

PSGP 2007
Project # 3

Port of Honolulu
Department of Transportation – Harbors Division
Passive Search System (PS2)
Investment Amount: \$1,187,930.00 (note \$130K for ROV & remainder for RFIEDS)

I. BACKGROUND

COTP Zone: Port of Honolulu
Eligible Port, as listed in Table 2 (Eligible Port Areas Systems): Honolulu, HI.

Although smaller in population than the majority of states in the nation, the unique geography and the heavy reliance on harbor operations as a primary source of transportation for people and goods underline the need for a strong security infrastructure in the State of Hawaii. The State of Hawaii is comprised of seven main islands with ten state commercial harbors covering six of those islands (Oahu, Maui, Kauai, Molokai, Lanai, and Hawaii) (*Diagram 1: Port of Honolulu Harbors*). The Port of Honolulu includes all ten of the state commercial harbors (*Diagram 2: Hawaii State Commercial Harbors by District and Island*). Each of these harbors experience significant daily cargo handling operations and are critical components of the economies of each respective island as well as that of the entire state.

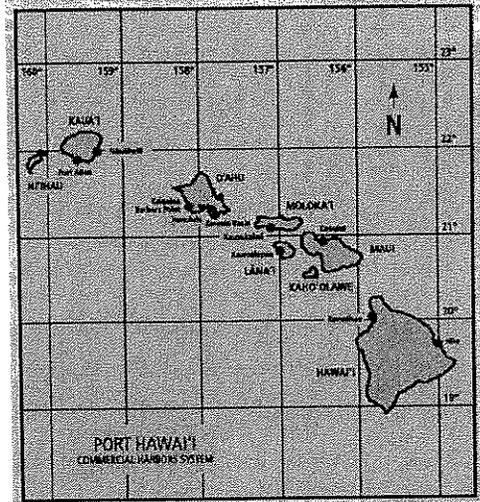


Diagram 1: Port of Honolulu Harbors

The State of Hawaii is also plays a key role as a link to Pacific Rim economies. Currently, while the Harbors Division has received monies for development and initial installation for Honolulu Harbor (Oahu), Kahului Harbor (Maui), Kawaihae Harbor (Hawaii) and Nawiliwili Harbor (Kauai), a complete and cohesive credentialing system is clearly needed to complete the system in Honolulu as well as protect the additional harbors essential to the State of Hawaii.

District	Island	Harbor(s)
Oahu	Oahu	Honolulu Harbor, Kalaeloa Barbers Point Harbor, Kewalo Basin
Maui	Maui	Kahului Harbor
Maui	Molokai	Kaunakakai Harbor
Maui	Lanai	Kaumalapau Harbor
Hawaii	Hawaii	Hilo Harbor, Kawaihae Harbor
Kauai	Kauai	Nawiliwili Harbor, Port Allen Harbor

Diagram 2: State Commercial Harbors By District and Island

Organization’s authorizing official for entering into grant agreement:

Mr. Glenn Okimoto, Harbors Administrator, (808) 587-1927, Glenn.Okimoto@hawaii.gov

Organization’s primary point of contact for management of the project(s):

Mr. Kelvin Ogata, Program Manager (808) 587-2100 (Ph) (808) 587-2065 (fax) Kelvin.Ogata@hawaii.gov

Ownership or Operation:

The Hawaii State Department of Transportation (DOT) - Harbors Division is responsible for the statewide commercial harbor system. DOT - Harbors Division administers harbor facilities, and is responsible for the overall security of harbor areas.

Role in Providing Layered Protection of Regulated Entities

Basic landside protection of our regulated facilities is provided by Harbors Enforcement Officers and Contract Security. The State Law Enforcement Coalition (SLEC), comprised of the Department of Transportation Harbors Division (DOT-HAR), Department of Public Safety – Sheriffs Division (DPS), Department of Land and Natural Resources – Conservation Enforcement (DLNR), State Attorney General Enforcement Office, State Department of Defense (National Guard) and State Civil Defense (SCD), will provide law enforcement support during times of special events at MARSEC Level 1 and heightened security (MARSEC Level 2 & 3) through an MOU that has been in effect for three years. When not deployed throughout the Pacific, the US Coast Guard (USCG) provides direct enforcement support through its Maritime Security Safety Teams. Additional dry-side support comes from the County of Honolulu Police, Fire, EMS, PACOM, USARPAC and the JTTF (FBI, US Attorney, Secret Service). DLNR provides additional waterside enforcement through a separate MOA established over 4 years ago.

