House District26	THE TWENTY-SEVENTH LEGISLATURE	
Senate District13	APPLICATION FOR GRANTS & SUBSIDIES	Log No:
Seliate District15	CHAPTER 42F, HAWAII REVISED STATUTES	For Logiciaturals Lisa Only
Type of Grant or Subsidy Request:		For Legislature's Use Only
XX GRANT REQUEST — OPERATING	GRANT REQUEST - CAPITAL	SUBSIDY REQUEST
"Grant" means an award of state funds by the le permit the community to benefit from those activ	egislature, by an appropriation to a specified recipient, to sulvities.	pport the activities of the recipient and
incurred by the organization or individual in provi	e legislature, by an appropriation to a recipient specified in the viding a service available to some or all members of the pub	
"Recipient" means any organization or person re	eceiving a grant or subsidy.	
	S REQUEST (LEAVE BLANK IF UNKNOWN): DLNR (DOBOR)	
STATE PROGRAM I.D. NO. (LEAVE BLANK IF UNKNO):	
1. APPLICANT INFORMATION:	2. CONTACT PERSON FOR MAT	TERS INVOLVING THIS
Legal Name of Requesting Organization or Indivi	vidual: Navatek Ltd. Name Ann Chung	
Dba:		
Street Address: 841 Bishop St., Suite 1110	Title Director of Special Project	
Mailing Address: 841 Bishop St., Suite 1110 Hor	Phone # <u>808-351-6000</u>	
Walling Address. 041 Dishlop St., Saite	1 4X 11 <u>666 625 7666</u>	
	e-mail <u>achung@navatekltd.com</u>	1
3. Type of business entity:	6. DESCRIPTIVE TITLE OF APPL	ICANT'S REQUEST:
☐ NON PROFIT CORPORATION X SFOR PROFIT CORPORATION ☐ LIMITED LIABILITY COMPANY ☐ SOLE PROPRIETORSHIP/INDIVIDUAL	Ocean Recreation Manag	ation Activities in the South Oahu gement Area to Identify Potential nerging from New Trends in Water
4. FEDERAL TAX ID #: 5. STATE TAX ID #:	7. AMOUNT OF STATE FUNDS RE FISCAL YEAR 2014: \$450,0	
8. STATUS OF SERVICE DESCRIBED IN THIS REQUES: New Service (Presently Does not exist) Existing Service (Presently in Operation)	SPECIFY THE AMOUNT BY SOURCES OF FUNDS AVA AT THE TIME OF THIS REQUEST: STATE \$ FEDERAL \$ COUNTY \$ PRIVATE/OTHER \$	
	MICHAEL SCHMICKER NAME & TITLE	1-31-13 Date signed

Applicant: Navatek, Ltd.

I. Background and Summary

This section shall clearly and concisely summarize and highlight the contents of the request in such a way as to provide the State Legislature with a broad understanding of the request. Include the following:

1. Applicant's background:

Navatek, Ltd. was founded in 1979 and operates out of offices in Honolulu, Hawaii with 49 employees. Navatek is a subsidiary of *kama'aina* company Pacific Marine, founded in 1944, with 450 employees. Parent company Pacific Marine also owns Pacific Shipyards International LLC, the State's largest commercial ship repair company.

For over 30 years, Navatek has professionally operated a fleet of advanced small craft in Hawaiian waters – including survey vessels capable of conducting sustained, at-sea observations and data collection. The company also employs a staff of local, certified, trained and U.S.C.G-licensed boat operators who are familiar with Hawaii waters, and ocean sports activities in those waters, regularly participating in those sports. This unique combination of available survey craft and skilled boat operators makes it possible for Navatek to conduct the proposed "on-water" survey safely, efficiently and effectively.

2. The goals and objectives related to the request

They are three:

- Develop and establish a survey methodology and procedures to determine the <u>current</u> (2014) scope and degree of ocean sports activities being conducted in the South Oahu Ocean Recreation Management Area.
- Conduct a survey of those activities
- Compile that data and produce a report for the State of Hawaii which will allow it to determine where current legislation, rules and regulations are adequate to protect the safety of ocean users, and minimize legal liability to the State of Hawaii in case of accidents or deaths resulting from using the South Oahu ORMA.

Applicant: Navatek, Ltd.

3. The public purpose and need to be served:

As the State's population grows, the public's usage of Hawaii's ocean waters is continually increasing. Tourism brings additional millions of people to play in Hawaii's waters, and the ocean recreation industry continues to develop and market new craft, vehicles and toys for ocean sports use. The waters become more and more crowded, and the new products create new risks. Traditional water sports like surfing, swimming, sailing, paddling a canoe, and fishing have been enjoyed for years. They now share the water with activities popularized in the last 2-3 decades such as; sailboards, scuba divers, high-speed jet skis, parasailers, and water sledders. Several new water sports activities have become extremely popular in recent years. These include Stand-Up Paddling (SUP), paddle board racing, extreme skin diving, and unlimited class outrigger canoe racing.

To better manage risks associated with ocean sports in Hawaii, the State of Hawaii has created an Ocean Recreation Management Plan (HRS 256) which 1) designates specific Ocean recreation Management Areas (ORMA) on each island, and 2) lays down rules and regulations regarding the use of these areas by the public. Perhaps the most heavily used ORMA in the State is the South Oahu Ocean Recreation Management Area. This ORMA covers the heavily used and tourist-popular waters of Waikiki and Hanauma Bay, as well as seven other zones.

As usage has exploded, so have accidents (even deaths) along with costly lawsuits against individuals, corporations and the State of Hawaii (and eventually the taxpayer). "Lawsuits arising out of water sports and recreational liability issues have become quite common in our society. Plaintiffs generally claim that they should have been protected or warned of a hazard by the defendants." (Louie and Ching, FDCC Quarterly Summer 2006).

As the population using Hawaii's ocean waters increases, and new sport recreation activities are introduced, the danger grows that Hawaii's legislative rules and regulations no longer adequately cover the activities – and risks – found in the ORMAs.

Under this request, Navatek proposes to conduct an on-water survey of current ocean sports activities actually taking place in the waters of the South Oahu Ocean Recreation Management Area, in order to 1) determine the present scope and range of these activities 2) identify

emerging safety, usage conflicts and liability issues emerging from new trends in water sports activities.

During this survey, Navatek will be stationed on the water in the South Oahu ORMA. This will allow Navatek to provide, at no additional cost, two other additional benefits to the State of Hawaii during this 12 month survey. Navatek will 1) monitor the ORMA for sea-borne debris, including identifying and collecting samples of any debris from the Japan 2011 earthquake off Tohoku which may make it to Hawaii's shore, and 2) help the Coast Guard and DOBOR respond to any endangered swimmers and boaters operating in the ORMA.

4. Describe the target population to be served:

The target population to be served includes; Oahu residents and Oahu tourists using the nine zones in the South Oahu Ocean Recreational Management Area.

5. Describe the geographic coverage:

The nine zones in the South Oahu Ocean Recreational Management Area: Hanauma Bay Restricted Zone, Maunalua Bay Restricted Waters, Waialae-Kahala Restricted Areas; Diamond Head Restricted Area; Waikiki Ocean Waters Restricted Zones; South Shore Parasail Area; Kahakaaulana Islet Commercial Zone; Reef Runway Zone; Koko Head and Makapuu commercial high speed boating zone. Additionally, offshore areas beyond the seaward boundaries of the zones will be monitored for activity. The range of SUP, paddle board racer practice, and even extreme skin diving activity is perceived to be increasing further offshore.

APPENDIX 1

HRS Chapter 256
Subchapter 6:
"South Oahu Ocean Recreation Management Area"

SUBCHAPTER 6

SOUTH OAHU OCEAN RECREATION MANAGEMENT AREAS

\$13-256-86 Definition. The "South Shore Oahu Ocean Recreation Management Area" means all ocean waters and navigable streams from Makapuu Point to the west boundary of the Honolulu International Airport Reef Runway, Oahu, Hawaii, extending three thousand feet seaward of the territorial sea baseline as shown on Exhibit "CC", dated August 15, 1988, located at the end of this subchapter. [Eff 2/24/94] (Auth: HRS \$\$200-2, 200-3, 200-4) (Imp: HRS \$\$200-2, 200-3, 200-4)

\$13-256-87 Hanauma Bay Restricted Zone. (a) The Hanauma Bay Restricted Zone means the area confined by the boundaries shown for said zone on Exhibit "DD", dated August 15, 1988, located at the end of this subchapter. The boundaries are as follows:

Beginning at the low water mark at Palea Point then by azimuth measured clockwise from True South, 23 degrees 15 minutes and 50 seconds for a distance of one thousand nine hundred forty-six feet to Paioluolu Point; then along the shoreline of Hanauma Bay to the point of beginning.

(b) Restriction: Hanauma Bay is designated a swimming and snorkeling zone. No watercraft of any description shall operate or moor in this zone, except a person (1) engaged in law enforcement, rescue or other operations essential to preserve life or property; (2) engaged in research or other activities pursuant to a permit issued by the department of land and natural resources. [Eff 2/24/94] (Auth: HRS §\$200-2, 200-3, 200-4)

\$13-256-88 <u>Maunalua Bay waters</u>. (a) Maunalua Bay waters means the area encompassed by the

boundaries shown on Exhibit "FF", dated May 15, 1990, and located at the end of this subchapter. The boundaries are described as follows:

Beginning at the southern point on the shoreline of Kawaihoa Point, then by azimuth measured clockwise from True South, 107 degrees for a distance of seventeen thousand and eighty-five feet to the southwestern tip of Wailupe Peninsula, then along the shoreline of Maunalua Bay to the point of beginning.

- (b) Commercial ocean recreation activities shall be restricted within Maunalua Bay waters as follows:
 - (1) No commercial operator shall operate a thrill craft, engage in parasailing, water sledding or commercial high speed boating, operate a motorized vessel towing a person engaged in parasailing, or operate a motor vessel towing a person engaged in water sledding during all weekends, and state or federal holidays.
 - (2) All commercial ocean recreation activities in Maunalua Bay waters are prohibited on Sunday, effective January 1, 1991.
- (c) Zone A Restricted Zone is the area encompassed by the boundaries shown of the zone on Exhibit "EE", dated February 7, 1990, and located at the end of this subchapter. The boundaries of Zone A are as follows:

Beginning at a point in the water, by azimuth measured clockwise from True South, which is 325 degrees for a distance of two thousand three hundred twenty-five feet from a point on the low water mark on the east side of Maunalua Bay boat ramp; then on a radius of two hundred feet around that point.

