



Info Express Inc.

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High-Tech Information Processing

## **FAX TRANSMITTAL**

TO:

Mr. Rob Carlson

FROM:

Scott Lafferty

COMPANY:

Seabeam Instruments, Inc.

DATE:

Oct 5, 1994

PHONE:

1-508-660-6000

PAGES:

16

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### **MESSAGE**

Dear Rob,

The following pages are a combined team effort. I don't think I could of finished without them. Ian Wegener, Mike Baker, Aleck Lafferty (dad) and good family friends Steve Lambert and Gale Nelson.

Mike Baker is the person managing the UK office. He is well trained and has lots of experience and connections in the Oil and Gas industry. Ian Wegener, Paul Duncan and the SSI personnel know him well. Mike Baker was Geo Manager for Geodetic Singapore. All the Info Express commercial SIDA work the past three years, came from his Geo department. He saw the ups and downs of the SIDA system. He had may offers for work with large companies, but he believed in the SIDA system so much, he came to work for us. If you would like to talk with Mike his home number is 44-380-812601, FAX is 44-380-728368 the office number will be setup soon.

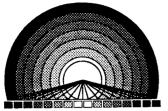
Putting this document together the past 2 to 3 months has made me think of what I really want to do. So I think the following document reflects those thoughts.

You can call me at home or work anytime: 1-206-820-8810 Home

Sincerely

Scott Lafferty President





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Seabeam Instruments, Inc. 141 Washington Street East Walpole, MA 02032-1155

October 5, 1994

For the attention of Mr. R. Carlson

Dear Rob,

Thank you for the feedback during various communications over recent months. I apologize for not responding sooner, but I have been very busy establishing a UK office (Info Express Limited), following up client requests (generated form our UK marketing trip) and developing business opportunities in Europe. Info Express is now pleased to provide you with a business proposal. I feel that a mutually agreeable business arrangement between our two companies would provide significant benefits and increased business potential to both.

I have structured this letter into five sections as follows:

- 1. **Info Express Profile:** A brief history of Info Express with details about its current status, applications of the current SIDA system, potential future applications/markets, and an outline of marketing strategy.
- 2. **Potential Benefits to Seabeam:** Discussion of the potential benefits that SIDA technology and Info Express expertise might provide to Seabeam.
- 3. **Potential Benefits to Info Express:** Discussion of the potential benefits to Info Express of a product buy out and business arrangement with Seabeam and how it would fit into the future strategy of Info Express.
- 4. Summary and Example Outline Business Plans: Summary of the above three sections and an outline example of a potential business arrangement involving the SIDA product buy out and provision of the required expertise and support which will encourage commitment, motivation, and trust.

5. **Financial Proposal:** Financial proposal with indicative prices for SIDA Technology Buy Out and transfer of Info Express expertise.

## 1. Info Express Profile

Info Express Inc. is an independent, wholly-owned software and hardware design, development and manufacturing company with headquarters in Kirkland, Washington. The company designs, manufactures, and supports ongoing development and engineering of the SIDA product line. Info Express was incorporated in 1986 and has provided and maintained leading expertise in survey data management, data basing, and marine geoscience systems.

SIDA systems have been designed and continuously developed for commercial and military clients. Major clients include the Royal Australian Navy (RAN), who awarded a contract in 1988 involving provision of seven SIDA systems plus maintenance, implementation, training, and support. All aspects of this contract and subsequent contracts were successfully fulfilled. This included shipboard acquisition and display units plus shore-based data processing and data storage functions for the RAN's Mine Counter Measures and Mine Surveillance divisions. Additional systems were subsequently ordered and provided to the RAN with an excellent record of reliability and performance. One of the subsequent contracts awarded by RAN was to supply the "Megapost" MCM-IPS system for use as a high-volume image processing and target management system. (See Attachment A for a project reference.) The MCM-IPS system has since been customized to provide all functionality in a single-screen PC and combined into a cost effective "single box" collection, storage, processing and management system.