Hawaii Department of Transportation Harbors Division (DOT-HAR) along with SLEC is charged with protection of all areas within the Port of Honolulu, which encompasses all ten of the state commercial harbors. This responsibility necessitates the requirement to provide surveillance and access control from water entry points and major thoroughfares with access to port facility and piers.

Infrastructure:

Critical infrastructure includes the Harbors' passenger ship facilities and all major cargo facilities located throughout the state. The State of Hawaii imports 80% of its food and merchandise, with 98% of those goods shipped by sea – in essence, 78.4% of all food and merchandise consumed in the state are imported via cargo shipping. An island by island breakdown is described below:

Oahu District, Island of Oahu. The island of Oahu is the busiest of all of the Islands and is the first point of entry in to the state. Three of the state's ten commercial harbors reside on Oahu – Honolulu Harbor, Kaloaloa Barbers Point Harbor and Kewalo Basin. Barbers Point Harbor is on the westerly side of the island in the vicinity of the developing city of Kapolei and contains a number of specialized facilities not found at Honolulu Harbor such as a coal bulk unloader system and pneumatic cement pump system. Honolulu Harbor and Kewalo Basin are located near Honolulu's urban base including the central business district, industrial district, principal government facilities, major tourist attractions (Waikiki beach and hotels), Pearl Harbor Naval Base, and the Honolulu International Airport. This area is dominated by intensive harbor and waterfront activities.

Maui District, Island of Maui. The island of Maui has become the second busiest harbor as the tourist and residential populations continue to dramatically grow. As a result, passenger and cargo hold handling has also substantially increased.

Maui District, Island of Molokai. Kaunakakai Harbor is located on the southern coast of the island of Molokai and is the only point of embarkation/debarkation of goods produced on the island or cargo and goods destined for the Molokai market.

Maui District, Island of Lanai. Kaunapala Harbor is the main harbor for the island and is home to the Lanai fishing fleet, Lanai Oil Company, and used for cargo handling of domestic goods to re-supply the Lanai population.

Hawaii District, Island of Hawaii. The Island of Hawaii is known for its rugged beauty and isolation but has paid for this isolation with a necessary dependence on ocean shipping to supply everyday needs.

Kauai District, Island of Kauai. Kauai passenger volume has risen with the interest in Kauai as a tourist destination. Nawiliwili Harbor serves Lihue, the main town and home to the Lihue International Airport, and is in close proximity to the largest tourist population on the island. Port Allen Harbor is a commercial harbor serving the entire island including key Department of Defense facilities.

Nature of Operations:

The ports are of significant economic importance, serving as the State's primary infrastructure for everyday goods sold through shopping centers, warehouses, tourist attractions, and restaurants. In addition to daily cargo operations, four of the Port of Honolulu facilities receive passenger cruise ships on a weekly basis. A

new ferry passenger system is slated to begin in the summer of 2007 and is anticipated to significantly increase water traffic through daily trips.

Statewide cargo total for FY2006 was 20,664,738 tons, an increase of approximately 486,000 tons from FY2005. Hawaii depends almost entirely on the ocean shipping industry to import essential commodities (food, clothing, fuel, building materials, automobiles, etc) and export local products (pineapple, sugar, molasses, diversified agriculture, etc). Honolulu Harbor, which serves as a distribution hub for neighbor islands and as a primary link between the Far East, Pacific Rim and the mainland United States, saw close to half of the statewide cargo total and was ranked by the American Association of Port Authorities as the tenth busiest of all 75 North American container ports.

Passenger totals for FY2006 were 1,968,710 which represent a significant increase from last years total of approximately 250,000 passengers. The substantial increase can be attributed to the arrival of an additional cruise liner fleet and an increase in foreign passenger cruise ship stops in Hawaii. With the arrival of a new inter-island ferry with daily service anticipated for May 2007, DOT- Harbors Division expects to see an even more dramatic increase in passenger totals for the upcoming year. As cargo and passenger statistics continue to climb, the commercial harbor cargo yards have been transformed in to the State's "warehouses" which have complicated the orchestration of cargo movements. Thus, security of these facilities has been more complex and much more difficult.

DOT-Harbors is responsible for administration of harbor facilities used by commercial cargo, passenger and fishing operations. Current access control for the 17 regulated facilities is decentralized although the neighbor islands districts are provided with specific guidance and directives. All credentialing is done by the Oahu District office using the Identi-Card system and integrates scanners, biometric readers, smart cards, etc. All harbors employees have picture ids that meet the standards set forth in the 33 CFR, as well as tenant activities and primary users of the facilities. A stand alone emergency management command and control center is in the building process; in the interim an EMCC will be collocated with the security office. The Harbor's contract security company provides active access control at our cargo facilities control points and are adequately trained in pat down procedures, use of hand held metal detectors, vehicles searches, etc.