(d) Zone B Restricted Zone is the area encompassed by the boundaries shown of the zone on Exhibit "EE", dated February 7, 1990, and located at the end of this subchapter. The boundaries of Zone B are as follows:

Beginning at a point in the water, by azimuth measured clockwise from True South, which is 330

degrees for a distance of one thousand six hundred eighty feet from a point on the low water mark on the east side of Maunalua Bay boat ramp; then on a radius of two hundred feet around that point.

(e) Zone C Restricted Zone is the area encompassed by the boundaries shown of the zone on Exhibit "EE", dated February 7, 1990, and located at the end of this subchapter. The boundaries of Zone C are as follows:

Beginning at a point in the water, by azimuth measured clockwise from True South, which is 340 degrees for a distance of two thousand five hundred fifty feet from a point on the low water mark on the east side of Maunalua Bay boat ramp; then on a radius of two hundred feet around that point.

Zones A, B and C are designated commercial thrill craft operating zones. No commercial operator permittee shall operate more than six rental thrill craft within each designated area at any one time. No commercial thrill craft shall be operated within Zones A, B and C except between the hours of 9:00 a.m. and 5:00 p.m., Mondays through Fridays. No commercial thrill craft shall be operated within Zones A, B and C on Saturdays, Sundays and state or federal holidays.

(f) Zone D Restricted Zone is the area encompassed by the boundaries shown of the zone on Exhibit "EE", dated February 7, 1990, and located at the end of this subchapter. The boundaries of Zone D are as follows:

Beginning at a point in the water, by azimuth measured clockwise from True South, which is 012 degrees for a distance of seven hundred fifty feet from a point on the low water mark on the east side of Maunalua Bay boat ramp; then on a radius of two hundred feet around that point.

Zone D is designated a recreational thrill craft operating zone for use by inexperienced operators only. Commercial thrill craft operations are prohibited.

(g) Zone E Restricted Zone is the area encompassed by the boundaries shown of the zone on Exhibit "EE", dated February 7, 1990, and located at the end of this subchapter. The boundaries of Zone E are as follows:

Beginning at a point in the water, by azimuth measured clockwise from True South 076 degrees for a distance of four thousand one hundred feet from Buoy "1", then 076 degrees for a distance of eight thousand four hundred feet; 168 degrees for a distance of one thousand four hundred fifty-five feet; 259 degrees for a distance of eight thousand five hundred eighty feet; then in a straight line to the point of beginning.

Zone E is designated a recreational thrill craft zone. No person shall operate a commercial thrill craft within this area. Other vessels shall exercise caution when transiting this area. This zone shall be closed to all thrill craft operations during the whale season, from December 15 to May 15 of the following year.

(h) Zone F Restricted Zone is the area encompassed by the boundaries shown of the zone on Exhibit "EE", dated February 7, 1990, and located at the end of this subchapter. The boundaries of Zone F are as follows:

Beginning at a point in the water at Buoy "1", by azimuth measured clockwise from True South, then 157 degrees for a distance of one thousand nine hundred thirty-five feet; 092 degrees for a distance of one thousand nine hundred five feet; 085 degrees for a distance of three thousand three hundred feet; 075 degrees for a distance of four thousand two hundred eighteen feet; 347 degrees for a distance of two thousand four hundred feet; 259 degrees for a distance of eight thousand eight hundred eighty feet; 000 degrees for a distance of eight hundred eighty-five feet; then by a straight line to a point of beginning. No person shall operate a vessel within this area

This is a green

at a speed in excess of slow-no-wake.

sea turtle resting and foraging area.

(i) Zone G Maunalua Bay Parasail Zone is the area encompassed by the boundaries shown of the zone on Exhibit "FF", dated May 15, 1990, and located at the end of this subchapter. The boundaries of Zone G are as follows:

Beginning at entrance buoy "1" to the Hawaii-Kai Marina and Maunalua Bay boat launching ramp, establishing the eastern boundary along the extended centerline of the Ku'i channel entrance; then by straight line to buoy R-2 off Diamond Head, establishing the western boundary.

Zone G Maunalua Bay Parasail Zone is designated for parasail operations. All operating parasail vessels shall remain seaward of the boundary line. No more than two commercial operating area use permits for parasailing operations shall be authorized for this zone. No permittee shall operate more than one vessel with a parasail aloft at any one time. No person shall operate within one thousand feet of any buoy when the parasail is aloft. All other vessels using this area shall exercise extreme caution. This zone, except for that portion which is encompassed by alternate parasail zone G1, shall be closed to parasail operations from January 6 to May 15 of each year.

(j) Zone G1 Maunalua Bay Alternate Parasail Zone is the area encompassed by the boundaries shown on Exhibit "FF", dated May 15, 1990, and located at the end of this subchapter. The boundaries of Zone G1 are as follows:

Beginning at a point on the the eastern boundary of Zone G at the intersection of the straight line following a line from Kawaihoa Point at Koko Head to buoy R-2 off Diamond Head, establishing the shoreward boundary; then at a point on the shoreward boundary intersected by a line on a bearing of 000 degrees to the Kahala Hilton Hotel establishing the western boundary. Zone G1 Maunalua Bay Alternate Parasail Zone is that portion of parasail Zone G which is designated

for parasail operations from January 6 to May 15 of each year. No permittee shall operate more than one

parasail vessel within this zone during this period. No parasail vessel shall exceed the speed of 18 knots within this zone. All other vessels using this area shall exercise caution.

(k) Zone H Ingress-egress corridor means the area encompassed by the boundaries shown on Exhibit "HH", dated August 19, 1988, and located at the end of this subchapter. The boundaries of Zone H are as follows:

Beginning at a point at the shoreward western boundary of Maunalua Beach Park boat ramp; then by azimuth measured clockwise from True South, 120 degrees for a distance of seventy-five feet, 030 degrees for a distance of one hundred feet to a point in the water; 120 degrees for a distance of one hundred feet to a point in the water; 218 degrees for distance of one hundred feet to a point on land; then in a straight line to the point of beginning.

Zone H is designated for recreational thrill craft ingress-egress to the ocean waters of Maunalua Bay. No person shall operate or moor a vessel, surfboard, or sailboard within this area.

(1) Zone I means the area encompassed by the boundaries shown on Exhibit "HH", dated August 19, 1988, and located at the end of this subchapter. The boundaries of Zone I are as follows:

Beginning at a point in the water 270 degrees by azimuth measured clockwise from True South, at a distance of twenty-five feet from daybeacon R"2" of Ku'i channel; then 270 degrees for a distance of three hundred feet, 025 degrees for a distance of one thousand one hundred twenty-five feet; 090 degrees for a distance of three hundred feet; then in a straight line to the point of beginning.

Zone I is designated for recreational water skiing and commercial water sledding. Only one commercial operating area use permit shall be issued for this zone for safety purposes.

(m) Maunalua Bay, Ku'i Channel speed
restrictions.

(1) The speed of any watercraft shall not exceed 10 knots when within the confines of the Ku'i channel as shown on Exhibit "GG" dated May 15, 1990, and described as follows:

Beginning at a line drawn between buoys R''2'' and G''1A'', then through each and every daybeacon in ascending order to daybeacons R''8'' and G''9''.

(2) The speed of any watercraft shall not exceed 5 knots when within the confines of the Ku'i channel as shown on Exhibit "GG", dated May 15, 1990, and located at the end of this subchapter. The boundaries are described as follows:

Beginning at a line drawn between buoys R"8" and G"9", then through each and every daybeacon and buoy in ascending order to the boundaries of Hawaii Kai Marina Bridge, May Way Bridge and Kuli'ou'ou Stream. [Eff 2/24/94] (Auth: HRS \$\$200-22, 200-23, 200-24, 200-37) (Imp: HRS \$\$200-22, 200-23, 200-24, 200-37)

\$13-256-89 <u>Waialae-Kahala Restricted Areas</u>. (a) The Waialae-Kahala Swimming Area A.

(1) The Waialae-Kahala swimming area A means the area confined by the boundaries shown for said zone on Exhibit "II", dated August 19, 1988 located at the end of this subchapter. The boundaries are as follows:

Beginning at the low water mark at the southern tip of the Waialae Nui Stream groin, then by azimuth measured clockwise from True South; 205 degrees for a distance of five hundred fifty feet to a point in the water; then in a straight line to the southern tip of the rocky peninsula; then along the low water mark in a westerly direction to the point of beginning.

(b) The Waialae-Kahala Swimming Area B.

(1) The Waialae-Kahala swimming area B means the area confined by the boundaries shown for said area on Exhibit "II", dated August 19, 1988 located at the end of this subchapter. The boundaries are as follows:

Beginning at the low water mark at the southern tip of the rocky peninsula then by azimuth measured clockwise from True South; 340 degrees to the north tip of the islet; then along the low water mark on the eastern portion of the islet to the southeast tip; then in a straight line to the southern tip of the groin at the eastern boundary of the Kahala Hilton Hotel; then following the low water mark in a westerly direction to the point of beginning.

- (2) Restrictions. The Waialae-Kahala swimming areas A and B are designated for swimming and bathing and the use of water sports equipment. No person shall operate or moor a vessel, except as provided for in subsection (d), or surfboard, or sailboard within this area.
- (c) Waialae-Kahala Ingress-Egress Corridor.
- (1) The Waialae-Kahala ingress-egress corridor means the area confined by the boundaries shown for said area on Exhibit "II", dated, August 19, 1988 located at the end of this subchapter. The boundaries are as follows:

Beginning at a point on the low water mark of the shoreline which is adjacent to the east side of the groin at Waialae Beach Park; then by azimuth measured clockwise from True South, 006 degrees to the seaward end of the groin and the boat channel; then 253 degrees for a distance of one hundred forty feet along the boat channel; then 186 degrees to the low water mark of the shore; then along the shoreline to the point of beginning.

