosure and ethics oversight committee.

Former United States Senator Larry L. Pressler was a member of Congress for 22 years, 18 of which he served in the U.S. Senate (1979-1997). During that time, he authored the Telecommunications Act of 1996 and was Chairman of the Senate Commerce, Science and Transportation Committee as well as Chairman of the Aviation Subcommittee for that committee. Since 1997, former Senator Pressler has been and is currently Chairman of The Pressler Group, L.L.C., a business consulting and government relations group headquartered in Washington, D.C. Currently, former Senator Pressler serves on the Boards of Infosys Technologies Ltd., and the Philadelphia Stock Exchange Board of Governors. Former Senator Pressler was a Rhodes Scholar at Oxford, England, received a Masters in Public Administration from Harvard's Kennedy School of Government, and is a graduate of Harvard Law School. Former Senator Pressler serves as the chair of our compliance, disclosure and ethics oversight committee.

43

Kenneth S. Wood was the President of Barringer Technologies, Inc., a trace detection company, from 1996 through 2002. Since 2002, Mr. Wood has been providing business consulting services and pursuing other business interests. Mr. Wood graduated from Colgate University with a B.A. degree in Economics and received his J.D. degree from Seton Hall University. Mr. Wood serves on our finance and audit committee and is chair of our compensation committee.

David D. Cryer serves as our Chief Financial Officer, Secretary and Treasurer. Mr. Cryer worked for FSTO, our former subsidiary, since its founding in 1997 and joined us in September, 2002. Mr. Cryer also serves as Chief Financial Officer of Integrated Medical Services, Inc., a Wyoming corporation, and serves as the Controller to Kildare Corporation, a Delaware corporation. Mr. Cryer graduated from the University of Massachusetts with a B.S. degree in Accounting. He received a Masters Degree in Management Science at Ball State University. Mr. Cryer serves, as an ex officio member, on our compliance, disclosure and ethics oversight committee and executive committee. Upon completion of this offering, we anticipate that Mr. Cryer will devote substantially all of his professional time and attention to his duties as our Chief Financial Officer.

### **Board of Directors**

Pursuant to our bylaws, our board of directors shall consist of at least one and not more than fifteen directors, with the exact number to be fixed from time to time by our board of directors. Our board of directors currently has eight members. Each director holds office until the next annual meeting of stockholders and until the director's successor is elected and qualified.

### Finance and Audit Committee

The finance and audit committee consists of Kenneth S. Wood and Joseph J. Luca, who is chairman. The functions of the finance and audit committee include retaining our independent auditors, reviewing their independence, reviewing and approving the planned scope of our annual audit, reviewing and approving any fee arrangements with our auditors, overseeing their audit work, reviewing and pre-approving any non-audit services that may be performed by them, reviewing the adequacy of accounting and financial controls, reviewing our critical accounting policies and reviewing and approving any related party transactions.

# Compensation Committee

The members of the compensation committee are Joseph J. Luca and Kenneth S. Wood, who is chairman. The compensation committee makes recommendations to the board of directors on compensation for our executive officers and other key employees, and reviews management's recommendations for stock option grants and other compensation plans or practices.

# Compliance, Disclosure and Ethics Oversight Committee

The compliance, disclosure and ethics oversight committee consists of Joseph J. Luca, Stephen P. Tocco and former Senator Larry L. Pressler, who is its chairman, plus our executive officers, Samuel A. Kovnat, Captain William B. Cotton, Frank L. Rees, and David D. Cryer (ex officio member). The general functions of the committee include setting, implementing and monitoring policies to ensure that we comply to the fullest extent possible with all applicable local, state and federal laws, rules and regulations and ethical standards; adopting a code of ethics; reviewing, controlling and ensuring that we release news, information and materials which are truthful, accurate and complete in all material respects and which comply with Regulation FD; and establishing, overseeing and implementing disclosure, control and review procedures used to prepare SEC filings.

44

# Executive Committee

The members of our executive committee are Samuel A. Kovnat, Captain William B. Cotton, Frank L. Rees, and David D. Cryer (ex officio member). The chief executive officer, Mr. Kovnat, is its chairman. The purpose of the executive committee is to exercise the powers of our board of directors in the management of our operations when our board is unable to act except the executive committee shall not have the power to fill vacancies in our board of directors or the power to amend our bylaws or take any other action without prior approval of our board of directors if the board has required such approval with respect to a particular action or which directly contravenes a prior resolution of our board of directors.

# Limitation of Liability and Indemnification of Directors and Officers

Our amended articles of incorporation and bylaws provide that our directors and officers will not be personally liable to us or our stockholders for monetary damages due to the breach of a fiduciary duty as a director or officer. Nevada Revised Statute 78.7502 provides that we may indemnify any officer, director, employee or agent who is party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, provided he was acting in good faith and in a manner which he reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he had no reasonable cause to believe that his conduct was unlawful. The indemnification includes all actual and reasonable expenses, including attorney's fees, judgments, fines and settlement amounts. The termination

of any action, suit or proceeding by judgment, order, settlement or conviction, does not of itself prevent indemnification so long as the officer or director acted in good faith and in a manner which he reasonably believed to be in, or not opposed to, our best interests, or, with respect to any criminal action or proceeding, he had no reasonable cause to believe that his conduct was unlawful.

In addition, Nevada Revised Statute 78.7502 provides that we may indemnify any officer, director, employee or agent who is party to any threatened, pending or completed action or suit brought by us or by our stockholders on our behalf, provided he was acting in good faith and in a manner which he reasonably believed to be in, or not opposed to, our best interests. The indemnification includes all actual and reasonable expenses, including attorney's fees, judgments, fines and settlement amounts. However, indemnification is prohibited as to any suit brought in our right in which the director or officer is adjudged by a court to be liable to us.

To the extent that the officer or director is successful on the merits in any proceeding pursuant to which such person is to be indemnified, we must indemnify him against all actual and reasonable expenses incurred, including attorney's fees.

The foregoing indemnity provisions will limit your ability as stockholders to hold officers and directors liable and collect monetary damages for breaches of fiduciary duty, and require us to indemnify officers and directors to the fullest extent permitted by law.

To the extent that indemnification may be available to our directors and officers for liabilities arising under the Securities Act of 1933 as amended, we have been advised that, in the opinion of the SEC, such indemnification is against public policy and therefore unenforceable.

### EXECUTIVE COMPENSATION

The following table sets forth information concerning the compensation of our chief executive officer and our other most highly compensated executive officers whose salary plus bonus in our last fiscal year exceeded \$100,000, for all services rendered in all capacities to us, during our fiscal years ended May 31, 2001, 2002 and 2003.

45

### **Summary Compensation Table**

					Long Term Compensation						
	Annual Compensation			Awards Pay			Payou	uts			
Name and Principal Position	<u>Fiscal</u> <u>Year</u>	Salary (\$)	<u>Bonus</u> (\$)	Other Annual Compensation (\$)		ricted ock (#) (1)	Shares Underlying Options/ SARs (#) (2)	LTI	IP Payouts (\$)	All Ot	her Comp (\$)
Samuel A. Kovnat, CEO	2001 2002 2003	127,860 124,800 150,960	  	  	- - -	 	  		  	  	
William B. Cotton, President	2001 2002 2003	86,870 117,238 138,043	  	  	 166,667 		145,834 		  	  	
Frank L. Rees, Executive VP	2001 2002 2003	125,440 114,100 120,820	  	  	  		  		  	  	

- (1) The dollar value of Captain Cotton's restricted stock is not set forth as our common stock was not publicly traded at the time of the grant, December 30, 2001. The shares vest at a rate of 20% upon the date of grant and 20% annually over the next four years.
- (2) Represents options to purchase our common stock awarded pursuant to Captain Cotton's employment agreement and his service on the board of directors.

# **Compensation of Directors**

Only directors who are not employees of ours, currently Messrs. Kemper, Tocco, Luca, Pressler, and Wood, are compensated for their services as directors. Each non-employee director is paid \$1,000 for each meeting of the board of directors that he attends in person. Non-employee directors sit on the Finance and Audit Committee, Compensation Committee or Compliance, Disclosure and Ethics Oversight Committee. Non-employee directors are compensated at the rate of \$300 to \$400 per hour for their work on the board of directors, including telephonic meetings, and on such committees. Directors are also reimbursed for their expenses incurred in attending board of directors and committee meetings.

Each independent member of the board of directors is also eligible for a grant of stock options under the following terms. Upon initial election to the board of directors, we granted each an option to purchase 41,667 shares of our common stock at \$6.00 per share. Of these options, 25% vest immediately, with the unvested options vesting at a rate of 25% every year over a three-year period. All options have a three-year term beginning upon the later of September 1, 2002 or the date of vesting.