Info Express focused primarily on supporting the RAN contract from 1988 to 1992, providing dedicated support and flexibility when required to interface to different sensors and data management requirements. This allowed continuous development of the system to its current form. For this reason, SIDA systems were not made available to the commercial market until 1992. Commercial Oil and Gas offshore survey companies have since successfully used systems for several major projects in Southeast Asia, India, and Australia.

Info Express carried out a concentrated marketing campaign in Europe earlier this year with presentations and demonstrations to selected military and commercial entities. Due to the enormous interest shown in the SIDA product and identification of several high-potential markets, Info Express has employed a business development manager and established an office in England to market the SIDA product and support European-based clients and projects.

The UK office will function as an autonomous entity to provide services as well as equipment and support. They will also carry out all business administration

N. C.

for marketing, business development, projects, and ongoing contracts. The UK office will maintain a pool of support engineers, and field and software personnel for projects. The USA office will continue to function as the design, development and manufacturing base. This strategy will allow me to be more independent and work freely on ideas, design, and development, and provide dedicated support to the requirements of Seabeam or a New Company (as detailed later in this business proposal).

## **Client History**

Columbus American Discovery Group Shell Oil Company, USA Amoco Oil Company, USA Royal Australian Navy ONGC, India Brunei Shell Petroleum Shell Sarawak Woodside Petroleum, Australia Maersk Oil, Thailand

## **SIDA Application and Markets**

Traditional applications of the SIDA system have included multitask Mine Counter Measure and Mine Surveillance systems, data acquisition, and management and processing of commercial hydrographic and geophysical marine survey data. SIDA systems have also been applied in the pipeline industry for inputting existing pipeline data, map data and detailed inspection data enabling fast, interactive and ready access to survey data, sonar images, interpreted features/contacts, KP listings, photos, report text and any other relevant current or historic information.

Market applications for the system, with its unique interactive database and capacity to handle and efficiently manage huge quantities of data, are not limited to survey acquisition and processing units in the offshore Oil and Gas exploration industry, but are very diverse. Applications include providing very flexible and user-friendly integrated data management systems, and data service centers to provide full data storage, archiving, and data management for all types of data, including image, with ready access in a GIS format.

Attachment B lists some selected markets and applications for the SIDA system technology. Some of these applications are very diverse and business opportunities are not currently being pursued due to the limited resources of Info Express. Info Express is currently concentrating on the traditional markets of the Oil and Gas companies and to a lesser degree the military markets for traditional sonar acquisition and processing systems. We are also using marketing

contacts within commercial organizations to develop business opportunities in the areas of data service centers, QC services, and integrated vessel management systems.

Interest in these other services from selected oil clients has been very high; especially for data service centers. Recent meetings with submarine cable, survey, geotechnical, and railway companies have resulted in very positive feedback regarding specialized Info Express services.

Lead-in times for securing and implementing these larger data service center type projects are likely to be at least six months and more likely one to two years or longer. Contract periods are also of much longer duration. Info Express considers the potential in this area to be enormous, and a logical progression from the marketing of sonar processing systems, due to the database and data management capabilities of the SIDA system. We see data dispatch and use of Information Technology as key areas and markets for future developments of Info Express.

Numerous possibilities exist for the SIDA system in conjunction with sensor companies. For example, performance and features of top-end survey system (side scan, swath, navigation, etc.) manufacturers could be dramatically improved with implementation of the SIDA either as a replacement or complement. Ability to input other types of high-volume data such as a laser scan, video, ground penetrating radar, and photo image, as well as any type of survey data, could provide specialist business opportunities with sensor companies. Management of video and/or laser data in a similar way to side scan or swath has been discussed in detail with several companies and the potential in the ROV and pipeline inspection market is enormous.

RAN has been a very important Info Express client, and I believe that many more opportunities exist in the military sector and more effort should be made to supply systems to this market. Info Express has tendered for provision of China MCM system, responded to recent issued RFI from the Israeli Navy for provision of sonar image processing systems and we are bidding jointly with the ML Aviation on a multi-route surveillance system tender of the UK navy. We have also identified an MCM project in Norway. Current "off the shelf" SIDA systems readily meet the stated requirements of these projects and can also offer several value-added features as options.