(2) Restrictions. The Waialae-Kahala ingressegress corridor is designated for use by

- windsurfing and manually propelled water sports equipment.
- (d) Waialae-Kahala Beach Boat Channel.
- (1) The Waialae-Kahala beach boat channel means the area confined by the boundaries shown on Exhibit "II", dated, August 19, 1988 located at the end of this subchapter. The boundaries are as follows:

Beginning at a point on the low water mark at the southern tip of the Waialae Nui Stream groin, then by azimuth measured clockwise from True South, 205 degrees for a distance five hundred fifty feet, coincident with Swimming Area A boundary; then in a straight line to the low water mark at the south eastern tip of the rocky peninsula; then along the low water mark of the rocky peninsula and shoreline to a point one hundred twenty-five feet east of the rocky peninsula; then 343 degrees in a straight line to intersect Swimming Area B boundary; then along Swimming Area B boundary to the northern tip of the islet; then 160 degrees for a distance of four hundred twenty-five feet; then 025 degrees for a distance of four hundred seventy-five feet; then in a northwesterly direction to the point of beginning.

(2) Restrictions. The Waialae-Kahala beach boat channel is designated for use by commercial vessels, operating under contract with the Kahala Hilton Hotel and holding a valid commercial use permit from the department. The operation of any other vessel is prohibited within this area. [Eff 2/24/94] (Auth: HRS \$\$200-2, 200-3, 200-4) (Imp: HRS \$\$200-2, 200-3, 200-4)

\$13-256-90 <u>Diamond Head Restricted Area</u>. (a) The Diamond Head Restricted area means the area confined by the boundaries shown for said area on

Exhibit "JJ", dated September 19, 1988, located at the end of this subchapter, the boundaries are as follows:

Beginning at a point at the low water mark of the shoreline on the western boundary of the Diamond Head Lighthouse; then by azimuth measured clockwise from True South, 345 degrees for a distance of two thousand eight hundred eighty feet; 253 degrees for a distance of two thousand two hundred fifty feet; then by a straight line to a point at the low water mark at the most eastern boundary of Diamond Head Beach Park; then along the low water mark in a westerly direction to the point of beginning.

(b) Restrictions. The Diamond Head Restricted Area is designated for surfboards, sailboards and manually propelled vessels. No person shall operate a motorized vessel within this area. [Eff 2/24/94] (Auth: HRS §\$200-2, 200-3, 200-4) (Imp: HRS §\$200-2, 200-3, 200-4)

\$13-256-91 <u>Waikiki Ocean Waters Restricted</u> Zones. (a) Waikiki Speed Zone.

(1) Waikiki speed zone means the area confined by the boundaries shown for said zone on Exhibit "KK", dated June 30, 1988, located at the end of this subchapter. The boundaries are as follows:

Beginning at a point on the low water of the shoreline at the southern tip of Magic Island on a straight line to the Ala Wai Entrance Buoy G "1", then on a straight line to Diamond Head Buoy R "2", then on a straight line toward Diamond Head Lighthouse to intersect the Diamond Head windsurfing zone boundary, then along the boundary to the low water mark at Diamond Head Beach Park, then along the low water mark following the shoreline to the point of beginning.

(2) Restriction. No person shall operate a vessel or watercraft within the Waikiki

speed zone at a speed in excess of slow-nowake. Vessel operators shall exercise caution while transiting the area due to heavy use by swimmers.

- (b) Waikiki Commercial Thrill Craft Zone A.
- (1) Waikiki Thrill Craft Zone A means the area confined by the boundaries shown on Exhibit "KK", dated June 30, 1988, located at the end of this subchapter. The boundaries are as follows:

Beginning at a point in the water by azimuth measured clockwise from True South, 045 degrees for a distance of three thousand six hundred feet from the low water mark of the tip of the groin at the southern boundary of Fort DeRussy Beach Park; then on a radius of two hundred feet around that point.

- (c) Waikiki Commercial Thrill Craft Zone B.
- (1) Waikiki Commercial Thrill Craft Zone B means the area confined by the boundaries shown for said zone on Exhibit "KK", dated June 30, 1988, located at the end of this subchapter, which boundaries are described as follows:

Beginning at a point in the water by azimuth measured clockwise from True South, 025 degrees for a distance of three thousand eight hundred feet from the low water mark of the tip of the groin at the southern boundary of Fort DeRussy Beach Park; then on a radius of two hundred feet around that point.

(d) Restrictions. Waikiki Commercial Thrill Craft Zone A and Zone B are designated commercial thrill craft areas. No commercial operator permittee shall operate more than six rented thrill craft within it assigned area at any one time. [Eff 2/24/94] (Auth: HRS §\$200-23, 200-24, 200-37) (Imp: HRS §\$200-23, 200-24, 200-37)

\$13-256-92 South Shore Parasail Area. (a) South Shore Parasail Area is the area defined on Exhibit "LL", dated February 7, 1990, and located at the end of this subchapter. The boundaries are as follows:

Beginning at buoy R-2 of Kalihi Channel entrance; then by straight line to buoy G-1 of the Ala Wai channel; then by straight line to buoy R-2 off Diamond Head.

- (b) South Shore Parasail Area is designated for the operation of parasail vessels. No more than four commercial operating area use permits shall be authorized in this area. No permittee shall operate more than one vessel with a parasail aloft at any one time. All operating parasail vessels shall remain seaward of the boundary line. No person shall operate a parasail aloft within one thousand feet of any channel entrance buoys. All other vessels using this area shall exercise extreme caution. This area shall be closed to parasail operations from January 6 to May 15 of each year.
- (c) South Shore Alternate Parasail Area is the area defined on Exhibit "LL", dated February 7, 1990, and located at the end of this subchapter. The boundaries are as follows:

Beginning at buoy R-2 of Kalihi Channel entrance; then by straight line to buoy R-2 off Diamond Head.

(d) South Shore Alternate Parasail Area is designated for parasail operations from January 6 to May 15 of each year. No more than four parasail vessels shall be operated within this area during this period. All parasail vessels with parasail aloft, shall remain seaward of the boundary line. No person shall operate a parasail aloft within one thousand feet of any channel entrance buoys. All other vessels using this area shall exercise extreme caution. [Eff 2/24/94] (Auth: HRS §\$200-22, 200-23, 200-24, 200-37) (Imp: HRS §\$200-22, 200-24, 200-37)

\$13-256-93 Kahakaaulana Islet (Harris Is.)
Commercial Zone. (a) Zone A Restricted Area is the area encompassed by the boundaries shown of the zone on Exhibit "NN", dated June 6, 1989, located at the end of this subchapter. The boundaries are as follows:

Beginning at a point in the water, by azimuth measured clockwise from True South, which is 123 degrees for a distance of five hundred twenty-five feet from a point on the low water mark on the eastern tip of Mokuoeo Island; then on a radius of two hundred feet around that point.

(b) Zone B Restricted Area is the area encompassed by the boundaries shown of the zone on Exhibit "NN", dated June 6, 1989, located at the end of this subchapter. The boundaries are as follows:

Beginning at a point in the water, by azimuth measured clockwise from True South, which is 208 degrees for a distance of four hundred fifty feet from a point on the low water mark on the eastern tip of Mokuoeo Island; then on a radius of two hundred feet around that point.

(c) Zone C Restricted Area is the area encompassed by the boundaries shown of the zone on Exhibit "NN", dated June 6, 1989, located at the end of this subchapter. The boundaries are as follows:

Beginning at a point in the water, by azimuth measured clockwise from True South, which is 242 degrees for a distance of nine hundred feet from a point on the low water mark on the eastern tip of Mokuoeo Island; then on a radius of two hundred feet around that point.

(d) Zone D Restricted Area is the area encompassed by the boundaries shown of the zone on Exhibit "NN", dated June 6, 1989, located at the end of this subchapter. The boundaries are as follows:

Beginning at a point in the water, by azimuth measured clockwise from True South, which is 115 degrees for a distance of six hundred forty-five feet from a point on the low water mark on the western tip of Mokuoeo Island; then on a radius of two hundred feet around that point.

- (e) Zones A, B, C, and D are designated as commercial thrill craft zones. No commercial operator permittee shall operate more than six rented thrill craft within the assigned zones at any one time.
- (f) Zone E restricted zone is the area encompassed by the boundaries shown on Exhibit "NN", dated June 6, 1989, located at the end of this subchapter. The boundaries are as follows:

Beginning at a point on the low water mark of the northern tip of Kahakaaulana Islet (Harris Is.), then by azimuth measured clockwise from True South, which is 180 degrees for a distance of three hundred sixty feet; 090 degrees for a distance of one thousand fifty feet; 000 degrees for a distance of one thousand two hundred seventy-five feet; then by a straight line to the shoreline at the south tip of Kahakaaulana Islet (Harris Is.).

(g) Zone E restricted zone is designated a a commercial ocean activities zone for commercial sailing, windsurfing and diving. Vessels transiting this area shall exercise extreme caution when occupied by commercial activities. [Eff 2/24/94] (Auth: HRS \$\$200-23, 200-24, 200-37)

\$13-256-94 Reef Runway Zone F. (a) The Reef Runway Zone F is the area encompassed by the boundaries shown of the zone on Exhibit "NN", dated June 6, 1989, located at the end of this subchapter. The boundaries are as follows:

Beginning at a point in the water by azimuth measured clockwise from True South, 323 degrees for a distance of four hundred fifty feet from the low water mark of the western boundary of the Reef Runway 8R; then 323 degrees for a distance of two thousand seven hundred sixty feet; 270 degrees for a distance of thirteen thousand seven hundred ten feet; 180 degrees for a distance of two thousand two hundred fifty feet; then by a straight line to the point of beginning.

- (b) The Reef Runway Zone F is designated for recreational thrill craft operations. No person shall operate a commercial thrill craft within this area. Any vessel transiting this area shall exercise extreme caution when occupied by recreational thrill craft. [Eff 2/24/94] (Auth: HRS §\$200-23, 200-24, 200-37) (Imp: HRS §\$200-23, 200-24, 200-37)
- \$13-256-95 Koko Head and Makapuu commercial high speed boating zone. (a) The zone is the area defined on Exhibit "CC-1", dated May 15, 1990, and located at the end of this subchapter. The boundaries are as follows:

Beginning at point in the water, by azimuth measured clockwise from True South, 312 degrees from Kawaihoa Point, establishing the southwest boundary extending seaward; then on a line not less than one thousand five hundred feet from the shoreline to Makapuu Point; then 311 degrees extending seaward from Makapuu Point, establishing the northeast boundary.