Hawaii State Civil Defense provides the only detection and surveillance equipment, beyond pier cameras, as part of the H2S CIS program. This program is also interoperable with WebEOC, the communications/information system being implemented throughout the State of Hawaii.

Nature of Operations

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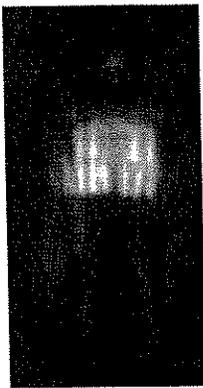
Describe the applicant's current and required capabilities

Currently, the State of Hawaii's Honolulu Harbor is the busiest port in the State with no capability to provide IED prevention or detection. Currently, the State of Hawaii has marine patrol established and some law enforcement officers on foot patrol. There are a handful of video surveillance systems but nothing that captures in detail the weapons or suspicious objects carried on individuals. Currently, there is no effective means for detecting a suicide bomber.

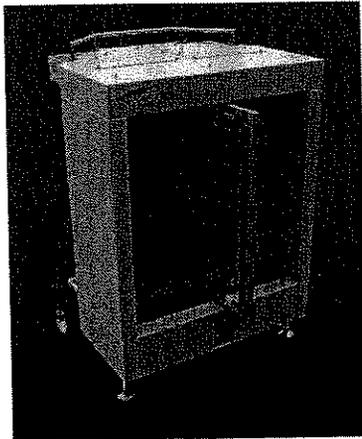
Provide a brief abstract for this Investment

The investment is two fold: (1) We plan to procure an Underwater Remotely Operated Vehicle (ROV) to meet the vulnerabilities. This ROV system consists of a small, highly portable, yet powerful submersible vehicle, tethered with a control system. The submersible weighs less than 10 pounds, is

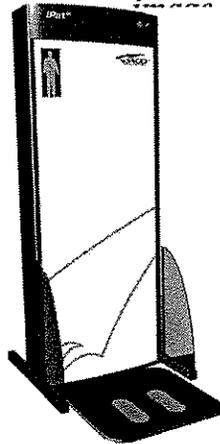
depth rated to 500 feet and has a tilting color video camera in the front and a fixed black and white camera in the rear. Propulsion is delivered by high efficiency thrusters. The control panel includes the operator interface and contains the power supply circuitry. In addition to the control panel interface, the system can be operated by using an industry standard Windows-based computer and off-the-shelf PC or video game controller. This will be easy to integrate into H2S-CIS. The entire system weighs approximately 100 pounds and fits inside of two pelican cases for easy transport in car, boat or aircraft. Rapid deployment is easily attained; only three plug-in connections are required in order to be operational.; and (2) a radiation-free millimeter-wave imaging systems throughout Honolulu Harbor and several Piers starting with Pier 10 to ensure prevention and detection of a suicide bomber or IED laden terrorist. The systems to be deployed include the ST-150 distance suicide bomber detection system, the iPat walk-up imaging system and the aPat, handheld weapons/IED detection system. All systems are radiation free, easy-to-deploy, non-invasive---no privacy concerns, capable of detecting IEDs, guns (metallic and non-metallic), knives, bombs, and anything suspicious, systems are wireless with capability to relay information to command center.



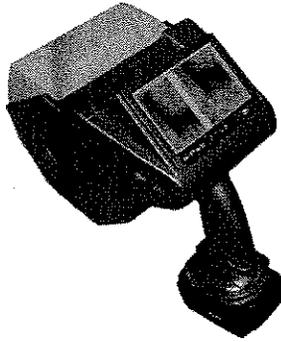
*ST 150 Millimeter-wave
image of our show friend*



ST 150 Suicide Bomber Detector



iPat, walk-up weapons/IED detector



aPat, handheld weapons detector—takes the pat out of screening, displays suspicious objects in window of unit & to command center

SAGO
SYSTEMS, INC.