Company size, marketing network, and resources of Info Express are very limited and the realization of all the above can be achieved only with improved cash flow and increased resources. Info Express believes that Seabeam is much better structured to develop business opportunities, particularly within the military market.

#### 2. Potential Benefits to Seabeam

Potential benefits of SIDA technology and transfer of Info Express expertise and technology to Seabeam can be seen in the following areas:

a) Introduction of current SIDA system/technology to add value/provide upgrade path for existing Seabeam products such as Seabeam SB1000 and older generation systems. In addition, SIDA systems could complement other Seabeam data collection or processing products and be marketed as stand alone re-badged Seabeam products.

With Seabeam's marketing network and experience, significant short-term profits may be realized by marketing the existing SIDA side scan top-end processor and post processing/reporting services more effectively than has been done in the past. Realized sales would increase the volume of existing product and lead to further reducing the cost of the product and quickly return value on the investment.

Info Express currently has hardware assets of six real-time acquisition/processing systems, an MCM-IPS system and six post-processing systems, plus an inventory of spares. These systems could be introduced directly as proven systems with Seabeam re-badging.

Side Scan systems (and other data sensors) are easily interfaced to the SIDA system. This may be advantageous for increasing and complementing future sales of Seabeam and Channel products.

The use of SIDA technology for display and co-registration of bathymetry with data storage could be provided on the current platform to provide a low entry level system for operator interface and navigation analysis of data. This could assist with easier introduction of bathymetric analysis software. The manipulation and display of side scan sonar mosaics and high-volume data manipulation can provide Seabeam with a ready-made inexpensive 'hook' to lead to sales of the shallow water systems with the ability to co-register existing side scan mosaic data with entry level Seabeam data for complete bathymetric detail of bottom environment.

In relation to the existing Seabeam product line, SIDA technology could offer the option of providing a PC-based system for turnkey packages to provide lower entry costs. Inexpensive hardware and options on the SB1000 family could allow less dependence on other companies which are outside Seabeam control. Opportunities to use Info Express expertise and experience in integration of sensors and logging to provide total

survey solutions with the SB1000 would allow Seabeam to promote a complete systems approaching the multibeam arena.

Info Express equipment is designed to be stable. Critical boards, such as digitizers, have been designed and built to ensure that changing technology will not force massive software and hardware redevelopment. Info Express designed the structures and wrote the system software from "the ground up" to optimize how the system is controlled and to ensure the integrity of the acquired data, particularly in harsh marine environments. Info Express has developed considerable experience and understanding of collecting and analyzing both equipment and environmental noise and bad data from the serial telemetry inputs from various sensors. The SIDA system has excellent tools and solutions to retain data integrity while working with less than optimum data. The benefit of this is that all the data handling and storage routines are valid and controllable. The system processes and edits data effectively and is an excellent QC tool for both raw and processed data sets. This is obviously to the benefit of the user, but can also be marketed independently to the clients of the user. No "work arounds" of third party software or operating systems are required. All internal A/D converters. CPU, graphics, and memory boards are programmed and directly controlled by Info Express so the true performance and integrity of the system and data are known.

An interesting possibility may be the use of the SIDA system as a modernization "top end" for the older Seabeam family of analog controlled systems. This could provide the start of an upgrade path for more modern systems at a minimal entry cost for existing customers.

# b) Development potential of the SIDA system software and its migration to open systems.

This second "thrust" is believed to be the key application of the SIDA technology within the Seabeam group and would enable efficient migration to "Open Systems" for medium and long term goals.

The linking of network facilities to the SIDA is already accomplished and this should allow direct compatibility to post processing open systems and allow integration with any new product range. The majority of software is written in C to allow relatively easy transport to UNIX based processors. With the in-house Seabeam experience in the scientific (UNIX) area, the synergy in this development could add significantly to the outcome. Info Express has researched and identified a ready path into open systems which would greatly increase the synergy of the two companies by 'sharing' developed software that could be used on a parallel path with

the other planed Seabeam and Info Express developments. This 'shared' software development path should ensure commitment and trust from both sides. Transition of a multiple-function system to one of smaller dimensions and equipment peripherals is a function of Info Express design. This functionality assesses the hardware status of the platform and tailors the software automatically to adapt to the working environment. This functionality allows for easier "plug and play" and much easier configuration management of the system.