# **Employment Contracts**

Effective as of November 4, 2003, we entered into a two-year employment agreement with Samuel A. Kovnat, our Chief Executive Officer. The agreement provides for the

payment to Mr. Kovnat of an annual salary of \$166,000.

Effective as of November 4, 2003, we entered into a two-year employment agreement with William B. Cotton, our President. The agreement provides for the payment to Mr. Cotton of an annual salary of \$150,000.

46

On November 3, 2000, we entered into a three-year employment agreement with Frank L. Rees, our Executive Vice President. The agreement provided for the payment to Mr. Rees of an annual salary of \$146,000 subject to continuous government funding. We anticipate that we will extend this contract for an additional two years under substantially similar terms.

Effective as of November 4, 2003, we entered into a two-year employment agreement with David D. Cryer, our Chief Financial Officer. The agreement provides for the payment to Mr. Cryer of an annual salary of \$124,800.

These agreements also provide that the parties may agree by written amendment to continue the agreement on a year-to-year basis. Pursuant to these agreements, in the event of termination without cause, we will continue to pay the officer an amount equal to his pay for twelve monthly installments or the amount equal to his pay for the number of monthly installments remaining under his employment agreement, whichever is greater.

#### CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

We recently approved the continuation of a consulting contract in the amount of \$6,000 per month plus expenses between us and The Kemper Group, Inc. which is owned by one of our directors, Jackson Kemper, Jr.

# SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth, as of January 28, 2004, certain information with respect to the beneficial ownership of our common stock by (i) each stockholder known by us to be the beneficial owner of more than five percent (5%) of our common stock, (ii) each director, (iii) each executive officer, and (iv) all of our directors and executive officers as a group. Except as set forth below, we are not aware of any beneficial owner of more than five percent (5%) of our common stock. Except as otherwise indicated, we believe that the beneficial owners of our common stock listed below, based on information furnished by such owners, have sole investment and voting power with respect to such shares, subject to community property laws where applicable.

Name (1)	Amount and Nature of Beneficial Ownership (2)	Percent of Common Stock (3)
<b>Directors and Executive Officers</b>		
William B. Cotton, Director, President (4)	395,834	7.27%
Samuel A. Kovnat, Chairman, CEO (5)	422,980	7.98%
Frank L. Rees, Director, Executive Vice President	422,980	7.98%
David D. Cryer, Chief Financial Officer, Secretary, Treasurer	41,667	*
Jackson Kemper, Jr., Director (6)	83,334	1.56%
Stephen P. Tocco, Director (7)	41,667	*
Joseph J. Luca, Director (8)	20,834	*
Larry L. Pressler, Director (9)	41,667	*
Kenneth S. Wood, Director (10)	10,417	*
All directors and officers as a group (nine persons) (11)	1,481,380	27.72%
Certain Beneficial Owners		
Spencer Trask Intellectual Capital Company, LLC (12)	417,326	7.80%

<sup>\*</sup>Represents beneficial ownership of less than one percent of the issued and outstanding common stock on January 28, 2004.

<sup>(1)</sup> Unless otherwise indicated, all addresses are c/o Flight Safety Technologies, Inc., 28 Cottrell Street, Mystic, Connecticut, 06355.

- (2) Beneficial ownership as reported in the above table has been determined in accordance with Rule 13d-3 of the Securities Exchange Act of 1934. The number of shares beneficially owned by each person or group as of January 28, 2004 includes shares of common stock that such person or group had the right to acquire on or within 60 days after January 28, 2004, including, but not limited to, upon the exercise of options.
- (3) For each person and group included in the table, percentage ownership is calculated by dividing the number of shares beneficially owned by such person or group as described above by the sum of the 5,302,068 shares of common stock outstanding on January 28, 2004 and the number of shares of common stock that such person or group had the right to acquire on or within 60 days of January 28, 2004, including, but not limited to, upon the exercise of options.
- (4) Includes 166,667 shares of our common stock subject to certain restrictions, and 145,834 shares of our common stock issuable to Mr. Cotton upon the exercise of options at a rate of \$6.00 per option.
- (5) Does not include an aggregate of 50,000 shares of our common stock owned by Mr. Kovnat's daughter and his grandsons. Mr. Kovnat disclaims beneficial ownership of the shares owned by these individuals.
- (6) Represents 41,667 shares of our common stock, plus an additional 41,667 shares of our common stock issuable to Mr. Kemper upon the exercise of options at a rate of \$6.00 per option.
- (7) Represents shares of our common stock issuable to Mr. Tocco upon the exercise of options at a rate of \$6.00 per option.
- (8) Represents shares of our common stock issuable to Mr. Luca upon the exercise of options at a rate of \$6.00 per option. Options for an additional 20,834 shares of our common stock will vest over the next 2 years at a rate of 10,417 shares per year.
- (9) Represents shares of our common stock issuable to former Senator Pressler upon the exercise of options at a rate of \$6.00 per option.
- (10) Represents shares of our common stock issuable to Mr. Wood upon the exercise of options at a rate of \$6.00 per option. Options for an additional 31,250 shares of our common stock will vest over the next 3 years at a rate of 10,417 shares per year.
- (11) Includes 302,084 shares of our common stock issuable upon the exercise of options. See notes 4 through 9.
- (12) Includes 363,667 shares of our common stock held by Spencer Trask Intellectual Capital Company, LLC; 5,682 shares of our common stock held by Spencer Trask Ventures, Inc.; 35,182 shares of our common stock issuable to Spencer Trask & Co. upon exercise of issued and outstanding warrants at a rate of \$6.00 per warrant; and 12,795 shares of our common stock issuable to William Dioguirdi, President of Spencer Trask, LLC upon exercise of warrants at a rate of \$6.00 per warrant. The address for Spencer Trask Intellectual Capital Company, LLC is 535 Madison Avenue, 18<sup>th</sup> Floor, New York, NY 10022.

# DESCRIPTION OF SECURITIES

Upon completion of this offering, our authorized capital stock will consist of 50,000,000 shares of common stock, \$0.001 par value, and 5,000,000 shares of preferred stock, \$0.001 par value. The following summary is qualified in its entirety by reference to our articles of incorporation and bylaws, copies of which are filed as exhibits to our previous filings with the SEC and incorporated herein by reference.

48

# Units

In the offering described in this prospectus, we are offering for sale units of our securities. Each unit consists of two shares of common stock and one public warrant to purchase one additional share of common stock. The public warrants will trade only as a part of a unit for 30 days following this offering unless the representative of the underwriters determines that separate trading of the warrants should occur earlier.

# Common Stock

We have authorized 50,000,000 shares of \$0.001 par value common stock, and 5,302,068 shares are currently issued and outstanding. After giving effect to the issuance of the shares of common stock included in the units offered by this prospectus, assuming the underwriter does not exercise its overallotment option, there will be 8,002,068 shares outstanding upon closing of this offering. Holders of shares of our common stock are entitled to receive such dividends as may be declared by our board of directors from funds legally available therefore and, upon liquidation, are entitled to share pro rata in any distribution to stockholders. The holders of shares of our common stock have one vote per share and have no preemptive rights. Our common stock is not redeemable, does not have conversion rights and is not liable to assessment or further calls by us. Our articles of incorporation, as amended, do not grant the stockholders cumulative voting rights in the election of directors. Certain provisions of the articles and bylaws, certain sections of the Nevada General Corporation Law, and the ability of our board of directors to issue shares of preferred stock and to establish the voting rights, preferences and other terms thereof, may be deemed to have an anti-takeover effect and may discourage takeover attempts not first approved by our board of directors, including takeovers which stockholders may deem to be in their best interests.

# **Preferred Stock**

Our articles of incorporation provide for the issuance of up to 5,000,000 shares of preferred stock, \$0.001 par value. Our board of directors will have the authority, without further action by the stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series and to designate the rights, preferences, privileges and restrictions of each such series. The issuance of preferred stock could have the effect of restricting dividends on the common stock, diluting the voting power of the common stock, impairing the liquidation rights of the common stock or delaying or preventing a change in control without further action by the stockholders. At present, we have no plans to issue any shares of preferred stock after completion of this offering.

# **Stock Options**

Currently, there are outstanding options to purchase an aggregate of 632,950 shares of our common stock at an exercise price of \$6.00 per share; 580,866 of these options are vested, 20,834 will vest over the next 24 months, and 31,250 will vest over the next 36 months.

# **Existing Warrants**

Currently, there are outstanding warrants to purchase an aggregate of 101,058 shares of our common stock, exercisable at \$6.00 per share.