iPat Image

Concealed Objects*

*not shown are coin and cell phone

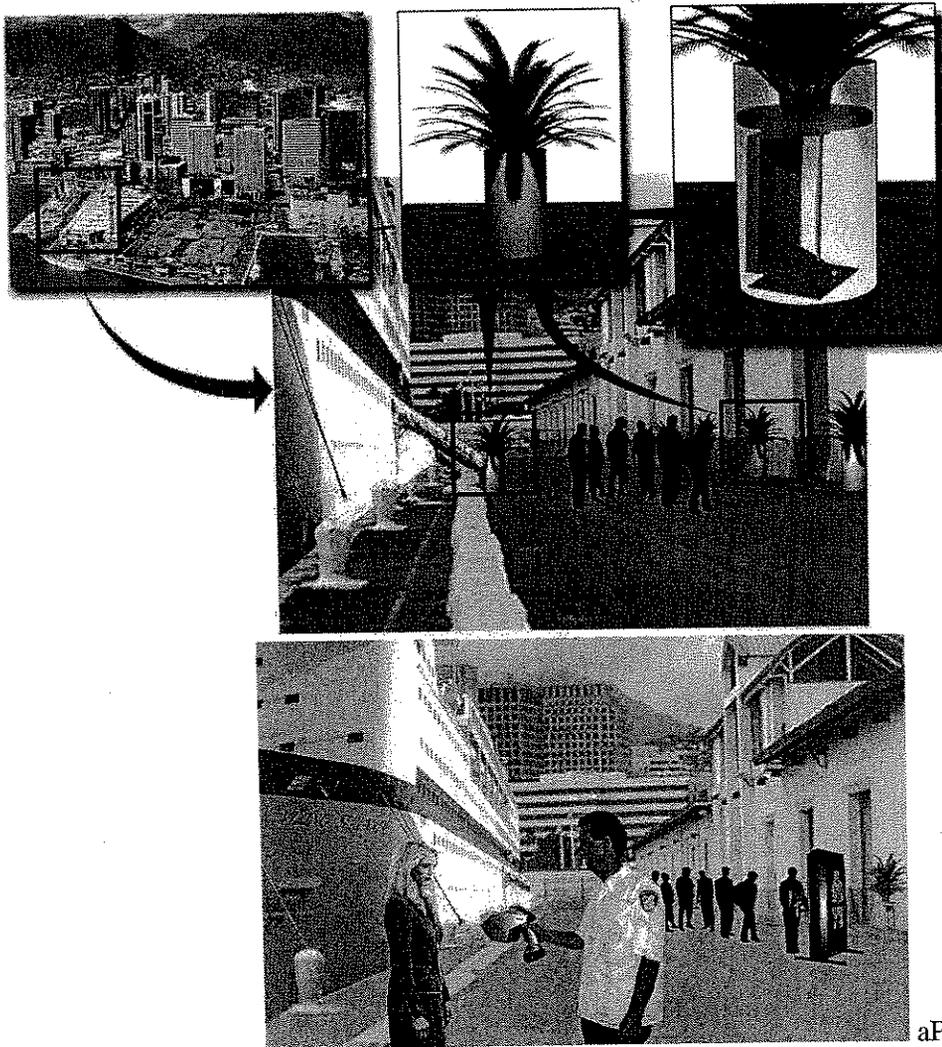
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SAGO PROPRIETARY

II. STRATEGIC AND PROGRAM PRIORITIES

- 1) The Radiation Free Millimeter-Wave Imaging Systems address the Enhancement of Maritime Awareness to its full extent with the capability of remotely and wirelessly sending the images of threat detections including IEDs to a command center. The proposed systems provide answers to the unknown allowing law enforcement officials, the U.S. Coast Guard, Maritime Patrol and others to understand if and when an armed individual is on a pier, near the harbor or attempting to board a cruise ship.
- 2) The investment provides Enhanced Prevention, Detection, Response and Recovery capabilities to the full extent for IED attacks involving passengers and/or vehicle ferries. The proposed plan provides the exact location and outline of the weapon or suicide vest. No other product can determine the exact location of the threat without using radiation. The systems proposed are safe, radiation-free while maintaining an individual's privacy. No longer will it be a hazard for security personnel to check a person. There is no physical pat-down. The systems proposed are used without contact to the

passenger. The ST 150 can be camouflaged without passengers knowing there is covert screening underway. The suicide bomb detection system can be placed in a planter or trash can for instance.



aPat or iPat systems could be established within cruise ship terminal for enhanced security of passengers boarding cruise ships

Describe how the Investment will support priorities outlined in the applicable Area Maritime Security Plan (mandated under the MTSA)

- 1) Expanding regional collaboration: This project does not relate directly to this priority
- 2) Implementing the National Incident Management System and the National Response Plan: This project integrates those best practices and procedures into a unified structure. This capability provides a consistent framework for entities at all jurisdictional levels. Implementation of this capability promotes interoperability and compatibility among all organizations within the State of Hawaii through unified standards and protocols for command and management, preparedness, resource management, communications and information management, supporting technologies, and management and maintenance.
- 3) Implementing the National Infrastructure Protection Plan: This project supports infrastructure protection by providing surveillance of critical infrastructure.
- 4) Strengthening information sharing and collaboration capabilities: This provide information and collaboration capability through the integration into the H2S-CIS capability.