- (b) This zone is designated for the operation of commercial high speed boats. No more than four commercial operating area use permits for high speed boats shall be issued in this zone. All operating commercial high speed boats shall remain seaward of the shoreward boundary as shown on Exhibit "CC-1". All other vessels transiting this zone shall exercise extreme caution. This zone shall be closed to commercial high speed boat operations during the whale season, from December 15 to May 15 of the following year. [Eff 2/24/94] (Auth: HRS §\$200-22, 200-23, 200-24, 200-37) (Imp: HRS §\$200-22, 200-23, 200-24, 200-37)
- \$13-256-96 Ke'ehi Lagoon canoe racing zone. (a) The Ke'ehi Lagoon canoe racing zone is the area encompassed by the boundaries of the zone shown on Exhibit "NN-1", dated August 15, 1990, and located at

the end of this subchapter. The boundaries of the zone are as follows:

Beginning at a point in the water, located by azimuth measured clockwise from True South, 043 degrees for a distance of one thousand ninety feet from the low water mark of the shoreline at the Southwest boundary of Ke'ehi Lagoon Beach Park,; then 235 degrees for a distance of two thousand eight hundred twenty-five feet; 325 degrees for a distance of nine hundred feet; 055 degrees for a distance of two thousand eight hundred twenty-five feet; then to the point of beginning.

(b) The Ke'ehi Lagoon canoe racing zone is designated for training and competitive Hawaiian canoe activities. No person shall anchor or moor a vessel in this zone at any time. [Eff 2/24/94] (Auth: HRS \$\$200-23, 200-24, 200-37)

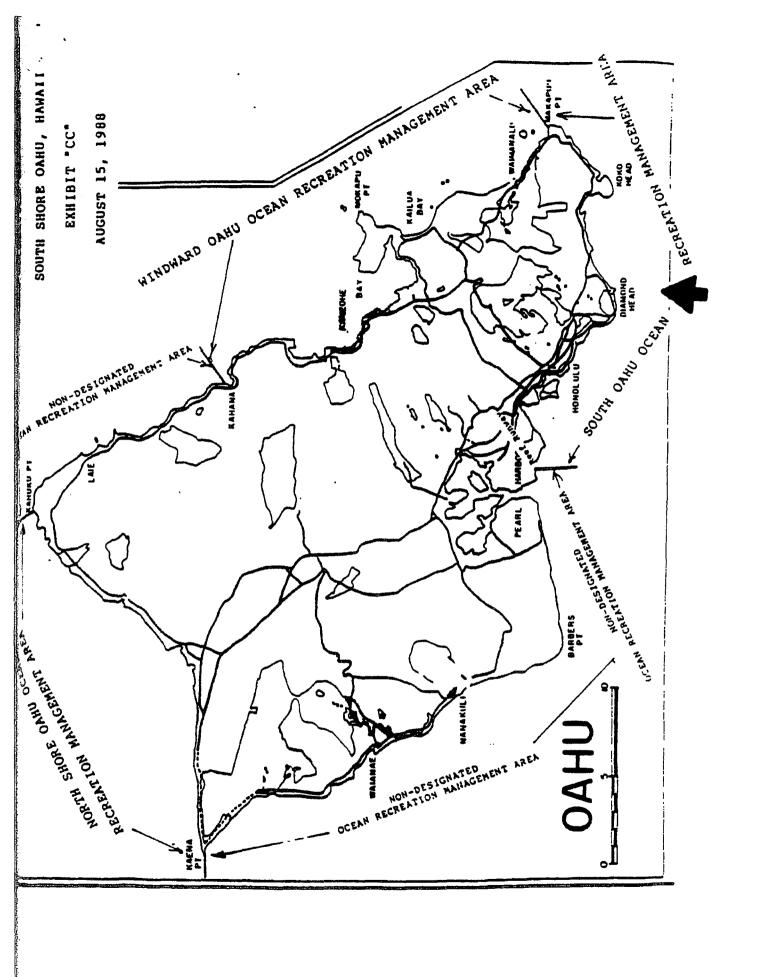
\$13-256-97 Ke'ehi Lagoon competitive water ski zone. (a) The Ke'ehi Lagoon competitive water ski zone is the area encompassed by the boundaries of the zone shown on Exhibit "NN-1", dated August 15, 1990, and located at the end of this subchapter. The boundaries of the zone are as follows:

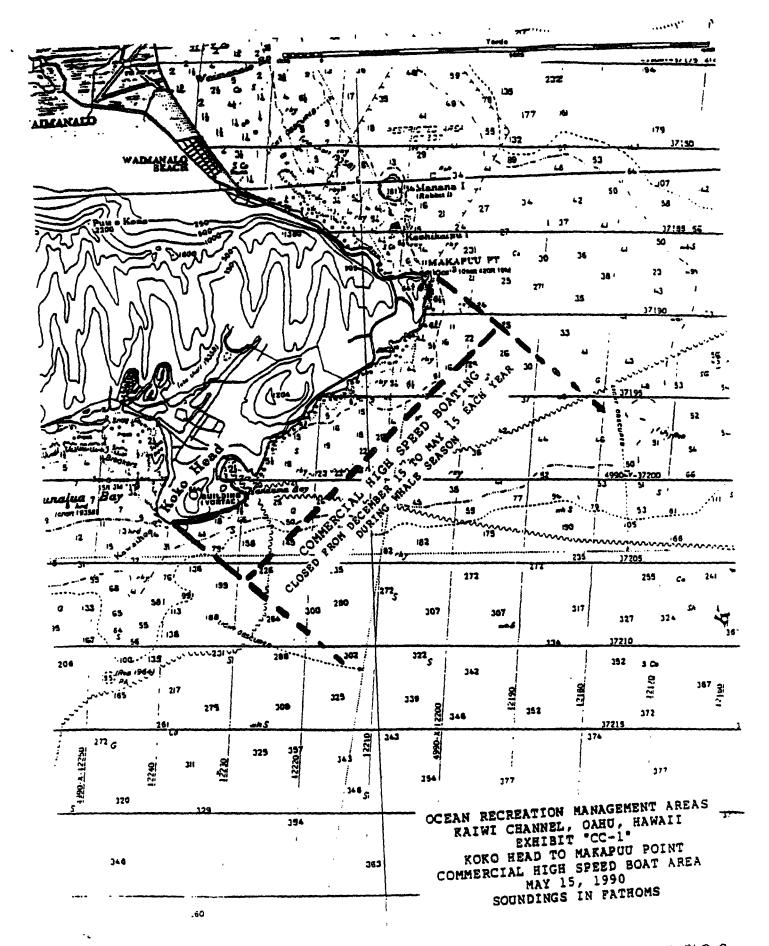
Beginning at a point in the water, located by azimuth measured clockwise from True South, 000 degrees for a distance of ninety-five feet from the Kalihi Channel rear range light; then 048 degrees for a distance of one hundred eighty-five feet; 064 degrees for a distance of four hundred ten feet; 154 degrees for a distance of two thousand seven hundred forty feet; 244 degrees for a distance of four hundred fifty feet; then to the point of beginning.

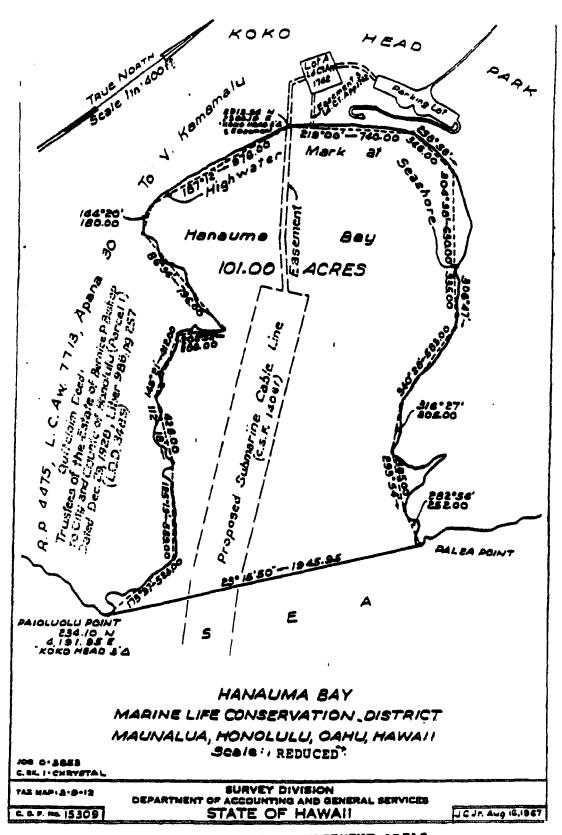
(b) The Ke'ehi Lagoon competitive water ski zone is designated as a competitive waterski area. Individual recreational water ski activities shall be permitted except during scheduled competitive water ski activities. No person shall anchor or moor a

vessel in this zone at any time. [Eff 2/24/94] (Auth: HRS \$\$200-23, 200-24, 200-37) (Imp: HRS \$\$200-23, 200-24, 200-37)

§§13-256-98 to 13-256-105 (Reserved)