49

#### Public Warrants Issued in This Offering

#### General

Each public warrant entitles the holder to purchase one share of our common stock at an exercise price per share of \$3.30 (110% of the public offering price allocated to one share). The exercise price is subject to adjustment upon the occurrence of certain events as provided in the public warrant certificate and summarized below. Once separated from the units, our public warrants may be exercised at any time after this offering until the fifth anniversary of the effective date of this offering, which is the expiration date. Those of our public warrants which have not previously been exercised will expire on the expiration date. A public warrant holder will not be deemed to be a holder of the underlying common stock for any purpose until the public warrant has been properly exercised. Reference is made to the warrant agreement, which has been filed as an exhibit to the registration statement in which this prospectus is included for a complete description of the terms and conditions of the public warrants.

# Separate Transferability

Our common stock and public warrants sold in this offering will initially be represented by certificates representing units, and we will not replace these certificates with certificates representing the component securities of the units for a period of 30 days following this offering unless the representative of the underwriters determines that separate trading of the warrants should occur earlier. During such 30-day period, or such shorter period as the representative of the underwriters determines, the public warrants will not trade separately. We will announce in advance the commencement of trading in the public warrants by a press release. We will continue to list the units on the American Stock Exchange for up to 30 days following this offering but may cease to maintain the listing of the units at any time thereafter. Upon separation, unit holders who wish to hold physical certificates will, upon surrender of their unit certificates, receive certificates for the common stock and public warrants represented by such unit certificates.

# Redemption

At any time after the first anniversary of the date of this offering, we may redeem some or all of the public warrants at a price of \$0.25 per warrant (subject to adjustment), upon 30 days' notice so long as the last reported sales price per share of our common stock as reported by the principal exchange or trading market on which our common stock trades equals or exceeds \$10.00 (subject to adjustment) for twenty consecutive trading days ending on the tenth day prior to the date we give notice of redemption. We will send the written notice of redemption by first class mail to public warrant holders at their last known addresses appearing on the registration records maintained by the transfer agent for our public warrants. No other form of notice by publication or otherwise will be required. If we call the public warrants for redemption, they will be exercisable until the close of business on the business day next preceding the specified redemption date.

# Exercise

A public warrant holder may exercise our public warrants only if an appropriate registration statement is then in effect with the SEC and if the shares of common stock underlying our public warrants are qualified for sale under the securities laws of the state in which the holder resides. We are required to use our best efforts to maintain a current prospectus relating to such shares of our common stock at all times when the market price of our common stock exceeds the exercise price of the public warrants until the expiration date of the public warrants, although there can be no assurance that we will be able to do so.

Our public warrants may be exercised by delivering to our transfer agent the applicable public warrant certificate on or prior to the expiration date or the redemption date, as applicable, with the form on the reverse side of the certificate executed as indicated, accompanied by payment of the full exercise price for the whole number of public warrants being exercised. Public warrants may only be exercised to purchase whole shares. Public warrant holders will receive cash equal to the current market value of any fractional interest, which will be the value of one whole interest multiplied by the fraction thereof, in the place of fractional public warrants that remain after exercise if they would then hold public warrants to purchase less than one whole share. Fractional shares will not be issued upon exercise of our public warrants.

50

For the life of the public warrants, the holders thereof are given the opportunity to profit from a rise in the market of our common stock, with a resulting dilution in the interest of all other stockholders. So long as the public warrants are outstanding, the terms on which we could obtain additional capital may be adversely affected. The holders of the public warrants might be expected to exercise them at a time when we would, in all likelihood, be able to obtain any needed capital by a new offering of securities on terms more favorable than those provided by the public warrants.

# $Adjust ments\ of\ Exercise\ Price$

The exercise price and redemption price are subject to adjustment in specified circumstances, including in the event we declare any stock dividend to stockholders or effect any split or reverse split with respect to our common stock after the effective date of this offering. Therefore, if we effect any stock split or reverse split with respect to our common stock, the exercise price in effect immediately prior to such stock split or reverse split will be proportionately reduced or increased, respectively. Any adjustment of the exercise price will also result in an adjustment of the number of shares purchasable upon exercise of a public warrant or, if we elect, an adjustment of the number of public warrants outstanding. The public warrants do not contain provisions protecting against dilution resulting from the sale of additional shares of our common stock for less than the exercise price of the public warrants or the current market price of our common stock.

Until exercised, the warrants will have no voting, dividend or other shareholder rights.

#### Registration Rights

In July 2003, our board of directors approved a plan to use commercially reasonable efforts to promptly register an aggregate of 213,175 shares of our common stock underlying certain of our outstanding warrants and stock options. Participation in this plan was conditioned upon an agreement by the security holder to shorten the period of exercise to one year from the effective date of registration of the underlying shares with the SEC and to eliminate the so-called "cashless exercise" provision. Holders of warrants and stock options to purchase an aggregate of 125,677 shares of our common stock have elected to participate in this plan. We specifically reserved the right to withdraw or terminate this plan at any time, for any reason in our sole discretion. Management is currently considering what, if any, action to take in implementing this plan.

### FEDERAL INCOME TAX CONSIDERATIONS

The following discussion sets forth the material federal income tax consequences, under current law, relating to the purchase and sale of the units and the underlying common stock and warrants. The discussion is a summary and does not deal with all aspects of federal taxation that may be applicable to an investor, it does not consider specific facts and circumstances that may be relevant to a particular investor's tax position. Some holders, such as dealers in securities, insurance companies, tax exempt organizations, foreign persons and those holding common stock or warrants as part of a straddle or hedge transaction, may be subject to special rules that are not addressed in this discussion. This discussion is based only on current provisions of the Internal Revenue Code of 1986, as amended, and on administrative and judicial interpretations as of the date of this prospectus, all of which are subject to change. You should consult your own tax advisor as to the specific tax consequences to you of this offering, including the applicability of federal, slate, local and foreign tax laws.

Tax Basis

The tax basis for the common stock and public warrant comprising each unit will be determined by allocating the cost of the unit (exclusive of any tax basis allocable to a fractional share of common stock or any public warrant to purchase less than one share of common stock upon the exchange of units for common stock and public warrants) among the two shares of common stock and one public warrant in proportion to the relative fair market value of these securities on the date the unit is issued.

51

### Exercise or Sale of Warrants

No gain or loss will be recognized by a holder of a warrant on the purchase of shares of common stock for cash on an exercise of a warrant, except that gain will be recognized to the extent cash is received in the place of fractional shares or warrants. The tax basis of common stock received upon exercise of a warrant will equal the sum of the tax basis of the exercised warrant and the exercise price. The holding period of the common stock acquired will begin on the date the warrant is exercised. It does not include the period during which the warrant was held.

Gain or loss from the sale or other disposition of a warrant will be capital gain or loss to its holder if the common stock to which the warrant relates would have been a capital asset in the holder's hands. This capital gain or loss will be long-term capital gain or loss if the holder has held the warrant for more than one year at the time of the sale, disposition or lapse. If we redeem a warrant, the holder generally will realize capital gain or loss. Individuals generally have a maximum federal income tax of 15% on long-term capital gains. The deduction of capital losses is subject to limitations.

# Sale of Common Stock

A holder who sells common stock other than in connection with a tax free reorganization involving us will recognize gain or loss in an amount equal to the difference between the amount realized and the holder's tax basis in the common stock. Generally, the holder's tax basis in the common stock will equal the portion of the unit price that was allocable to the common stock. If the common stock is a capital asset in the holder's hands, gain or loss upon the sale of the common stock will be a long-term or short-term capital gain or loss, depending on whether the common stock has been held for more than one year. Individuals generally have a maximum federal income tax of 15% on long-term capital gains. The deduction of capital losses is subject to limitations.

# Expiration of Warrants Without Exercise

If a holder of a warrant allows it to expire or lapse without exercise, the expiration or lapse will be treated as a sale or exchange of the warrant on the expiration date. The holder will have a loss equal to the amount of such holder's tax basis in the lapsed warrant. If the warrant is a capital asset in the hands of the holder, the loss will be a long-term or short-term capital loss, depending on whether the warrant was held for more than one year. The deduction of capital losses is subject to limitations.

# SHARES ELIGIBLE FOR FUTURE SALE

Future sales of substantial amounts of common stock or our other securities in the public market or the prospect of such sales could adversely affect prevailing market prices.