- 5) Enhancing interoperable communications capabilities: By integrating this capability into the H2S-CIS
- 6) Strengthening CBRNE detection and response capabilities: To the level that this project can detect CBRNE, it will strengthen CBRNE detection and response capabilities of Port of Honolulu

Describe how the investment supports any COTP Port-specific security priorities

The prevention and detection of potential IED attacks by small watercraft is fulfilled by this investment through real-time surveillance and tracking of threats through radar, AIS, and camera surveillance. As part of a larger security plan that also includes training and exercises for individual harbor personnel, PS2 supports the overall goal to reduce vulnerabilities at our ports as mandated by the COTP zone for the Port of Honolulu (all ten commercial ports that are the responsibility of the DOT-Harbors).

Describe how this Investment will support one or more of the Priorities of the National Preparedness Goal

With this investment, DOT-Harbors division will be able to utilize integrated intelligence to protect infrastructure in the harbors area critical to the State of Hawaii.

III. IMPACT

The importance of harbor and pier side security cannot be overstated for the State of Hawaii. Existing capacities do not mitigate the vulnerabilities that could cause loss of life, threaten critical infrastructure and/or take down the economic lifeline of the State. With the implementation of the PS2 system on Honolulu Harbors, the fastest growing tourist destination in the state, harbors personnel will be able to monitor, detect, and track both waterborne and pier side activity.

IV. FUNDING AND IMPLEMENTATION PLAN

	PS2 Request Total	Match Total	Grand Total
<i>Maritime Domain Awareness</i>	\$603,510.00	\$201,170.00	\$804,680.00
<i>Prevention, Protection, Response and Recovery Capabilities</i>	\$287,437.50	\$95,812.50	\$383,250.00
<i>Training</i>			
<i>Exercises</i>			
<i>TWIC Implementation</i>			
<i>National Preparedness Architecture</i>			
<i>M&A</i>			
<i>Total</i>	\$890,947.50	\$296,982.50	\$1,187,930.00

Potential challenges to implementation

One of the challenges is the change in public perception of security. This could be a challenge but can be overcome. It will be mitigated with education and understanding that Hawaii values its ports and the safety of individuals on the piers as well as those passengers disembarking and embarking on cruise ships. In addition, the stand-off ST 150 systems camouflaged in planter boxes could be a challenge to strategically place on the pier but can be mitigated by working with Harbor Police and the cruise ship lines on the best locations where information obtained will receive the maximum impact.

Management Team

This project will be managed by the Hawaii Department of Transportation, Mr. Kelvin Ogata.

Further funding resources

Beyond this investment request, no additional funding resources have yet to be identified for additional funding. We will be submitting proposals for future year PSGP requests to complete the PS2 integration into the rest of the 10 Honolulu Harbors. Furthermore, the State of Hawaii is looking into a long term maintenance contract for the system once all the systems have been installed.

Timelines and Milestones

The project schedule for full procurement and implementation of the Radiation-Free IED Detection Systems (RFIEDS) will begin in Honolulu and will not exceed 18 months. The anticipated start date is as soon as the contract is awarded. The cruise ship and pier activities are flourishing in Hawaii and are anticipated to increase between now and late 2008. There will be a new ferry service slated to start operations during March 2007 increasing the water traffic between the islands. This operation will be home-based at Honolulu Pier's 19-20 Ferry/Passenger Ship Facility in Honolulu Harbor with daily trips to Kawaihae, Hawaii; Kahului, Maui and Nawiliwili, Kauai. Initial deployments at Honolulu Harbor Piers 10, 19, and 20 will include training of supervisory personnel and initial operator training. The proposed timeline is such:

Month 0	Contract Awarded
Month 1	Review and update deployment priorities
Month 2	First Unit Delivered & Installed
Month 12	Rest of the units will be delivered, installed
Month 16	Units integrated into existing command Center
Month 17	Training session
Month 18	Submit Final Documentation

Planned duration

We are proposing an 18 month project. We are proposing Phase 1 of PS2 to provide increased capacity of maritime domain awareness in one of the key areas with growing vulnerabilities. We plan to propose future PSGP proposals to complete rest of the 10 Port of Honolulu's harbor installations. Once the installations are complete, the State of Hawaii will fund the maintenance of the systems.