# c) OEM agreement to supply systems to Info Express and develop other identified markets.

Info Express has experience and an excellent reputation in sonar imaging systems, market penetration, and contacts; particularly within the commercial Oil and Gas, offshore survey and submarine cable industries, and has identified several high potential markets. Refer to Attachment B for more information. These markets could be developed by Info Express under an OEM agreement with Seabeam. Info Express would promote Info Express "badged" OEM SIDA systems and "value add" the OEM SIDA product if required to meet specific client requirements. Seabeam would benefit from increased sales of the OEM product, but not be accountable for the Info Express "badged" and supported systems.

# 3. Potential Benefits to Info Express

Info Express currently has an inventory of highly-developed and highly-regarded assets in both hardware and software source code, but a history of poor business management and marketing of its product. The initial RAN contract and subsequent contracts with RAN and commercial sector since 1988 have realized income of nearly \$4 million. This should have resulted in a secure and stable future of the company. In effect, it funded a tremendous amount of additional and continuous development of the SIDA system with an estimated 30 man years of programming development. This allowed a product to be produced to fully meet or exceed commercial Oil and Gas and RAN specifications and requirements. The current system comprises a unique and ultra-fast data management system that is unrivaled in today's market. Income from the RAN contracts was not squandered, but channeled, into development at the expense of business management and marketing. Insufficient and wrongly-directed marketing and business management, including over-investment in hardware inventory, has resulted in current poor financial status with insufficient funds to support future projects and developments.

The company has identified several markets, both within and outside the traditional sonar image processing markets, and developed a marketing strategy to realize these markets. The company has been restructured to handle the

business administration and development, but cash reserves and flow is now a major problem, especially as most of the potential contracts have relatively long lead-in times and cash resources are required to start up and fund implementation of these projects.

An OEM agreement or other relationship with Seabeam would also provide increased credibility to the small-company image of Info Express, and enable shared use of design, software, products, and personnel resources such, as software engineers, programmers.

Seabeam should in itself provide a ready market for a large number of SIDA systems in terms of upgrading the older Seabeam swathe systems, plus integration with existing Seabeam SB1000's plus a medium to long term security with a development program to migrate the system to open systems for use with new products ranges. Short term cash flow would therefore be resolved so that Info Express could be structured to implement strategy of realizing identified markets and medium term stability would be ensured with ongoing business arrangement to provide development for migration and implementation to open systems.

## 4. Summary and Example Outline Business Plans

In summary, a purchase of Info Express expertise, software and hardware can provide Seabeam and other Channel Companies with a ready product that could be introduced to integrate with new products, enhance existing product lines, provide upgrades and new complementary or independent product lines, and marketed effectively to produce initial recovery of investment. Potential use of the SIDA technology to provide storage and data management software for use in new product ranges when migrated to UNIX is believed to be a key application. Expertise would be available from Info Express to effect integration with data sensors and jointly develop other defined projects and markets.

A purchase of the SIDA product would provide initial capital and allow increase of resources to support business plans of Info Express. An OEM agreement between Seabeam and Info Express, with Seabeam providing OEM SIDA products to Info Express, who would then promote and "value add" as Info Express "badged" systems, would enable Info Express to develop business opportunities in other identified markets and lead to increased sales of the Seabeam OEM product. Info Express Limited in UK would operate as an autonomous office in this role and allow me to be free to continue to work on new ideas and provide dedicated support to Seabeam.

### **Example Outline Business Plans**

Sample business plans of a new Seabeam company and Info Express follow. The business plans provide independence and benefits in business opportunities to both companies, but also encourage trust, commitment, and motivation.

# a) Outline of New Company (NC) Business Plan

- Formation of a new company (NC) wholly owned and controlled by Seabeam.
   NC has exclusive right to sale, lease and support of the SIDA product.
- ii) NC provides systems for sales and leases through Seabeam agency network.
- iii) NC provides system support and training to agency network or if required contracts Info Express for some of these services or part services.
- iv) Info Express provides training to NC and Seabeam employees for mutually agreed time basis.
- v) Info Express provides design, development, constancy expertise to NC and Seabeam for mutually agreed time basis.
- vi) NC has OEM agreement with Info Express to provide SIDA systems which Info Express in turn "value adds" and promotes as Info Express "badged" systems. NC benefits from sales of any OEM SIDA products through Info Express.