Upon completion of this offering, 8,002,068 shares of common stock will be outstanding, which includes 5,302,068 shares of common stock currently outstanding and the 2,700,000 shares of our common stock comprising a part of the units to be sold pursuant to this prospectus. The shares comprising the units will be freely tradable without restriction under the Securities Act of 1933, unless purchased by an "affiliate" of ours, as that term is defined in Rule 144 under the Securities Act. Of the remaining 5,302,068 outstanding shares, as of January 28, 2004, 3,003,581 were freely tradable and we estimate 2,298,487 were eligible to be traded under Rule 144 of the Securities Act. Of these 2,298,487 shares, (i) 1,179,295 were held by "affiliates" and subject to the monthly volume limitation under Rule 144; and (ii) 1,119,192 were held by non-affiliated stockholders, subject to the monthly volume limitation, which we estimate will expire for 1,021,150 of these shares on September 1, 2004 and on 98,042 of these shares on June 27, 2005. In addition, the 1,179,295 shares held by "affiliates" will be subject to contractual lock-up agreements with The Shemano Group, Inc. pursuant to which such shares may not be sold for a period of 90 days from the effective date of this offering.

An additional 1,687,500 shares of our common stock may become available for resale upon exercise of the public warrants, the underwriters' over-allotment option and the representative's warrants.

52

An additional 632,950 shares may become eligible for future sale upon exercise of stock options currently outstanding; and 101,058 shares may become eligible for future sale upon exercise of warrants currently outstanding.

As a result of the foregoing, 4,122,773 of the shares outstanding immediately prior to the offering (or obtainable on exercise of securities outstanding immediately prior to the offering) can be resold in the public market immediately following the offering without restriction or subject to limitations other than the passage of additional time. An additional 1,179,295 shares will be eligible for resale upon expiration of, or release from, the lock-up agreements applicable to them. Many of the holders of these securities

have held them for a considerable period of time and may wish to dispose of some or all of their investment. The sale of a substantial number of such shares in the public market, or the possibility of such sales, could have a depressive effect on our stock price.

# Transfer Agent and Registrar

The transfer agent for the units and public warrants offered hereby, our common stock and our currently outstanding warrants is Pacific Stock Transfer Company.

# American Stock Exchange

Our common stock, units and public warrants have been approved for listing on the American Stock Exchange under the trading symbols "FLT," "FLT.u" and "FLT.ws," respectively.

### UNDERWRITING

The Shemano Group, Inc. is acting as the representative of the underwriters. We and the underwriters named below have entered into an underwriting agreement with respect to the units being offered. In connection with this offering and subject to certain conditions, each of the underwriters named below has severally agreed to purchase, and we have agreed to sell, the number of units set forth opposite the name of each underwriter.

<u>Underwriters</u>
The Shemano Group, Inc.
Pali Capital, Inc.

Number of Units 1,050,000 300,000

The underwriting agreement is subject to a number of terms and conditions and provides that the underwriters must buy all of the units if they buy any of them.

The representative has advised us that the underwriters propose to offer the units to the public at the public offering price indicated on the cover page of this prospectus, which includes the underwriting discount indicated there, and that they will initially allow concessions not in excess of \$0.27 per unit, of which not in excess of \$0.15 per unit may be reallowed to other dealers who are members of the NASD. After the public offering, concessions to dealer terms may be changed by the underwriters.

The underwriters have advised us that they do not intend to confirm sales of the units to any account over which they exercise discretionary authority in an aggregate amount in excess of five (5%) percent of the total securities offered hereby.

We have granted to the underwriters an option which expires 45 days after the date of this offering, exercisable as provided in the underwriting agreement, to purchase up to an additional 202,500 units at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions, which option may be exercised only for the purpose of covering over-allotments, if any. If the underwriters exercise the over-allotment in full, the total price to the public would be \$9,315,000, the total underwriting discounts and commissions would be \$698,625, and the total proceeds (before payment of the expenses of this offering) to our company would be \$8.616.375.

53

The underwriting agreement provides that we will reimburse the representative for its expenses on a non-accountable basis in the amount equal to 3% of the gross proceeds from the sale of the units offered by this prospectus, of which \$30,000 has been paid to date, and the balance of which shall be paid on the closing of this offering. In the event the offering for any reason is not closed or is withdrawn, the representative shall retain so much of the amounts received from us equal to its actual accountable expenses and reimburse us for the remainder, if any. We estimate the non-accountable underwriting expenses of this offering to be \$243,000. The representative has agreed to pay Dunwoody Brokerage Services, Inc., an entity not affiliated with us or the representative, a finder's fee of up to \$50,000 in cash upon completion of this offering for introducing the representative to us.

The underwriting agreement provides for reciprocal indemnification between us and the underwriters against certain liabilities in connection with the registration statement, including liabilities under the Securities Act of 1933, as amended.

At the closing of this offering, we will sell to the representative or its designees at an aggregate purchase price of \$100, underwriters' warrants to purchase up to 10% of the units sold (not including the possible exercise of the over-allotment) at an exercise price of \$7.20 per unit (120% of the public offering price per unit). The securities to be delivered upon exercise of the underwriters' warrants are the same as contained in the units, except that the warrant exercise price of the underlying warrant shall be \$5.40 per warrant (180% of the public offering price allocated to one share of common stock). The underwriters' warrants are exercisable for a period of four years commencing one year from the effective date of this offering. The underwriters' warrants contain provisions that protect their holders against dilution by adjustment of the exercise price and number of units issuable upon exercise on the occurrence of specific events, including stock dividends or other changes in the number of our outstanding shares, on the same terms as the public warrants. No holder of the underwriters' warrants will possess any rights as a stockholder unless the warrant is exercised. The underwriters' warrants may not be sold, transferred, assigned or hypothecated for a period of one year from the effective date of this offering, except to officers or partners (but not directors) of the representative and members of the selling group and/or their officers or partners. During the exercise period, the holders of the underwriters' warrants will have the opportunity to profit from a rise in the market price of the common stock, which will dilute the interests of our stockholders. We expect that the underwriters' warrants will be exercised when we would, in all likelihood, be able to obtain any capital needed on terms more favorable than those provided by the underwriters' warrants. Any profit realized by the representative on the sale of the underwriters' warrants or the underlying shares of common stock or public warrants

Beginning January 29, 2005, we will pay to the representative a warrant solicitation fee of five percent (5%) of the aggregate exercise price of the public warrants exercised pursuant to a warrant solicitation, if at the time of exercise of any public warrant (i) the market price of our common stock is equal to or greater than the then purchase price of the public warrant, (ii) the exercise of the public warrant is solicited by the representative at such time while the representative is a member of the National Association of Securities Dealers, Inc., (iii) the public warrant is not held in a discretionary account, (iv) disclosure of the compensation arrangement is made in documents provided to the holders of the public warrants, and (v) the solicitation of the exercise of the public warrants is not in violation of Regulation M (as such regulation or any successor regulation or rule may be in effect as of such time of exercise) promulgated under the Securities Exchange Act of 1934. In addition to the warrant solicitation fee, we will pay all costs and expenses relating to any solicitation. The representative is the sole warrant solicitation agent in connection with the solicitation of the public warrants.

We have agreed that, upon the request of the representative, we will, at our expense, on one occasion during the term of the underwriters' warrants, register the underwriters' warrants under the Securities Act. We have also agreed to include the underwriters' warrants and the shares of common stock and public warrants underlying the underwriters' warrants in any appropriate registration statement which is filed by us under the Securities Act of 1933, as amended, during the seven years following the effective date of the registration statement.

Until the distribution of the units offered by this prospectus is completed, rules of the SEC may limit the ability of the underwriters to bid for and to purchase units or their component securities. As an exception to these rules, the underwriters may engage in transactions that stabilize the price of the units. The Shemano Group, Inc., on behalf of the underwriters and selling group members, if any, and their affiliates, may engage in over-allotment sales, stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934.

- Over-allotment involves syndicate sales in excess of the offering size, which creates a syndicate short position.
- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Syndicate covering transactions involve purchases of the common stock and public warrants in the open market after the distribution has been completed in order to cover syndicate short positions. The underwriters may also elect to reduce any short position by exercising all or part of the over-allotment option to purchase additional units as described above.
- Penalty bids permit the representative to reclaim a selling concession from a syndicate member when the units originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions.

Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in this offering. Covered short sales are sales made in an amount not greater than the representative's over-allotment option to purchase additional shares in this offering. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through the over-allotment option. Naked short sales are sales in excess of the over-allotment option. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in this offering.

In general, the purchase of a security to stabilize or to reduce a short position could cause the price of the security to be higher than it might be otherwise. These transactions may be effected on the American Stock Exchange or otherwise. Neither we nor the underwriters can predict the direction or magnitude of any effect that the transactions described above may have on the price of the units. In addition, neither we nor the underwriters can represent that the underwriters will engage in these types of transactions or that these types of transactions, once commenced, will not be discontinued without notice.