Technical implementation plan

The objective of this project is to provide cutting-edge security systems utilizing safe radiation-free millimeter-wave imaging. Millimeter-waves are a part of the light spectrum beyond visible or infrared. Like infrared they show the temperature of the object being imaged. Unlike infrared they easily penetrate heavy clothing and fog allowing detection of illicit contraband such as: suicide vests, plastic explosives, ceramic and metal knives and guns. A passive millimeter-wave imaging system emits no radiation and is undetectable. The ST 150, aPat, and iPat systems are built by Sago Systems, Inc., a subsidiary of Trex Enterprises Corporation. The technology was developed as a result of 12 years of federal funding. It is the US Government's unit of choice for the application of passive suicide bomber detection. The ST 150, iPat and aPat described provides the highest spatial and temperature resolution of any non-classified system. The operating frequency of this system is at 100 GHz where the atmosphere is completely transparent. This eliminates the temperature and humidity sensitivities found by other systems employed in the Terahertz range. The ST 150, iPat and aPat units are completely portable. They can be deployed in a few minutes time and can be powered by batteries. Command and control is via 802.11 wireless allowing remote operation of the units. The ST 150 easily integrates into existing command and control systems.

Description of the ST 150 unit: The ST 150 allows for security personnel to be situated at a safe distance immediately viewing the images from a command center over a wi-fi network interface to a laptop computer. The ST 150 allows for authorities to isolate the threat from a distance and help prevent planned attacks. The ST 150 has been tested and evaluated by the US Government. Images do not compromise an individual's privacy, yet the operator can easily see the suicide vest, IED or suspicious object detected.

Description of the aPat: The handheld aPat radiation-free millimeter-wave system provides a full color screen within the system of the suspicious object. It is battery operated and wireless enabled. Images can be stored within the unit and viewed at the command center.

Description of the iPat: The iPat provides fast whole body imaging indoors or outdoors detecting a wide range of threats. This system was specially designed for security checkpoints, cruise ships and tourist attractions. The iPat provides a wireless output to a display terminal that can be located next to the unit or at a remote command center.

Indicate whether applicant's formal, written Procurement Policy or the Federal Acquisition Regulations are followed.

Consultant Fees: For each consultant enter the name, if known, service to be provided, hourly or daily fee (8-hour day), and estimated time on the project.

<u>Name of Consultant</u>	<u>Service Provided</u>	<u>Computation</u>	<u>Cost</u>
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[No funds requested for Project 3 PS2]

SUBTOTAL _____

Consultant Expenses: List all expenses to be paid from the grant to the individual consultant in addition to their fees (i.e., travel, meals, lodging, etc.)

<u>Item</u>	<u>Location</u>	<u>Computation</u>	<u>Cost</u>
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[No funds requested for Project 3 PS2]

SUBTOTAL _____

Contracts: Provide a description of the product or services to be procured by contract and an estimate of the cost. Applicants are encouraged to promote free and open competition in awarding contracts. A separate justification must be provided for sole source contracts in excess of \$100,000.

<u>Item</u>	<u>Cost</u>
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[No funds requested for Project 3 PS2]

SUBTOTAL: _____

TOTAL: _____

G. Other Costs: List items (e.g., rent, reproduction, telephone, janitorial or security services, and investigative or confidential funds) by major type and the basis of the computation. For example, provide the square footage and the cost per square foot for rent, and provide a monthly rental cost and how many months to rent.

<u>Description</u>	<u>Computation</u>	<u>Cost</u>
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[No funds requested for Project 3 PS2]

TOTAL _____

H. Indirect Costs: NOT APPLICABLE TO PSGP

Budget Summary - When you have completed the budget worksheet, transfer the totals for each category to the spaces below. Compute the total direct costs and the total project costs. Indicate the amount of Federal funds requested and the amount of non-Federal funds that will support the project.

SOLE SOURCE JUSTIFICATION FOR PASSIVE SEARCH SYSTEM (PS2)

1. A brief description of the procurement and what is being purchased?

The success of this project depends on the procurement of Sago Systems' passive millimeter wave imagers in order to protect our maritime infrastructure, pier facilities and piers, citizens, tourists, and passengers from the threat of terrorist attacks. We are requesting the purchase of Sago Systems' radiation free suicide bomber detection systems, known as the ST 150, Sago Systems' radiation free handheld weapons detection system, known as the aPat, and Sago Systems proprietary walk-up radiation free passive-millimeter wave imaging system, known as the iPat. All of the products are patented and built by Sago Systems. All of the products meet our requirements for enhanced security without compromising privacy or disrupting pier activities. All of Sago's products show the exact shape and location of a suspicious object—metallic & non metallic guns and knives, IEDs, sheet metal, liquids in containers, etc.—taking the guessing out of current methods and removing the “pat down” that takes place at current security checks.