# b) Outline of Info Express Business Plan

- i) Info Express provides training to NC and Seabeam employees for mutually agreed time basis.
- ii) Info Express provides dedicated consulting, expertise, and support to NC.
- iii) Info Express provides field support, operators, customizing and specialized interfacing to support Info Express's systems/services and as required by NC or its agency network.
- iv) Info Express has OEM agreement with NC and continues to promote and develop business opportunities with Info Express "badged" OEM SIDA products.

- v) Info Express continues design and development of new products with focus on conversion of historic data and Information Technology including internetworking, data center and dispatch services.
- vi) Info Express will be free to develop other products provided that they do not directly compete with the SIDA system. New developments are likely to complement the SIDA system and therefore increase sales and lease opportunities of the SIDA system.

## 5. Financial Proposal

An outline of prices is listed below for the sale of SIDA technology to Seabeam, including software source code, hardware assets, transfer of expertise and knowledge from Info Express.

## 5.1 Initial Product Buy Out Fee

a)	SIDA software source code with all associated documentation.	\$350,000
b)	Transfer of 12 existing real time/post processing systems at an average of \$40,000 (perceived market value of \$80-\$135,000 each) with all associated drawings and	\$480,000
c)	documentation. Transfer of one complete MCM-IPS system with all associated documentation and drawings. (Selling price of RAN system in 1992 was \$ 750,000 plus upgrades).	\$200,000

#### 5.2 Sliding Royalty Payments

Info Express to receive royalty payments for each SIDA product sold by New Company based on the following sliding rule:

15% of sale value for fist 20 systems sold 10% of sale value for 21st through 50th system sold 5% of sale value for systems sold thereafter

## 5.3 Business Development Fee

Info Express to receive additional business development fee of 15% for each New Company SIDA product sold as a direct result of Info Express introduction/promotion.

### **5.4 OEM Agreement**

Info Express and New Company to mutually agree on terms of OEM agreement to allow Info Express to compete and develop business opportunities in identified markets. In addition, current active market opportunities of Info Express, such as all outstanding tenders and RFI's in the sector, could be offered wholly to New Company.

## **5.5** Consulting/Personnel Contracts

The following personnel will be made available from Info express to carry out implementation and development of SIDA technology and transfer of expertise.

- a) Scott Lafferty to be contracted 120 days/year (or other mutually agreed number of days/year) to Seabeam or New Company for specific development/integration assignments @ \$80,000/year.
- b) John Banes to be contracted by New Company to carry out transfer and implementation of SIDA software for mutually agreed periods and contract rates.
- c) Ian Wegener can be released by Info Express from their shared portion of his services with SSI in Australia and would suggest a direct approach by Seabeam if required by New Company.
- d) Other Info Express contract personnel such as Jerry Hopple (circuit design engineer), Dave Reber (hardware design engineer), Steve Lambert and Gale Nelson (technical writers), and Ken Wade (embedded design engineer) to be contracted when required by New Company for mutually agreed periods and contract rates.

The above business plans would overcome any concerns about commitment, trust, and market as Info Express will be significantly involved and rewarded to promote the SIDA product. The OEM agreement would allow Info Express to continue to develop identified business opportunities and, if successful, would benefit Seabeam in terms of increased sales of OEM product.

The 'shared' path into open systems is also very significant as it leads to other parallel developments for both Seabeam and Info Express.

Development of certain "add ons" can be carried out either by Info Express or NC if prepared to take the risk of new idea/concepts and deviation from defined development path. OEM agreement also overcomes potential problems of demarcation in non-competing markets. It would also be in each company's interests to promote the SIDA system into wider markets such as video recording for ROV, laser linescan processing, and data service centers to achieve increased sales and exposure for the OEM SIDA product and support services.