The underwriting agreement provides for indemnification between us and the underwriters against specified liabilities, including liabilities under the Securities Act, and for contribution by us and the underwriters to payments that may be required to be made with respect to those liabilities. We have been advised that, in the opinion of the SEC, indemnification for liabilities under the Securities Act is against public policy as expressed in the Securities Act and is therefore unenforceable.

Our officers and directors have agreed that for a period of 90 days from the date this registration statement becomes effective that they will not sell, contract to sell, grant any option for the sale or otherwise dispose of any of our equity securities, or any securities convertible into or exercisable or exchangeable for our equity securities, other than through intra-family transfers or transfers to trusts for estate planning purposes, without the consent of The Shemano Group, Inc., as the representative of the underwriters, which consent will not be unreasonably withheld. The Shemano Group, Inc. may consent to an early release from the 90-day lock-up period if in its opinion the market for the common stock would not be adversely impacted by such sales and in cases of an officer, director or other stockholder's financial emergency. We are unaware of any officer or director who intends to ask for consent to dispose of any of our equity securities during the lock-up period.

55

The initial public offering price of the units offered by this prospectus and the exercise price of the public warrants were determined by negotiation between us and the underwriters. Among the factors considered in determining the initial public offering price of the units and the exercise price of the public warrants were:

- ☐ the market price of the common stock;
- our history and our prospects;
- ☐ the industry in which we operate;
- $\ensuremath{\mathbb{I}}$  the status and development prospects for our proposed products and services;
- our past and present operating results;
- the previous experience of our executive officers; and
- the general condition of the securities markets at the time of this offering.

The offering price stated on the cover page of this prospectus should not be considered an indication of the actual value of the units. That price is subject to change as a result of market conditions and other factors, and we cannot assure you that the units, or the common stock and public warrants contained in the units, can be resold at or above the initial public offering price.

# LEGAL MATTERS

Certain legal matters, including the legality of the issuance of the shares of common stock offered herein, are being passed upon for us by our counsel, Tobin, Carberry, O'Malley, Riley & Selinger, P.C., New London, Connecticut. Certain legal matters with respect to our patents and proprietary rights, as described in this prospectus, are being passed upon for us by our patent counsel, the Law Offices of David A. Tamburro, Deerfield Beach, Florida. Mr. Tamburro owns approximately 23,334 shares of our common stock. Certain matters related to the offer and sale of the units will be passed on for the underwriters by Blank Rome LLP, New York, New York.

# **EXPERTS**

The financial statements of Flight Safety Technologies, Inc. and its subsidiary, as of May 31, 2003, have been included herein and in the registration statement in reliance upon the report of Kostin, Ruffkess & Company, LLC, independent certified public accountants, appearing elsewhere herein, and upon the authority of that firm as experts in accounting and auditing.

# WHERE YOU CAN FIND MORE INFORMATION

We file reports, registration statements and other documents with the SEC. The registration statement of which this prospectus is a part contains additional relevant information about us and our common stock, and you should refer to the registration statement and its exhibits to read that information. References in this prospectus to any of our contracts or other documents are not necessarily complete, and you should refer to the exhibits filed with the registration statement for copies of the actual contract or document.

56

# INDEX TO FINANCIAL STATEMENTS

	<u>Page</u>
Audited Statements for Fiscal Years Ended May 31, 2003 and 2002	
Independent Auditors' Report	F-2
Consolidated Balance Sheets May 31, 2003	F-3
Consolidated Statements of Operations for the Years Ended May 31, 2003 and 2002	F-4
Consolidated Statements of Changes in Stockholders Equity (Deficit) for the Years Ended May 31, 2003 and 2002	F-5
Consolidated Statements of Cash Flows for the Years Ended May 31, 2003 and 2002	F-6
Notes to the Consolidated Financial Statements for the Years Ended May 31, 2003 and 2002	F-7
Unaudited Statements for Six-Month Periods Ended November 30, 2003 and 2002	
Balance Sheet November 30, 2003 and May 31, 2003	F-13
Statement of Operations for the Three and Six Month Period Ended November 30, 2003 and 2002	F-14
Statement of Cash Flows for the Six Months Ended November 30, 2003 and 2002	F-15
Notes to the Financial Statements for the Six Months Ended November 30, 2003 and 2002	F-16

## Financial Statements

To The Board of Directors Flight Safety Technologies, Inc.

# INDEPENDENT AUDITORS' REPORT

We have audited the accompanying consolidated balance sheet of Flight Safety Technologies, Inc. as of May 31, 2003, and the related statements of operations, changes in stockholder's equity (deficit), and cash flows for the years ended May 31, 2003 and 2002. These financial statements are the responsibility of our management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinions.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Flight Safety Technologies, Inc. as of May 31, 2003, and the results of its operations and its cash flows for the years ended May 31, 2003 and 2002, in conformity with accounting principles generally accepted in the United States of America.

/s/ Kostin, Ruffkess & Company, LLC

Farmington, Connecticut
July 9, 2003, except for note 11
as to which the date is
January 8, 2004

# FLIGHT SAFETY TECHNOLOGIES, INC. Consolidated Balance Sheets May 31, 2003

Assets	2003
Current assets:	
Cash	\$ 1,039,693
Contract receivables	155,833
Other receivables	56,859
Other current assets	24,728
Total current assets	1,277,113
Property and equipment, net of accumulated depreciation of \$138,924	111,879
Intangible assets, net of accumulated amortization of \$23,348	_130,834
	\$ <u>1,519,826</u>
Liabilities and Stockholders' Equity	
Current liabilities:	
Accounts payable	\$ 245,678
Accrued expenses	126,807
Total current liabilities	372,485
Minority interest	1,176
Stockholders' equity	
Common stock, \$0.001 par value, 50,000,000 shares authorized, 4,919,035 shares issued and outstanding	4,919
Additional paid-in-capital	3,697,461
Unearned stock compensation	(96,192)
Accumulated deficit	(2,460,023)
	1,146,165

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

F-3

# FLIGHT SAFETY TECHNOLOGIES, INC. Consolidated Statements of Operations For The Years Ended May 31, 2003 and 2002

	<u>2003</u>	<u>2002</u>
Contract revenues	\$ 1,093,097 \$	490,031
Costs and expenses:		
Costs of revenues	799,259	460,244
Research and development	40,444	45,511
Selling, general and administrative	1,142,112	762,897
Depreciation and amortization	59,083	44,507
	2,040,898	1,313,159
Loss from operations	(947,801)	(823,128)
Other income (expense):		
Interest income	7,868	20,892
Interest expense	(2,232)	(6,864)
	5,636	14,028
Loss before provision for income taxes	<u>(942,165)</u>	(809,100)

Provision for income taxes	1,809	
Net loss	\$ <u>(943,974)</u> \$	(809,100)
Net loss per share - basic	\$ (.24) \$	(.92)
Weighted average number of shares - basic	<u>3,948,067</u>	<u>881,750</u>

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

# F-4

# FLIGHT SAFETY TECHNOLOGIES, INC. Consolidated Statements of Changes in Stockholders Equity (Deficit) For The Years Ended May 31, 2003 and 2002

	Commo	on Stoc	k	Convertibl Prefer			Additional Paid-In Capital	nearned Stock pensation	A	.ccumulated Deficit	St	tockholders' Equity (Deficit)
	Shares	An	nount	Shares	A	mount	·	•				
Balance at May 31, 2001	865,000	\$	8,650	606,343	\$	6,063	\$ 1,929,930	\$ 	\$	(632,369)	\$	1,312,274
Issuance of preferred stock	67,000		670				23,852					24,522
Unearned stock compensation							98,088	(98,088)				
Net Loss										(809,100)		(809,100)
Balance at May 31, 2002	932,000	\$	9,320	606,343	\$	6,063	\$ 2,051,870	\$ (98,088)	\$	(1,441,469)	\$	527,696

Issuance of common stock	283,334	283			1,529,360			1,529,643
Issuance of stock options					63,250	(36,250)		27,000
Amortization of unearned stock compensation						38,146		38,146
Net share exchange	3,703,701	(4,684)	(606,343)	(6,063)	52,981		(74,580)	(32,346)
Net loss			<del></del>	<u></u>			(943,974)	(943,974)
Balance at May 31, 2003	<u>4,919,035</u> \$	<u>4,919</u>	s	\$	<u>3,697,471</u>	\$ <u>(96,192)</u>	\$ <u>(2,460,023)</u>	\$ <u>1,146,165</u>

The accompanying notes are an integral part of these financial statements

F-5

# FLIGHT SAFETY TECHNOLOGIES, INC. Consolidated Statements of Cash Flows For The Years Ended May 31, 2003 and 2002

	<u>2003</u>	<u>2002</u>
Cash flows from operating activities:		
Net loss	\$ (943,974)	\$ (809,100)
Adjustments to reconcile net loss to net cash provided by operating activities:		