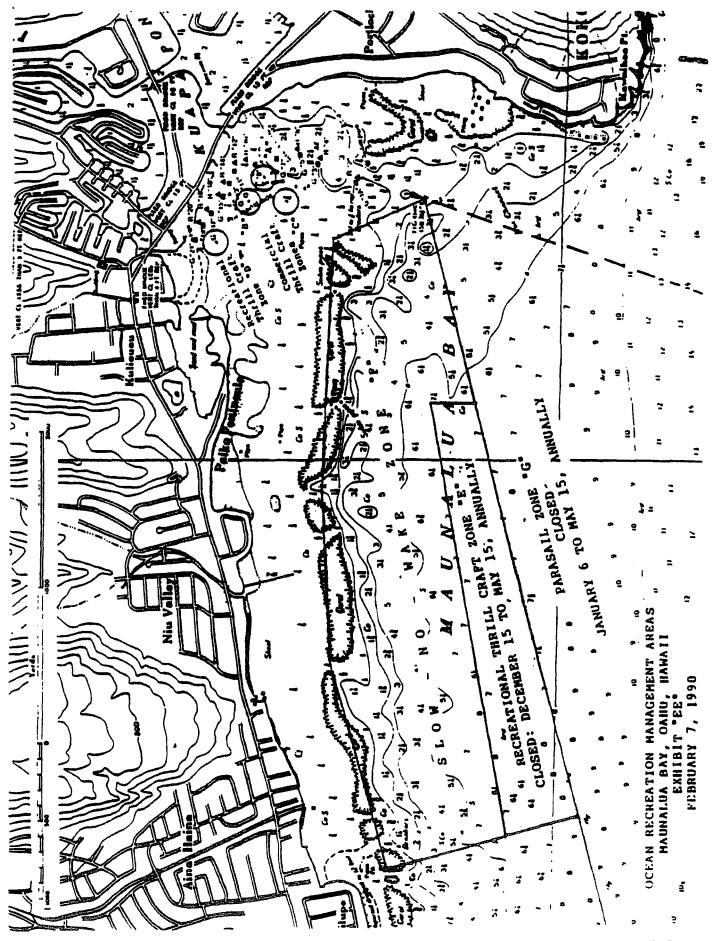


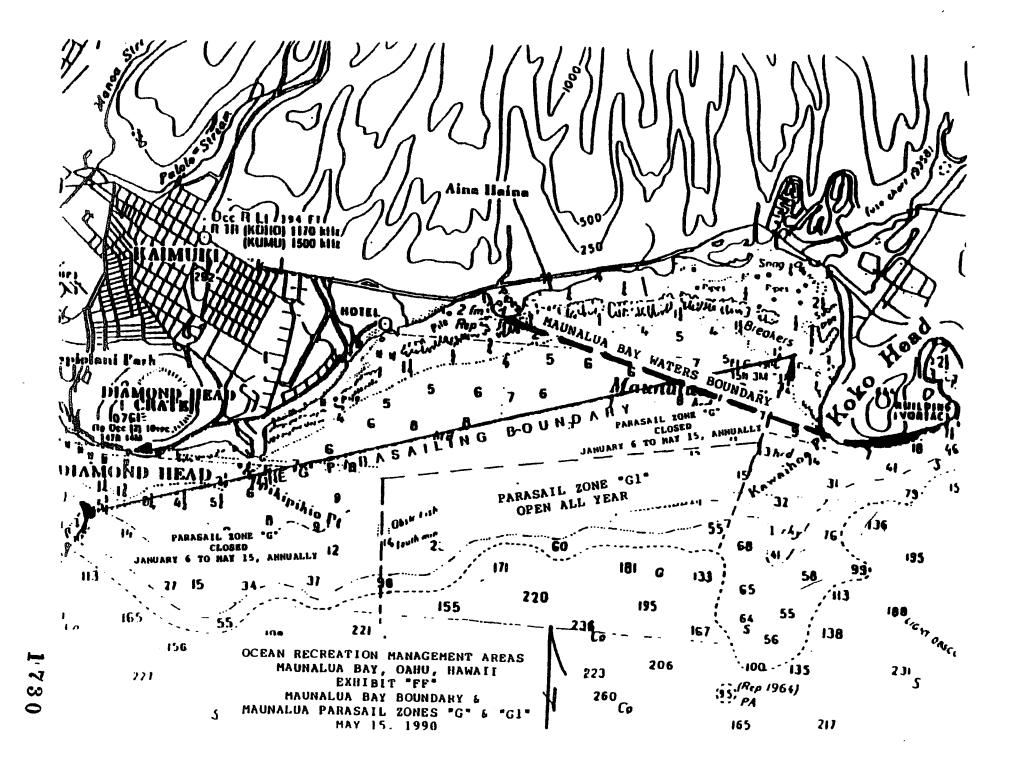
OCEAN RECREATION MANAGEMENT AREAS

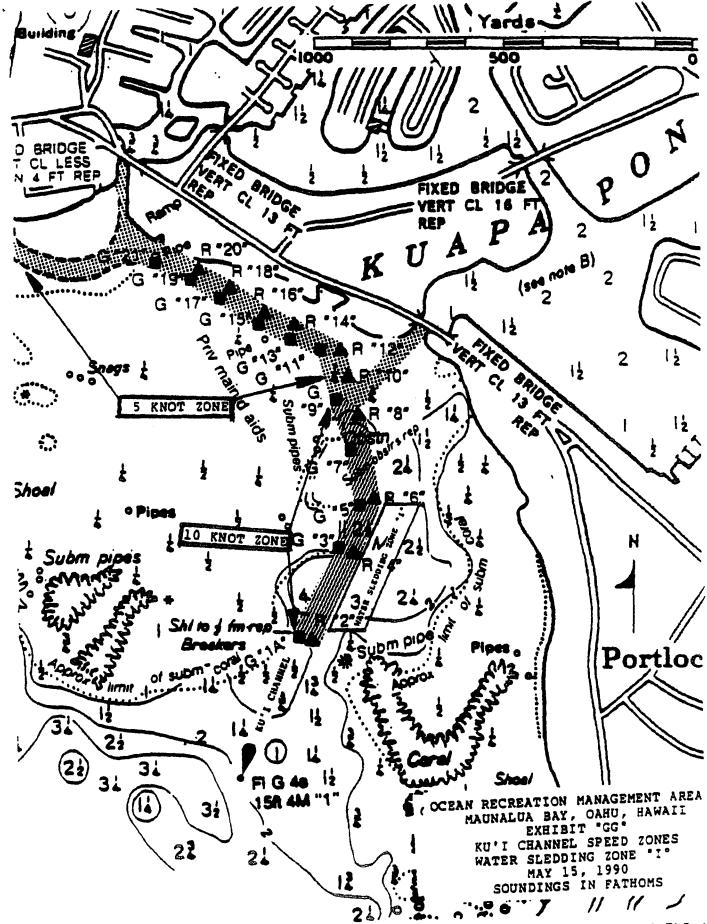
HANAUMA BAY, OAEU, HAWAII

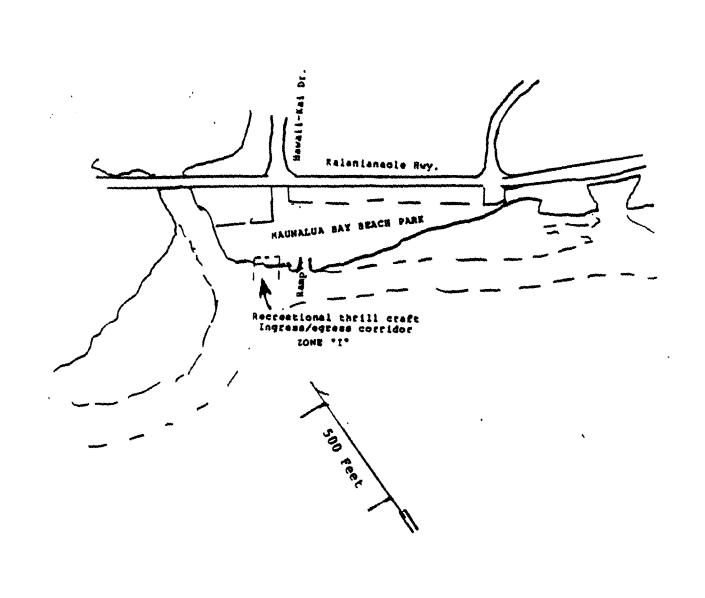
EXHIBIT "DD"