The above is a summary of why I believe that both Seabeam and Info Express can benefit from a SIDA product buy out and develop other business opportunities for the system. I believe that a very good working relationship, teamwork and synergy could develop between Seabeam, New Company, and Info Express which would result in a very significant expansion of our businesses and markets. The example business plan is only one idea by which we can both benefit and also encourage motivation and commitment. I would be very pleased to discuss other ideas. Please note that prices are indicative only and I can provide amendments to above prices based on any changes or other proposed business plans.

I trust that the above is in line with your ideas and estimated evaluation. Please do not hesitate to contact me if you have any comments or wish further information or discussion. I am very positive about entering such a business arrangement with Seabeam and look forward to your reply. I am available within the next week in the United States before an extended trip to Europe and Australia. If necessary, I would be pleased to meet for further discussion.

Sincerely.

Scott Lafferty President

Attachments:

A Project Reference

B Selected SIDA Markets and Applications

#### ATTACHMENT A

#### PROJECT REFERENCE

# Royal Australian Navy - Provision of "Megapost" Onshore Sonar Image Processing/Database Facility

The Royal Australian Navy (RAN) award Info Express Inc. a contract in 1992 to deliver a large post-processing facility to analyze dual-frequency sidescan sonar images recorded in support of the RAN's Mine Counter Measures Route selection program. The system, codenamed "Megapost" by Info Express Inc., includes six high-resolution color monitors and enables synchronization and playback of multiple passes through a Q-Route at high speed. The system allows operators to compare historic finds and look for detailed changes in the seafloor that may signal the laying of a mine. Historical data can be easily overlaid to allow ready comparison with other sets of data.

Naval operators are able to perform random access data retrieval from an optical jukebox capable of retaining up to 16 near-line gigabytes of image, annotations, contacts, targets and navigation data. An additional five plus gigabytes of images of on-line data were provided by five WORM drives, one MO Rewritable drive and several hard disks and remote drives. The "Megapost" system is driven by multiple CPU's communicating over a high speed SCSI bus, serial and parallel communication ports provide for interfacing to their system components, including a navigation database and target management system.

Info Express Inc. has also provided high-resolution mosaic software that allows operators to edit navigation, perform image warping and overlay multiple data sets. This software allows efficient production of geographically-accurate sonar mosaics to be displayed on a variety of selected laser and thermal printers and plotters.

This contract followed an earlier contract in 1988 and 1990, under which Info Express Inc. provided the RAN with twelve dual-frequency SIDA (Sonar Imaging and Data Acquisition) systems. These real-time SIDA systems have been successfully implemented with integration to a variety of sensors and have performed with a very high level of reliability and achieved all specified contract requirements and objectives.

#### **ATTACHMENT B**

#### SELECTED POTENTIAL MARKET/CLIENTS

- Military
- · Government
- · Oil & Gas Exploration
- · Cable Companies
- Mineral Exploration
- Survey Companies
- ROV/Diving Companies
- · Construction Companies
- · Pipeline Industry
- · Sensor Companies
- Consulting

#### SELECTED POTENTIAL APPLICATIONS

Applications can involve individual or combined features of the SIDA system, including acquisition/logging, data management, image and data processing, mapping, data basing, and archiving/storage.

- · Submarine Cable Surveys
- · Pipeline Inspection
- Oil & Gas Exploration
- ROV surveys
- Integrated survey/ROV
- · Specialized sensor surveys, e.g., laserscan
- Swath bathymetry
- Mineral Exploration
- · Consulting
- Data Service Center
- · Railroad systems
- · Powerline systems
- Marine Pipelines
- · Land Pipelines
- Highway systemsCrash Site systems
- Disaster Response systems
- Airport Runway systems
- Port Authority
- · Water Authority
- · Fishing Applications



- Bridge Inspection
- Search and Rescue
- · Search and Salvage
- · Environmental Marine
- · Environmental Air
- · Environmental Land
- · Sonar Buoy Tracking
- Chemical Spill Tracking and Clean Up
- · Surveillance Systems
- Mine Clearance
- Decoy/Chaff Tracking systems
- Mine Counter Measure systems
- · Surf/Beach mine detection
- · Global Asset/Oil Field Asset Tracking
- · Warehouse Dangerous Goods Tracking