Currently, there is no other supplier with the demonstrated capability to provide safe, radiation-free passive millimeter wave imaging with the combined necessary capabilities: outdoor standoff passive millimeter wave imaging, remote wireless operation, portable battery operation, covert installations, quick redeployment, and a 2' aperture to achieve 1" resolution, 75-95 GHz spectral imaging, and infrared fusion. Furthermore Sago Systems provides a layered security approach and is the only company with a radiation-free handheld unit and walk-up imaging weapons and IED detection system.

The systems are compatible with existing and proposed surveillance and command and control infrastructure and can be expanded and upgraded in the future. The systems are portable which allows reconfiguration to match changing threat situations. By screening prior to entry into critical or crowded areas the systems provide an additional layer of security against terrorist attacks by suicide bombers.

We have also selected Video Ray Pro 3 ROV series, the underwater vehicle of choice by the U.S. Coast Guard. The Video Ray Pro 3 ROV is what the USCG MSST uses and will provide additional training for the harbors personnel beyond the manufacturers initial training. This affords compatibility and interoperability between the USCG and harbors personnel of the system. The ROV's compact size and high resolution makes this system go anywhere, anytime, able to maneuver the small spaces underneath the piers and inspect hulls of ships prior to berthing at our major pier facilities and fills the requirements in accordance with the maritime security regulations. This system will meet the waterside security needs, while the SAGO system will enhance and improve the landside security posture at the harbors regulated facilities.

The State procurement system will be used whereby sole source procurement will be requested by the State with its State procurement office to allow the direct purchase of

the Passive Search System (Sago Systems and Video Ray) should the grant award fund this project.

2. An explanation of why it is necessary to purchase non-competitively:

It is necessary to purchase non-competitively because Sago provides an integrated layered array of PMMW imaging systems from a hand-held unit to a stand off real time imaging system. We have systems designed to be used indoor or outdoor based on the customers needs. In addition, we have established CONOPS from our operational experience with real people at real venues. There are other vendors that have systems which use PMMW or combine it with other systems but their different method of detection hierarchy will not provide a resolved image to the degree of Sago products. There is no other vendor in the world developing radiation-free, passive-millimeter-wave imaging products ranging from a handheld to a walk-up imager capable of detecting guns, knives, weapons, IEDs, sheet metal, liquids in containers, and anything suspicious hidden under clothing.

Some of the Research & Development of this technology was funded by the U.S. Government to specifically address the growing IED threat to the United States.

- **Expertise of the Vendor:** Sago Systems and its parent company, Trex Enterprises Corporation, are known as world leaders in passive millimeter-wave imaging and pioneered its development and applicable capabilities. The company has worked in this unique and narrow field for more than two decades and has provided scientific expertise to the Government on numerous occasions. The ST 150, aPat, and iPat systems are built by Sago Systems, Inc., a subsidiary of Trex Enterprises Corporation. The technology was developed as a result of 12 years of federal funding. It is the US Government's unit of choice for the application of passive suicide bomber detection. The ST 150, iPat and aPat described provides the highest spatial and temperature resolution of any non-classified system. The operating frequency of this system is at 100 GHz where the atmosphere is completely transparent. This eliminates the temperature and humidity sensitivities found by other systems employed in the Terahertz range. The ST 150, iPat and aPat units are completely portable. They can be deployed in a few minutes time and can be powered by batteries. Command and control is via 802.11 wireless allowing remote operation of the units. The ST 150 easily integrates into existing command and control systems.
- **Management:** This program will be managed by State of Hawaii, Department of Transportation, Harbors Division. Sago Systems will be the prime vendor providing safe, radiation free passive millimeter-wave imaging systems and infrastructure Statewide. The Company is managed by

former military personnel with decades of experience, expertise in understanding IED threats and con-ops.