AUGUST 15, 1988



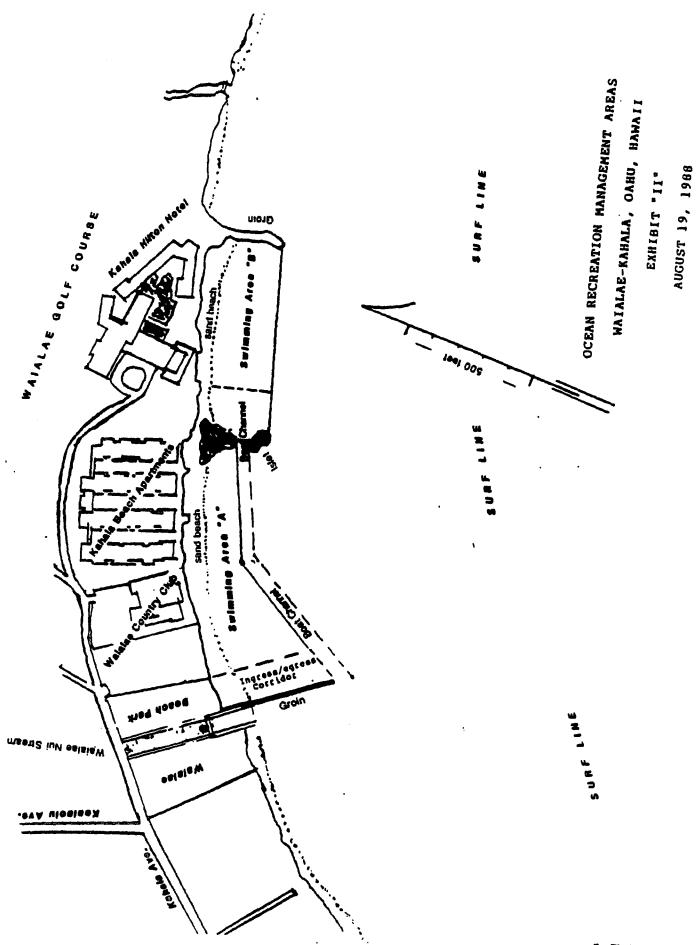


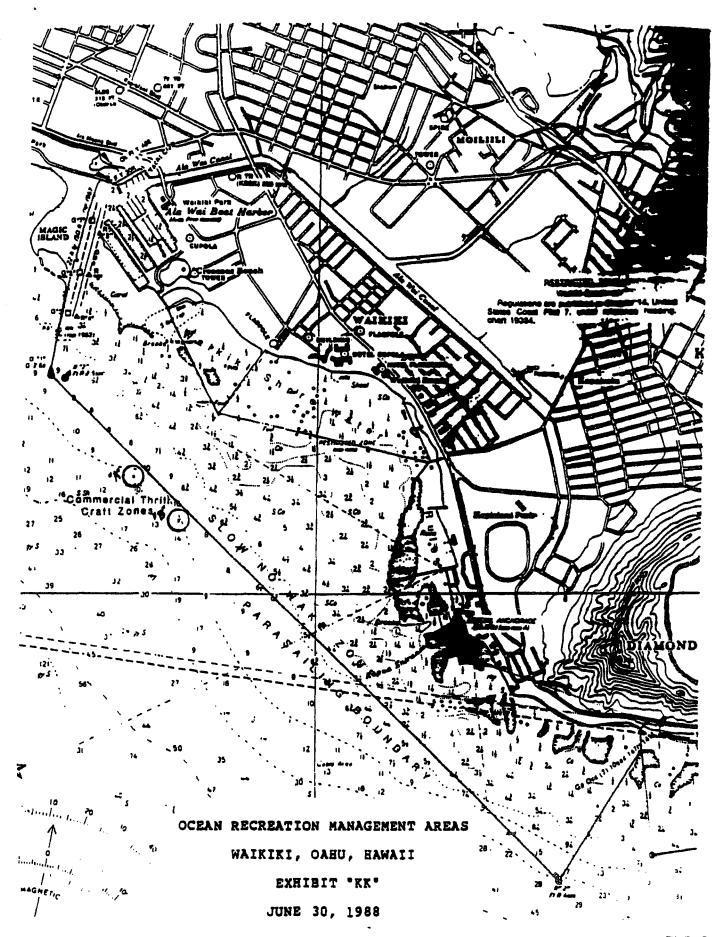


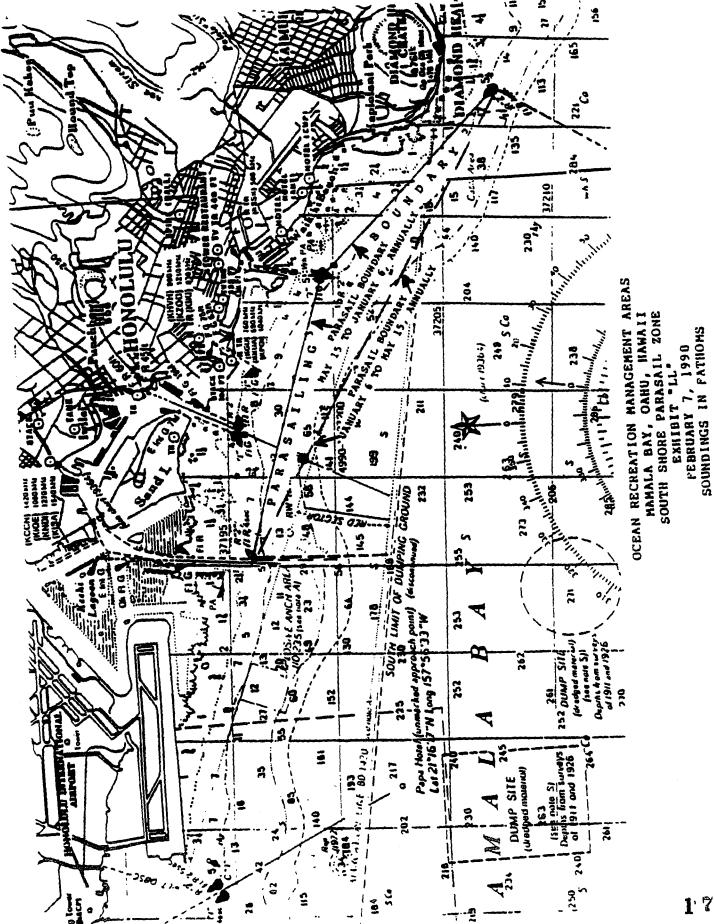


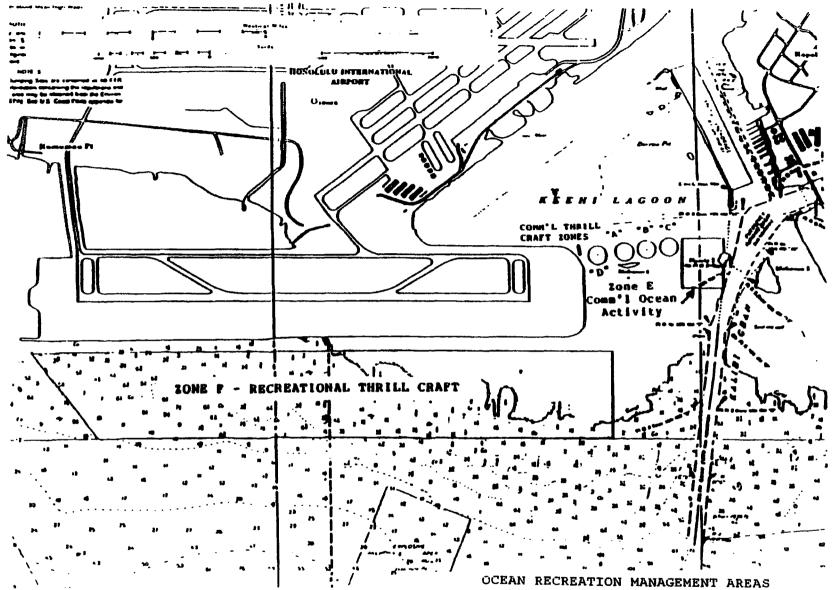
OCEAN RECREATION MANAGEMENT AREAS

MAUNALUA BAY, OABU, HAWAII
RECREATIONAL TERILL CRAFT
RECREATIONAL TERILL CRAFT
INGRESS/EGRESS CORRIDOR
EXHIBIT "HH"
AUGUST 19, 1988

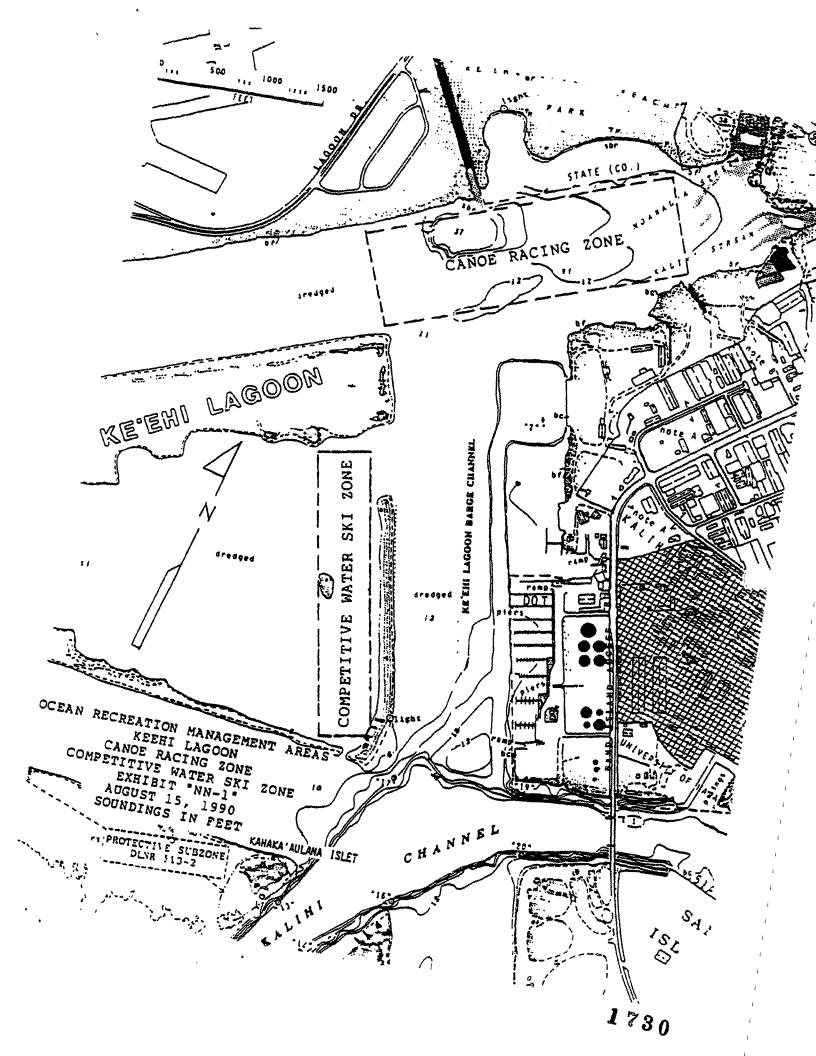








KE'EHI LAGOON, OAHU, HAWAII
KAHAKAAULANA ISLET (HARRIS IS.) COMMERCIAL ZONE
COMMERCIAL THRILL CRAFT ZONE "A", "B", "C" & "D"
REEF RUNWAY RECREATIONAL THRILL CRAFT ZONE
EXHIBIT "NN"
JUNE 6, 1989



Applicant: Navatek, Ltd.

II. Service Summary and Outcomes

1. Describe the scope of work, tasks and responsibilities;

The scope of work, tasks and responsibilities include developing study methodologies, conducting surveys, assemble data, and manage the overall program.

1. Develop and Establish survey study methodologies and procedures:

While the basic process for the survey is understood; public purpose, geographic area, population to be served, etc., the details of the survey process will be developed. The geographical areas within which to conduct the surveys will be specifically defined — baseline areas will reference South Oahu Ocean Recreation Management Area. The study areas will be further delineated into ranges from shore line to establish use-density zones. Survey methodology and procedures will be defined and include; survey intervals, survey frequency, survey target definition, and survey target verification for quality assurance. The data analysis methods will be defined to include statistical data reduction tools to apply and output formatting for final reporting.

2. Conduct Ocean Recreation Area Surveys:

Using Navatek contributed/supplied assets including; vessels, mooring facilities, survey equipment and data recording equipment, surveys will be conducted in South Oahu Ocean Recreation Management Area. On water surveys of activity will be conducted from vessels with the range and endurance to support accessing all areas and remaining on station through the individual survey windows. Supplemental surveys will be conducted from the shoreline to access areas restricted to vessel operations.