Depreciation and amortization	59,083	44,507
Non-cash compensation - common stock	65,146	24,522
Changes in operating assets and liabilities:		
(Increase) Decrease in contract receivables	(155,833)	248,808
(Increase) Decrease in other receivables	(1,557)	146,596
(Increase) Decrease in other current assets	(14,116)	3,413
Increase (Decrease) in accounts payable and accrued expense	133,896	(199,539)
Increase in costs in excess of billings and estimated earnings on uncompleted contracts		12,620
Net cash used in operating activities:	(857,355)	(528,173)
Cash flows from investing activities:		
Purchases of property and equipment	(3,355)	(7,967)
Payments for patents and other costs	(34,510)	(38,924)
Net cash used in investing activities:	(37,865)	<u>(46,891)</u>
Cash flows from financing activities:		
Proceeds from repayment of loans to officers	17,400	26,250
Payment on line of credit	(90,000)	(15,000)
Restricted cash	200,000	
Proceeds from issuance of common stock	1,529,643	
Net cash provided by financing activities	1,657,043	11,250
Net increase (decrease) in cash and cash equivalents	761,823	(563,814)
Cash and cash equivalents at beginning of year	277,870	841,684
Cash and cash equivalents at end of year	\$ 1,039,693	\$ <u>277,870</u>
Supplemental disclosures of cash flow information:		
Cash paid during the year for		
Income taxes paid (refunds)	\$ 2,401	\$ (6,611)
Interest	2,232	6,684

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

#### Note 1 - Summary of Significant Accounting Policies:

Significant accounting policies followed by Flight Safety Technologies, Inc. (the "Company") in determining financial position and the results of operations are as follows:

#### Consolidation

The consolidated financial statements of the Company include the accounts of the Company and its 96.54% owned subsidiary, Flight Safety Technologies Operating, Inc. All inter-company accounts and transactions have been eliminated in the consolidation. On June 27, 2003, Flight Safety Technologies Operating, Inc. was merged into Flight Safety Technologies, Inc.

#### Nature of Business

The Company is engaged in the development of two proprietary sensor technologies: SOCRATES and UNICORN.

SOCRATES (Sensor for Optically Characterizing Ring-eddy Atmospheric Turbulence Emanating Sound) is designed to detect clear air turbulence, microbursts, and aircraft generated vortices which result in hazardous conditions to safe air travel.

UNICORN (Universal Collision Obviation and Reduced Near-Miss) is a technology that is being designed based upon an arrangement of radar which gives both visual and audible warning indication of approaching aircraft to pilots.

On May 29, 1997, the Company was awarded a contract in the amount of \$1,326,335, sponsored by the Federal Aviation Administration ("FAA"), to commence the development and "Proof-of-Principle" of Socrates. During the period February 22, 1998 through May 31, 1999, the FAA added seven modifications to this contract totaling \$1,664,821.

The total contract funding for Phase I of Socrates in fiscal 1997 and 1998 was \$2,991,156. An additional \$4,927,898 was awarded on August 29, 1999, for Phase II of Socrates and Phase II was further increased to \$6,200,000 on February 20, 2003. As of May 31, 2003, nine task orders have been approved totaling \$6,041,448 and as of May 31, 2003, the remaining funding for Phase II is \$1,127,976.

The Company's Federal contract, with modifications, was issued and is managed by The Volpe Center of the U.S. Department of Transportation. The Company submits, and receives payment on, monthly invoices, which represent progress payments covering the Company's total direct and indirect costs on the project.

The Company's primary office is in Mystic, Connecticut, and it also has offices in Baltimore, Maryland, and Chicago, Illinois. In addition to its full-time employees, the Company is further supported by a team of consultants and subcontractors, including Lockheed Martin Corporation and Anteon Corp., with whom the Company has a long-term Teaming Agreement.

F	-7

#### FLIGHT SAFETY TECHNOLOGIES, INC. Notes To The Consolidated Financial Statements For The Years Ended May 31, 2003 and 2002

# Note 1 - Summary of Significant Accounting Policies: (Continued)

#### Property and Equipment

Depreciation of property and equipment is provided using the straight-line method over estimated useful lives of five years. Expenditures for major renewals and betterments, which extend the useful lives of property and equipment, are capitalized. Expenditures for maintenance and repairs are charged to expense as incurred.

#### Income Taxes

Deferred taxes arise from differences in recording depreciation, amortization, and net operating loss carryforwards for financial statement and tax purposes.

#### Off Balance Sheet Risk

The Company had amounts in excess of \$100,000 in a single bank during the year. Amounts over \$100,000 are not covered by the Federal Deposit Insurance Corporation.

#### Statements of Cash Flows

For purposes of reporting cash flows, cash and cash equivalents includes cash on hand and short-term investments maturing within ninety days. As a result of the business combination with Reel Staff, Inc. the following non-cash transaction was recorded:

Accounts payable	\$ 31,170
Common Stock	1,892
Additional paid in capital	41,518

\$

#### Intangible Assets

Intangible assets consist of patent costs associated with SOCRATES and UNICORN. Patents are being amortized using the straight-line method over a period of seventeen years.

#### Research and Development

Company sponsored research and development costs, including proposal costs and un-reimbursed expenditures for developmental activities are charged against income in the year incurred.

#### Revenue and Cost Recognition

The Company recognizes income from contracts under the percentage of completion method of accounting for financial reporting purposes. Revenues are measured by the ratio of the costs incurred to date divided by the estimated total costs for each contract. Contracting costs include all direct material, labor, and subcontracting costs. General and administrative costs are charged to expense as incurred. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined. Changes in job performance, job conditions, and estimated profitability and final contract settlements may result in revisions to costs and income and are recognized in the period in which the revisions are determined. Revenue related to claims is recorded at the lesser of actual costs incurred or the amount expected to be realized.

F-8

#### FLIGHT SAFETY TECHNOLOGIES, INC. Notes To The Consolidated Financial Statements For The Years Ended May 31, 2003 and 2002

#### Note 1 - Summary of Significant Accounting Policies: (Continued)

#### Per Share Data

Income or (loss) per share is computed by dividing income available to common stockholders by the weighted average number of common shares outstanding during each period. Potential common shares have not been included due to their anti-dilutive effect.

#### Fair Values of Financial Instruments

The estimated fair value of financial instruments has been determined based on the available market information and appropriate valuation methodologies. The carrying amounts of cash, accounts receivable, other current assets, accounts payable, and accrued expenses approximate fair value at May 31, 2003, because of the short maturity of these financial instruments

#### **Estimates**

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

### Concentration of Credit Risk

Concentration of credit risk exists with respect to contract receivables. This risk is mitigated by the fact that these receivables are with the United States Government.

#### **Stock Compensation**

The Company applies Accounting Principles Board Opinion 25, "Accounting for Stock Issued to Employees" ("APB 25") and related interpretations in accounting for its stock awards, and complies with the disclosure provisions of SFAS No. 123, "Accounting for Stock Based Compensation" ("SFAS 123"). Under APB 25, compensation expense is recognized over the vesting period to the extent that the fair market value of the underlying stock on the date of the grant exceeds the exercise price of the employee stock award.

The Company accounts for equity instruments issued to non-employees in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force ("EITF") Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services." All transactions in which services are received for issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. The measurement date of the fair value of the equity instrument issued is the earlier of the date on which the counterparty's performance is complete or the date on which it is probable that performance will occur.

	<u>2003</u>
U.S. Government:	
Amounts billed	\$ 155,833
Amounts not billed	<u>56,859</u>
	\$ 212,692

#### Note 3 - Property and Equipment:

Property and equipment are summarized by major classifications as follows:

	<u>2003</u>
Machinery and equipment	\$ 245,296
Furniture and fixtures	_5,507
	250,803
Less: accumulated depreciation	138,924
	\$ <u>111,879</u>

Depreciation expense for the years ended May 31, 2003 and 2002 was \$49,825 and \$37,479, respectively

#### Note 4 - Intangible Assets:

The gross patent costs as of May 31, 2003, were \$154,182. Related accumulated amortization was \$23,348. Amortization expense for the years ended May 31, 2003 and 2002 was \$9,258 and \$7,028, respectively. Amortization expense for the next five years is expected to be \$9,070 per year.