- **Responsiveness:** Sago Systems responds 24/7 to any customers' need and will provide training. All of Sago's products are easy to use allowing easy recognition of a suspicious object. Sago's products compatible with the State of Hawaii's current command center. As a passenger, tourist or citizen
- **Knowledge of the Program:** This State's passive millimeter-wave imaging project using Sago's patented products reduce risk by saving innocent lives and stopping a crime in advance of an attack. The ability to detect a threat and isolate the terrorist or weapon/IED carrying individual(s) averts a tragedy, averts injuring individuals and potentially killing them in an explosion. The ability to see the big-picture of what is happening on the piers and as passengers are departing or returning to cruise ships is significant. A terrorist attack or violent attack on Hawaii's busiest harbor or cruise ship lines would have a devastating economic impact on Hawaii's tourism and will paralyze the shipping industry, imports and exports from the harbor. Supporting this project mitigates the potential of an IED explosion. The ST150 network can paint a 360-degree view of a person. The systems can detect thin sheets of metal, shrapnel and suicide vests. There is no other company able to create this big-picture capability.
- **Expertise of staff personnel:** Sago Systems is comprised of a management team with more than 50 years of active-duty military experience spanning the globe starting at the highest level with a 4-star Admiral (USN) and a F-18 Fighter Pilot (USAF) backed by a team of experienced passive millimeter-wave experts who have filed more than 50 patents protecting their break-through inventions. Only Sago Systems and its parent company, Trex Enterprises Corporation, are recognized by the U.S. Government for leading the way in creating solutions-driven radiation free products. TSA just recently awarded Sago a contract to develop a walk-through portal system for airports.
- **Time Constraints:** Sago Systems' strength is its experience and its ability to perform. It is the only company with commercially available radiation free products—a handheld, outside stand-off suicide bomber imager and a walk-up screening system.
- **When procurement coverage is required and why:** Procurement coverage is required immediately to begin this important project that only Sago Systems can provide.
- **Impact on the program if dates are not met:** The Port of Honolulu has been identified by the Office of Domestic Preparedness (ODP) as one of 66

critical ports that need to be protected based on an extensive threat study performed by ODP. Therefore, if the dates are not met, we continue to be vulnerable to external threats.

- **How long it will take another vendor to reach the same level of competence:** The period could be from 3-10 years based on the costs and advances in designing and manufacturing PMMW components.

4. Uniqueness:

Sago is the only company capable of providing a layered, compatible, portable passive millimeter-wave imaging architecture generating safe, radiation-free quality imagery of guns, knives, IEDs concealed under clothing. Sago is the only company with a team of experts on staff with decades of experience. Sago is the only passive millimeter-wave Company supported by the U.S. Government for R&D, Testing and Deployment. The US Government currently has Sago Systems products deployed.

- 5. Other. Any other points that should be covered to “sell the case”:** Our team is focused on doing the job right the first time. We will be on target and on time with this project. Our team will use its vast array of operational and combat experience to ensure we protect your ports and make them the security showplace for Hawaii for both the landside and waterside.

6. Declaration:

This action is in the best interest of the Agency and defense of Hawaiian homeland security, i.e., Port of Honolulu Security.

PROPOSED SAGO/VIDEO RAY ROV EQUIPMENT DEPLOYMENT LOCATIONS

<u>TYPE SYSTEM</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>COMMENTS</u>	
<u>Full Body Image (iPats):</u> (Total 4 each)	Hilo PAX Facility	1 each	@ main screening checkpoint	
	Kahului PAX Facility	1 each	@ main screening checkpoint	
	Nawiliwili PAX Facility	1 each	@ main screening checkpoint	
	Honolulu PAX Facility	1 each	@ main screening checkpoint	
<u>aPats (handheld):</u> (Total 10 each)	Honolulu PAX Facility (Pier 2)	2 each	1 @ main access control point 1 @ 2 nd access control point	
	Honolulu PAX Facility (Pier 10-11)	1 each	1 @ main access control point	
	Honolulu CGO Facility (Pier 1)	1 each	1 @ main access control point	
	Honolulu CGO Facility (Pier 31)	1 each	1 @ main access control point	
	KBPH CGO Facility (Piers 1, 5-7)	1 each	1 @ main access control point	
	Kahului PAX Facility (Pier 1)	1 each	1 @ outer access control point	
	Hilo PAX Facility (Pier 1)	1 each	1 @ outer access control point	
	Kawaihae CGO Facility (Piers 1-2)	1 each	1 @ main access control point	
	Nawiliwili PAX Facility (Piers 1-2)	1 each	1 @ outer access control point	

*NOTE. FSO's/DM's MAY AT THEIR DISCRETION PLACE aPat at other locations

ST 150's:
(suicide detection)
(Total 10 each)

** SEE NOTE BELOW FOR LOCATIONS

Honolulu Pier 2 PAX Facility	3 each
Honolulu Pier 10-11 PAX Facility	2 each
KBPH CGO Facility (Piers 1, 5-7)	1 each
Kahului PAX Facility (Pier 1)	1 each
Hilo PAX Facility (Pier 1)	1 each
Kawaihae CGO Facility (Piers 1-2)	1 each
Nawiliwili PAX Facility (Piers 1-2)	1 each

**TBD – Strategically placed upon SAGO/Harbor assessment of area (PAX flow, pedestrian flow, etc.)

Video Ray ROV's:
Four (4) sets

One (1) Set each for Honolulu Harbor, Kahului Harbor, Hilo Harbor, Nawiliwili Harbor