3. Data Compilation, Data Reduction, Report Production:

All data collected will be consolidated in to a comprehensive report. Survey data will be complied and organized for analysis. Raw data will be available as final report appendix information. Data reduction of survey sightings and counts will be applied using statistical analysis tools. A detailed report of results, analysis, interpretation and conclusions will be provided.

4. Program Management

Applicant: Navatek, Ltd.

Navatek shall maintain the overall program management, which includes overall direction, technical guidance, program schedule, reviews, report production, contracting support, and other programmatics.

2. The applicant shall provide a projected annual timeline for accomplishing the results or outcomes of the service:

The project work will commence upon award and continue for 12 months. The following timeline details the activity:

Task	Description	Months After Award											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Develop Plan and Methodologies												
2	Conduct Surveys												
3	Analyize Data. Produce Report											344	
4	Program Management												

3. The applicant shall describe its quality assurance and evaluation plans for the request. Specify how the applicant plans to monitor, evaluate, and improve their results;

Navatek has conducted many at-sea tests and trials with experimental craft, ocean wave sensing equipment, data collection from electronic sensors for up to 25 channels at rates up to 20,000Hz, and supplemented all data collection with real-time observational logging and recording. The processes for the at-sea data collection are established.

For the purposes of the proposed survey, observations shall be recorded via manual log and include date, time, location confirmed with GPS position, type of activity, nature of activity, course, rate of travel and other notations. Data will be transcribed to computer log on board as time allows, or no later than close of business on the day of the observations. All available tools for sightings will be used including binoculars, bearing compasses, radar, and electronic chart plotting/course tracking software.

Two persons will be jointly conducting observations and will verify and confirm sightings. Acknowledgement of sightings will be required to establish them for record keeping. All data recording will be signed off daily by the persons conducting the survey.

The data will be evaluated for quality by reviewing logs and raw data streams for missing data components. (I.e. A sighting may not include a course heading or rate of travel.) During data

reduction, the data streams will be cleaned of incomplete entries to allow for fully accurate and complete data sets to be used in analysis.

4. The applicant shall list the measure(s) of effectiveness that will be reported to the State agency through which grant funds are appropriated (the expending agency). The measure(s) will provide a standard and objective way for the State to assess the program's achievement or accomplishment. Please note that if the level of appropriation differs from the amount included in this application that the measure(s) of effectiveness will need to be updated and transmitted to the expending agency.

The reporting will be to DLNR-DOBOR or other as necessary. The data outputs will be listed to include;

- usage of ocean areas by craft/equipment type,
- by time of day,
- by distance out from shore,
- use by day of the week with reference to seasonal and holiday impacts.
- The data outputs will be concise and clearly supported with intuitively readable chart graphics.

As a measure of effectiveness and accomplishment, the data outputs will represent the depth of the significant collection/observation efforts proposed. Trends in use, use by area, and use by time will be readily apparent and provide sound information on which to assess the need to adjust rules or policy. The study can be considered effective if it provides the State Legislature with adequate information to help determine:

- 1) any major changes in what ocean sports and recreation activities are taking place in the South Oahu Ocean Recreation Management Area (ORMA)
- 2) whether usage changes in the ORMA have increased the risk of accidents and resulting liability to the State and other parties.
- 3) whether current legislative rules and regulations may need to be reviewed and updated to reflect these changes.

III. Financial

Budget

1. The applicant shall submit a budget utilizing the enclosed budget forms as applicable, to detail the cost of the request.

Please see attached completed budget forms following this section.

2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2012-2013.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$155,555	\$109,841	\$112,324	\$70,894	\$448,615

3. The applicant shall provide a listing of all other sources of funding that they are trying to obtain for fiscal year 2012-2013.

None. No other funds are being requested for FY2012-2013.

4. The applicant shall provide a listing of all state and federal tax credits that have been granted within the prior three years. Additionally, the applicant shall provide a listing of all state and federal tax credits they have applied for or anticipate applying for pertaining to any capital project, if applicable.

Navatek lists the following tax credits and capitol project tax credits:

Tax Credits	2010	2011	2012
State of Hawaii	\$0	\$0	\$0
Federal	\$0	\$0	\$0
Research & Development	\$207,720	\$125,909	\$208,333

Capitol Project Tax Credits	2010	2011	2012
State of Hawaii	\$0	\$0	\$0
Federal	\$0	\$0	\$0

BUDGET REQUEST BY SOURCE OF FUNDS

(Period: July 1, 2013 to June 30, 2014)

Applicant: Navatek Ltd.

	NUD O E T	T		1	1
	BUDGET CATEGORIES	Total State	Navatek		
Ι,	AIEGURIES	Funds Requested (a)	Supplied Funding (b)	(c)	(d)
H-		(a)	(0)	(6)	(u)
Α.	PERSONNEL COST				
	1. Salaries	\$152,191.99			
İ	2. Payroll Taxes & Assessments	#40 007 00		 	
	Payroll Taxes DCAA Overhead/Assessments	\$13,697.28			
	3. Fringe Benefits	\$168,933.11 \$48,701.44			
	TOTAL PERSONNEL COST	\$383,523.81			
<u> </u>		\$303,923.01			
B.	OTHER CURRENT EXPENSES	i			
	1. Airfare, Inter-Island				
	2. Insurance		0045 000 00		
1	Lease/Rental of Equipment Lease/Rental of Space		\$215,000.00		
1	Lease/Herital of Space Staff Training	<u> </u>			
1	6. Supplies				
1	7. Telecommunication				
1	8. Utilities				
ı	9. Port Entry Fees	\$2,406.60			
Ĭ	10. Fuel	\$62,684.16			
	11	¥ = , 0 0 11 11 11 11 11 11 11 11 11 11 11 11			
1	12				
	13				
	14				
	15				
İ	16				
l	17				
l	18				
i	19				
	20				
	TOTAL OTHER CURRENT EXPENSES	\$65,090.76°	\$215,000.00	· · · · · · · · · · · · · · · · · · ·	
C.	EQUIPMENT PURCHASES				
D.	MOTOR VEHICLE PURCHASES				
E.	CAPITAL				
ТО	TAL (A+B+C+D+E)	\$448,614.57	\$215,000.00		
			Budget Prepared I	Ву:	
So	URCES OF FUNDING			-	
۱		\$449 G14 E7	Michael S	danidor	695-6651
	(a) Total State Funds Requested	\$448,614.57	Name (Blasse brown	MINICALI	Phone
	(b) Navatek Supplied Funding	\$215,000.00			
	(c) (d)				1-31-13
	(d)		Signature of Authorized		Date
			Michael Schi	micker	
то	TAL BUDGET		Name and Title (Please		
		·]	•	• •	

BUDGET JUSTIFICATION PERSONNEL - SALARIES AND WAGES

Applicant: Navatek Ltd.

Period: July 1, 2013 to June 30, 2014

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
Director of Marine Engineering		\$194,914.72	9.09%	\$ 17,719.52
Sen Contracts Administrator		\$72,508.80	3.85%	\$ 2,788.80
Applied Engineering Division Manager/Vessel Operator		\$117,000.00	27.69%	\$ 32,400.00
Mechanical Engineer/Vessel Operator		\$68,286.40	14.10%	\$ 9,630.13
Mechanical Engineer/Ship Captain/Controls Engineer/PADI Certified Diver		\$62,483.20	14.10%	\$ 8,811.73
Small Vessel Maintenance Manager/PADI Certified Diver/Vessel Operator		\$52,000.00	14.10%	\$ 7,333.33
Marine Mechanic III/PADI Certified Diver		\$81,827.20	16.03%	\$ 13,113.33
Marine Mechanic II/PADI Certified Diver		\$68,494.40	16.03%	\$ 10,976.67
Marine Mechanic I		\$52,520.00	16.03%	\$ 8,416.67
Electrician		\$69,784.00	26.92%	\$18,788.00
Controls Engineer		\$110,011.20	20.19%	\$ 22,213.80
				\$ -
				\$ -
				\$ -
TOTAL:				152,191.99

JUSTIFICATION/COMMENTS: The budget listed above assumes a planing period of one month which will be primarily staffed by the Director of Marine Engineering, the Applied Engineering Division Manager, a Mechanical Engineer, and a senior Marine Mechanic. The survey portion of the job will consist of two approximately 8 hour trips per week. The surveys will be staffed by a ship captain or a vessel operator, a marine mechanic, a controls engineer, and an electrician. The data reduction and report writing will be completed by the Applied Engineering Division Manager and the Mechanical Engineers.

BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Applicant: Navatek Ltd. Period: July 1, 2013 to June 30, 2014

DESCRIPTION EQUIPMENT	NO. OF	COST PER	TOTAL COST	TOTAL BUDGETED
			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
TOTAL:				

JUSTIFICATION/COMMENTS:

DESCRIPTION OF MOTOR VEHICLE	NO. OF VEHICLES	COST PER VEHICLE	TOTAL COST	NUMBER OF DAYS UTILIZED	TOTAL BUDGETED
HDV-100 (Navatek Supplied Asset)	1.00	\$6,500.00	\$ 6,500.00	10.00	65000
BLB-65 (Navatek Supplied Asset)	1.00	\$4,500.00	\$ 4,500.00	10.00	45000
Bladerunner 51 (Navatek Supplied Asset)	1.00	\$3,500.00	\$ 3,500.00	10.00	35000
TLB-CAT (Navatek Supplied Asset)	1.00	\$3,500.00	\$ 3,500.00	10.00	35000
Bladerunner 35 (Navatek Supplied Asset)	1.00	\$1,500.00	\$ 1,500.00	10.00	15000
Aronow 40 CAT (Navatek Supplied Asset)	1.00	\$1,500.00	\$ 1,500.00	10.00	15000
MISC Craft Under 30 ft (Navatek Supplied Assets)	1.00	\$500.00	\$ 500.00	10.00	5000
TOTAL:	7		\$ 21,500.00	70	\$215,000

JUSTIFICATION/COMMENTS: All of the assets listed above are supplied and funded by Navatek. See attached reference titled <u>Navatek Charter Rates.doc</u> for cost basis. The budget assumes seventy survey trips equally distributed between the different boats and ships in Navatek's fleet.