#### Note 5 - Stockholders' Equity:

Common Stock Options and Warrants

	Common Stock <u>Options</u>	Common Stock <u>Warrants</u>
Outstanding at May 31, 2001	194,847	40,423
Options granted to employees	_ 8,334	
Outstanding at May 31, 2002	203,181	40,423
Exchange pursuant to recapitalization	304,770	60,635
Options granted to non-employees	16,667	
Exchange pursuant to recapitalization	25,000	
Options granted to non-employees	41,667	
Warrants issued with the common stock issuance		_283,334
Outstanding at May 31, 2003	<u>591,285</u>	<u>384,392</u>

Stock based expense attributable to options issued to non-employees based on the fair value of the shares issued was \$40,594 for the year ended May 31, 2003. Deferred stock based expense for the unvested portion of the options issued was \$22,656.

The fair value of the options granted to employees and non-employees is estimated on the date of grant based on the Black-Scholes minimum value pricing model using the following assumptions:

	<u>2003</u>	<u>2002</u>
Risk free interest rate	5.22%	5.56%
Expected dividend yield	None	None
Expected life of the options	Three Years	Ten Years
Expected volatility	30%	80%

Stock based expense attributable to common stock issued to employees (201,000 shares) based on the fair value of the shares issued was \$24,552 and \$24,522 for the years ended May 31, 2003 and 2002, respectively. Deferred stock based expense for the unvested portion of the stock issued was \$73,536.

#### **Note 6 - Related Party Transactions:**

The Company utilizes the lobbying services of a firm that is wholly-owned by one of the Company's stockholders. Total expenses related to these services were \$74,818 and \$55,696 for the years ended May 31, 2003 and 2002, respectively. As of May 31, 2003 and 2002, fees of \$6,865 and \$12,707 remained unpaid in this regard, respectively.

The Company also utilized one of its stockholders for the performance of legal services associated with the establishment of certain patents and trademarks. The total cost of these services for the years ended May 31, 2003 and 2002 were \$ 34,510 and \$41,772, respectively.

#### Note 7 - Income Taxes:

Income tax expense for 2003 and 2002 is as follows:

	<u>2002</u>	<u>2001</u>
Current tax	\$ 1,809	\$ 
Deferred tax (benefit)	(731,239)	(129,473)
Valuation allowance	731,239	129,473
	\$ 1,809	\$ ()

Temporary differences relate to the differences in depreciation and amortization methods used for book and tax basis, and certain accrued liabilities. The Company has Federal and State net operating loss carryforwards of approximately \$1,700,000, to reduce future taxable income, if any. The Federal operating losses expire in various years through 2023 and the State operating losses expire in various years through 2008. The Company also has State tax credit carryforwards of approximately \$8,500, which expire in the year 2008.

F-11

#### FLIGHT SAFETY TECHNOLOGIES, INC. Notes To The Consolidated Financial Statements For The Years Ended May 31, 2003 and 2002

#### Note 8 - Commitments:

The Company has leased office space at \$1,550 per month in Mystic, Connecticut, which expires March 31, 2004. The Company also leases office space, on a month to month basis, in Baltimore, Maryland, from an officer of the Company at \$500 per month. Rent expense was \$24,488 and \$24,900 for the years ended May 31, 2003 and 2002, respectively.

In connection with the transfer of the UNICORN technology from Advanced Acoustical Concepts, Inc. to the Company, the Company has agreed to pay a 3% royalty on all net sales of UNICORN products. As of May 31, 2003 and 2002, no amounts have been paid under this commitment.

The Company has commitments with various firms for lobbying services totaling \$112,000 for the next fiscal year.

#### Note 9 - Teaming Agreement:

In connection with SOCRATES, the Company has entered into a Teaming Agreement (as defined in the Federal Acquisition Register "FAR") with Lockheed Martin Corporation ("Lockheed"). The Company will act as the primary contractor and Lockheed will function as the primary subcontractor. The agreement is for a ten year period ending in 2007, unless terminated earlier based on specific conditions identified under the agreement. As of May 31, 2003 and 2002, the Company was liable to Lockheed for \$129,224 and \$-0-, respectively.

#### Note 10 - Recapitalization:

On September 1, 2002, the Company's stockholders in exchange for 96.54% of its common and preferred stock receiving a 53% interest in another corporation (Reel Staff, Inc.). This transaction resulted in a business combination treated as a reverse acquisition and recapitalization whereby Flight Safety Technologies, Inc. became the surviving entity. Then Reel Staff, Inc. changed its name to Flight Safety Technologies, Inc. The stock exchange rate was two and one half shares of Reel Staff, Inc. for every share of preferred and common stock tendered by the existing stockholders of Flight Safety Technologies, Inc. The result was the issuance of 2,537,259 shares of common stock. In conjunction with the share exchange, we issued 283,334 shares of common stock in a private placement. The private placement raised gross proceeds of \$1,700,000, and after

deduction of expenses, net proceeds were \$1,529,643. The Proforma operating results of this transaction as of the beginning of the reporting years would be as follows:

	<u>2003</u>	<u>2002</u>
Net sales	\$ _1,093,097	\$ 495,516
Operating expenses	\$ (2,040,898)	\$ (1,369,359)
Net loss	\$ (943,974)	\$ (873,843)
Net loss per share	\$ (.18)	\$ (.18)

#### Note 11 - Subsequent Events:

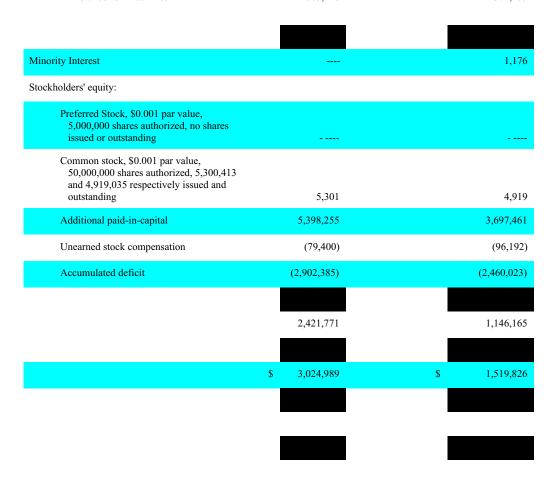
These financial statements have been adjusted to reflect a 1-for-3 reverse stock split which was effective December 31, 2003. As of May 31, 2003, shares outstanding have been adjusted and changed from 14,757,104 to 4,919,035. In conjunction with the stock split, common stock decreased by \$19,676 and additional paid in capital increased by the same amount. For the year ended May 31, 2003 and 2002, the weighted average number of shares decreased by 7,896,134 and 1,763,500, respectively. Net loss per share increased by \$(.16) and \$(.61), respectively. As of May 31, 2003, the common stock options and warrants decreased by 1,182,565 and 768,781, respectively.

F-12

## FLIGHT SAFETY TECHNOLOGIES, INC.

#### Balance Sheet November 30, 2003 and May 31, 2003

	(Unaudited) November 30, 2003		<u> </u>	(Audited) May 31, 2003
Assets				
Current assets:				
Cash	\$	1,904,284	\$	1,039,693
Contract receivables		359,289		155,833
Other receivables		74,654		56,859
Other current assets		243,912		24,728
Total current assets	_	2,582,139		1,277,113
Property and equipment, net of accumulated depreciation of \$172,586 and \$138,924,		209.076		111 970
respectively		298,976		111,879
Intangible assets, net of accumulated amortization of \$27,408 and \$23,348, respectively		143,874		130,834
	\$	3,024,989	\$	1,519,826
	_			
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable		471,872		245,678
Accrued expenses		131,346		126,807



The accompanying notes are an integral part of these financial statements

#### F-13

# FLIGHT SAFETY TECHNOLOGIES, INC.

# Statement of Operations (Unaudited) For The Three and Six Month Period Ended November 30, 2003 and 2002

	Thr	ee Months 2003	Ionths 003	Thi	ree Months 2002	Months 2002
Contract Revenues	s	762,252	\$ 1,294,467	\$	39,832	\$ 39,832

Cost of revenues		552,928		911,812		24,090		24,090
Research and development		59,540		76,657		12,155		16,823
Selling, general and administrative		348,157		712,577		303,722		538,728
Depreciation and amortization		18,961		37,922		13,806		27,550
		979,586		1,738,968		353,773		607,191
Loss from operations		(217,334)		(444,501)		(313,941)		(567,359)
Loss nom operations		(217,334)		(444,301)	I	(313,341)		(307,337)
Other income (Expense):								
Interest income		1,815		2,793		4,350		5,770
Interest expense		_				(205)		(2,232)
		1,815		2,793		4,145	l	3,538
					I			
Loss before provision for income taxes		(215,519)		(441,708)		(309,796)		(563,821)
Provision for income taxes		202	_	654	_		_	
							ı	
Net Loss	s	(215,721)	s	(442,362)	\$	(309,796)	s	(563,821)
Not Edds		(213,721)	9	(442,302)	Ψ	(303,130)		(303,021)
					I			
Net Loss Per Share								
Basic	\$	(.04)	\$	(.09)	\$	(.06)	\$	(.19)
Weighted Average Number of Shares Outstanding								
Basic		5,300,413		5,189,295		4,852,376		2,892,188

# FLIGHT SAFETY TECHNOLOGIES, INC.

# Statement of Cash Flows (Unaudited) For The Six Months Ended November 30, 2003 and 2002

2003

2002

	2003	2002
Cash flows from operating activities:		
Net loss	\$ (442,362)	\$ (563,821)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	37,922	27,550
Non-cash compensation - common stock	16,792	12,276
Assumption of Debt Upon Acquisition		(31,170)
Changes in operating assets and liabilities:		
(Increase) decrease in contract receivables	(203,456)	(39,832)
(Increase) decrease in other receivables	(17,795)	
(Increase) decrease in other current assets and other assets	(219,184)	(574)
Increase (decrease) in accounts payable and accrued expense	230,733	65,691
Net cash used in operating activities	(597,350)	(529,880)
Cash flows from investing activities:		
Purchases of property and equipment	(220,759)	(405)
Payments for patents and other costs	(17,300)	(11,199)
Net cash used in investing activities	(238,059)	(11,604)

Proceeds from repayment of loans to officers		10,650
Net proceeds (payment)/line of credit		(90,000)
Proceeds from issuance of common stock net of costs	1,700,000	1,529,643
Net cash provided by financing activities	1,700,000	1,450,293
Net increase (decrease) in cash and cash equivalents	864,591	908,809
Cash and cash equivalents at beginning of year	1,039,693	277,870
Cash and cash equivalents at end of quarter	\$ 1,904,284	\$ 1,186,679
Supplemental disclosures of cash flow information:		
Cash paid during the year for		
Income taxes paid	\$ 	\$ 
Interest		2,232

The accompanying notes are an integral part of these financial statements

F-15

#### FLIGHT SAFETY TECHNOLOGIES, INC.

#### Notes To The Financial Statements (Unaudited) For The Six Months Ended November 30, 2003 and 2002

The financial statements of Flight Safety Technologies, Inc. (referred to herein as the "Company", unless the context indicates otherwise) presented herein are unaudited. In the opinion of management, these financial statements included all adjustments necessary for a fair presentation of the financial position. Results for the six months ended November 30, 2003 and 2002 are not necessarily indicative of results for the entire year. The accompanying financial statements should be read in conjunction with the Company's financial statements for the years ended May 31, 2003 and May 31, 2002 which are included in the Company's 10-KSB filed on August 14, 2003.

#### Note 1. Summary of Significant Accounting Policies:

#### Cash

Cash represents cash on hand of \$108,512 and investments in money market accounts of \$1,795,772 as of November 30, 2003. Money market accounts earn interest at approximately 1% (per annum).

#### **Income Taxes**

As of May 31, 2003 the Company has federal and state net operating loss carryforwards of approximately \$1,700,000, to reduce future taxable income, if any. The federal operating losses expire in various years through 2023 and the state operating losses expire in various years through 2008. The Company also has state tax credit carryforwards

of approximately \$8,500, which expire in the year 2008.

#### Research and Development

Company sponsored research and development costs, including proposal costs and unreimbursed expenditures for developmental activities are charged against income in the year incurred.

#### Revenue and Cost Recognition

The Company recognizes income from contracts under the percentage of completion method of accounting for financial reporting purposes. Revenues are measured by the ratio of the costs incurred to date divided by the estimated total costs for each contract. Contracting costs include all direct material, labor and subcontracting costs. General and administrative costs are charged to expense as incurred. Provisions for estimated losses on uncompleted contracts are made in period in which such losses are determined. Changes in job performance, job conditions and estimated profitability and final contract settlements may result in revisions to costs and income and are recognized in the period in which the revisions are determined. Revenue related to claims is recorded at the lesser of actual costs incurred or the amount expected to realized.

#### **Intangible Assets**

Intangible assets consist of patent costs totaling \$171,282 with accumulated amortization of \$27,408. Amortization expense for the six months ended November 30, 2003 was \$4,260. Amortization expense for each of the next five years is expected to be approximately \$9,811.

F-16

#### FLIGHT SAFETY TECHNOLOGIES, INC.

Notes To The Financial Statements (Unaudited) For The Six Months Ended November 30, 2003 and 2002

#### Note 2. Interim Financial Information (Unaudited):

The interim financial statements of the Company for the three months ended November 30, 2003 and 2002, included herein, have been prepared by the Company, without audit, pursuant to the rules and regulations of the SEC. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to the rules and regulations relating to interim financial statements.

#### Note 3. Equity Transactions:

On September 1, 2002 the Company (then known as Reel Staff, Inc.) entered into a share exchange agreement ("Share Exchange") with shareholders of Flight Safety Technologies, Inc. (a private Delaware Corporation, formerly a subsidiary of the Company, operating under the name Flight Safety Technologies Operating, Inc. ("FSTO")). The share exchange resulted in a business combination treated as a reverse acquisition and recapitalization whereby for accounting purposes FSTO was treated as the acquiring corporation. The stock exchange rate was two and one half shares of the Company for every share of preferred and common stock tendered by the existing shareholders of FSTO. Simultaneous to this transaction the Company sold 283,335 units, at a price of \$6.00 per unit with each unit consisting of one common share and one warrant for common stock exercisable at \$6.00 per warrant, which generated net proceeds of \$1,529,643 at the closing of the private placement pursuant to Regulation S under the United States Securities Act of 1933, as amended. During the three months ended August 31, 2003, the 283,335 common stock warrants were exercised at \$6.00 resulting in additional proceeds to the Company of \$1,700,000. As of June 27, 2003, the Company has acquired 100% of the common and preferred stock of FSTO and, effective that date, FSTO was merged into the parent pursuant to a short form merger under Delaware and Nevada law.

#### Note 4. Summary of Shares Outstanding:

Common stock of Company on November 30, 2002	4,919,035
Common Stock Warrants Exercised July 10 to August 8, 2003	283,335
Merger shares July 11, 2003 - minority shares tendered	98,043
Total common stock issued and outstanding as of November 30, 2003	5.300.413

For the six months ended November 30, 2003, the effect of the Company's stock options and warrants are excluded from diluted earnings per share calculations since the inclusion of such items would be antidilutive.

#### FLIGHT SAFETY TECHNOLOGIES, INC.

#### Notes To The Financial Statements (Unaudited) For The Six Months Ended November 30, 2003 and 2002

#### **Note 5. Business Combination:**

As indicated in Note 3, on September 1, 2002, the Company participated in a share exchange. This transaction resulted in a business combination treated as a reverse acquisition and recapitalization whereby for accounting purposes FSTO was treated as the acquiring corporation. The proforma operating results which reflect revenue, operating expense, loss from continuing operations and net loss, and loss per share for the current and historical periods would be as follows:

	Three Months 2002	Six Months 2002
Net Sales	\$ 39,832	\$ 39,832
Operating Expenses	\$ (353,773)	\$(607,191)
Net Loss	<u>\$ (309,796)</u>	\$ 563,821)
Net Loss Per Share	<u>\$ (.06)</u>	\$ (.19)

#### **Note 6. Subsequent Events:**

These financial statements have been adjusted to reflect a 1-for-3 reverse stock split which was effective December 31, 2003. As of November 30, 2003, shares outstanding have been adjusted and changed from 15,901,233 to 5,300,413. In conjunction with the stock split, common stock decreased by \$10,600 and additional paid in capital increased by the same amount. For the three and six months ended November 30, 2003 and 2002, the weighted average number of shares decreased by 10,600,820, 10,378,590, 9,704,751 and 5,784,375, respectively. Net loss per share increased by \$(.03), \$(.06), \$(.04) and \$(.13), respectively.

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

#### TABLE OF CONTENTS

	<u>Page</u>
Prospectus Summary	3
Summary Financial Information	5
Risk Factors	6
<u>Use of Proceeds</u>	16
Dividend Policy	18
Capitalization	18
Market for Common Stock and Related Stockholder Matters	19
Selected Consolidated Financial Data	20
Management's Discussion and Analysis of Financial Condition and Results of Operations	21
Business	29
Management	42
Certain Relationships and Related Transactions	47
Security Ownership of Certain Beneficial Owners and Management	47
Description of Securities	48
Federal Income Tax Considerations	51
Shares Eligible for Future Sale	52
Underwriting	53
<u>Legal Matters</u>	56
<u>Experts</u>	56
Where You Can Find More Information	56
Index to Financial Statements	F-1

# 1,350,000 Units

# Flight Safety Technologies, Inc.



# **Prospectus**

The Shemano Group, Inc. [LOGO]