BUDGET JUSTIFICATION CAPITAL PROJECT DETAILS

Applicant: Navatek Ltd.

Period: July 1, 2013 to June 30, 2014

TOTAL PROJECT COST		ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		OF FUNDS REQUESTED	FUNDING RI SUCCEEDI	EQUIRED IN NG YEARS
	FY: 2011-20 <u>1</u> 2	FY: 2012-2013	FY:2013-2014	FY:2013-2014	FY:2014-2015	FY:2015-2016
PLANS	0	0	0	0	0	(
LAND ACQUISITION	0	0	0	0	0	(
DESIGN	0	0	0	0	0	(
CONSTRUCTION	0	0	0	0	0	(
EQUIPMENT	0	0	0	0	0	
TOTAL:	0	0	0	o	0	ļ

IV. Experience and Capability

A. Necessary Skills and Experience

The applicant shall demonstrate that it has the necessary skills, abilities, knowledge of, and experience relating to the request. State your experience and appropriateness for providing the service proposed in this application. The applicant shall also provide a listing of verifiable experience of related projects or contracts for the most recent three years that are pertinent to the request.

Navatek's vessels have logged thousands of hours in the waters of the south shore of Oahu. All of the testing for Navatek's Hawaii-built prototypes is conducted between Makapuu and Kaena Point. The employees that will be used for this survey have qualifications that include the following:

- USCG Captain's License,
- USCG Duty Designated Engineer,
- PADI dive certifications,
- first aid,
- CPR certifications.

In addition to these formal qualifications and work experience in these waters, many of the employees also spend their free time in this region swimming, canoe paddling, surfing, fishing, spearfishing, wind surfing, kite surfing, or kayaking. The intimate knowledge of the waters and coastline greatly enhance Navatek's ability to perform meaningful surveys.

The engineers scheduled to support this effort also have a multitude of experience involving complex data acquisition programs. Hardware and software already owned by Navatek will be utilized to assist in the data collection, and laptop computers will be taken on each survey to log and store the collected data in real time. Navatek also possesses a number of data reduction tools and algorithms that will be employed after the data has been collected.

Previous Projects with Relevant Experience:

- 1) Pacific Missile Range Charters
 - a. Utilized the BLB-65 to support missile recovery mission on Kauai
- Data Acquisition Programs Conducted off of the South Shore of Oahu
 - a. Include operations at various speeds in a wide range of sea states

- b. Also include wave height and frequency measurements
- c. Vessels Tested
 - i. HDV-100
 - ii. BLB-65
 - iii. BR-51
 - iv. TLB-CAT
 - v. SeaFlyer
 - vi. Foilcat
 - vii. NSW RIBS
 - viii. Navy Standard RIBS
 - ix. Ultra Deep-V
 - x. ST Marine USVs
- 3) "Battleship" Movie Support
 - a. Fabricated part of the on-water set for the movie
 - b. Supported filming of key scenes off of Barber's Point
- 4) Buoy Retrieval Charters

B. Facilities

The applicant shall provide a description of its facilities and demonstrate its adequacy in relation to the request. If facilities are not presently available, describe plans to secure facilities. Also describe how the facilities meet ADA requirements, as applicable.

Navatek Construction and Operations Division employs a staff of 6 engineers and 20 small boat craftsmen and operators working out of offices and construction facilities located on the site of its sister company Pacific Shipyards International, Pier 41, Honolulu, Hawaii. Navatek's small boat construction facility shares Pacific Shipyard International's 7-acre construction and repair facilities and equipment including drydocking, rigging and crane services, steel and aluminum fabrication and welding, mechanical and machine shop, and painting and preservation. Navatek separately owns and operates a fiberglass reinforced plastics shop. The Navatek, Ltd. GRP shop includes a free-span 3000 square foot insulated building, a 1000 square foot covered boat shop and more than 5000 square feet of hard-top storage and lay-down area. The GRP shop and staff has the capability and expertise to work in a variety of composite materials including all fabrics such as Kevlar, carbon fiber and pre-pregs, and all resins such as vinylesters, epoxy and fire retardant formulations of each. The shop application techniques include capability for hand

laminating, vacuum bagging, and resin infusion. Staff experience includes fabrication and repair of US Navy RIBs, and other small Navy support craft and construction of America's Cup racing yachts. Certification for US Navy radome repair is pending.

Navatek has a fleet of vessels particularly suited for the waters off Oahu. These vessels including all maintenance as required and insurance are offered as in-kind contributing support to this project. See attached detail sheets for vessel information.

Gary K. Johnson, General Manager, Applied Engineering Division, Navatek Ltd. Gary joined Navatek Ltd. in December 2006 to assist in shipbuilding design and construction for Navatek. Gary served as project manager for the construction and commissioning of two 9M Unmanned Surface Vessels (USV) and one 16m USV that Navatek delivered to the ST Electronics. Gary now manages and supervises all of the engineers, naval architects, and craftsmen at Navatek's facility in Honolulu Harbor, and he is responsible for the fleet of technology demonstrator's consisting of boats and ships that range in size between 15ft and 100ft. Gary earned a B.S.E. in Mechanical Engineering from the University of California at Santa Barbara in 2006 and a M.S. in Naval Architecture from the University of Southampton in 2011. Gary spends the majority of his free time on boats and in the ocean. Gary is an avid fisherman, and he also paddles one and six-man canoes, surfs, kayaks, free-dives, and loves to stand-up paddle. He has paddled and escorted canoe races between Molokai and Oahu numerous times.

John Zuanich, Director of Marine Engineering, Navatek Ltd. John joined Navatek Ltd. in 1996 as Construction Manager in the Applied Engineering Division. Major Navatek projects managed by him include the rebuilding of the 140-passenger, 45-knot Westamaran-built Norwegian hydrofoil M.V. Foilcat (drives, propulsion system, foils and struts) and return of the vessel to commercial service as a commuter ferry in Hawaii. Prior to joining Navatek, Ltd., from 1983-1985 he served as Vice-President, Maintenance and Repairs for Guam-based Z Fishing Corp., which operates a fleet of twelve 250-foot super-seiner fishing vessels trawling throughout the Pacific. He received his Bachelor's degree in International Business from the University of Southern California in 1968. John spent many years competing in windsurfing races on Maui, but he recently made the switch to kite surfing.

Brian Kays, *Controls Engineer*, *Navatek Ltd.* Brian joined the company in 2002 and now manages the Electro/Mechanical Controls Systems Section. During his time at Navatek Ltd., he has supported a variety of projects including Seaflyer, HDV-100, and BLB-60 with hydraulic circuit design and fabrication and installation of ride control systems. Prior to coming to Navatek, Brian served as a Mechanical Engineer/Senior Design Engineer for Genie Industries. Brian holds a B.S. in Mechanical Engineering from the University of Washington. Brian is a key crew member for our larger vessels with hydraulically actuated ride control systems.

Audra White, Senior Contracts Administrator, Navatek Ltd.

William S. Lawson, Mechanical Engineer, Applied Engineering Division, Navatek Ltd. Billy joined Navatek Ltd. in July 2009 to assist in production and design of Navatek's prototype technologies. He earned a B.S.E. in Mechanical Engineering from the University of Hawaii and has held CPR and lifeguard certifications as a surf instructor along the south shore of Oahu. Billy has played a role in engineering and construction on projects such as the SLED and TLB Cat, and has also coordinated and executed testing programs and data collection on the performance of various prototypes. Billy is a competitive paddler, a surfer and a fisherman. He has spent the majority of his life participating in water sports along the south shore of Oahu.

Michael T. Buelsing, Mechanical Engineer and Vessel Captain, Navatek, Ltd. As a recent graduate from the University of San Diego with a B.A./B.S in Mechanical Engineering and a minor in Math, Michael started at Navatek in July of 2010. Bringing experience gained through designing and building a prototype wave energy generator for his senior project he has since supported a wide range of projects at Navatek. Some of the more notable projects he has worked on include designing a floating movie set that would eventually be filmed off of Koolina, and helping to design and test a range of amphibious vehicles that may be used to deliver aid to coastal areas recovering from natural disasters. In March of 2011 Michael earned a USCG Master's License entitling him to serve as the captain aboard Navatek's fleet of demonstrator vessels. In his free time he enjoys sailing, diving, and triathlons.

Will Foster, Small Craft Master, Applied Engineering Division, Navatek Ltd. Joining Navatek Ltd. in May of 2010, Will has been primarily active in vessel operation, technology demonstration, vessel maintenance, purchasing, and logistics. Graduated from the University of Oregon in 2006 in Environmental Science with a double minor in Geography and Biology, Will's affinity for the ocean brought him back to Hawaii where he was born and raised. Prior to Navatek Will spent 2007-2010 at the Kaneohe Marine Corps Base Marina as a mechanics assistant and boat operations specialist. Versed in sailing, a Hawaii state champion paddler, U.S. Department of Interior certified Inshore and Offshore Small Vessel Operator, and certified by PADI up to Rescue Diver, Will's continued to choose to spend his time on the water surfing, fishing, kayaking, free-diving, body surfing, stand-up paddling, and crossing inter-island channels by boat. Will has continued to renew his Medic First Aid and CPR certifications.

John Zaleski, *Marine Mechanic III*, *Navatek Ltd.* John joined the company in 1996 as diesel mechanic. John served as the chief engineer on the Navatek II, Seaflyer, Slice, Midfoil, and Foilcat. John previously served for 24 years in the US Navy as a Chief Engineman. John is also PADI certified as a Dive Master. John is also certified as a Duty Designated Engineer with the USCG for unlimited horsepower.

Arnold Manzano, *Marine Mechanic II*, *Navatek Ltd.* Arnold joined the company in 2006 as a diesel and an outboard mechanic. Arnold is our chief outboard mechanic, and he also provides us with support on our larger diesel powered vessels. Arnold previously worked for Atlantis Submarines as their lead mechanic between 2001 and 2008. Arnold is also PADI certified as a Rescue Diver.

Dell Agricula, *Marine Mechanic I*, *Navatek Ltd.* Dell joined the company in 2005 as a diesel mechanic and a welder. Dell has provided us with support on long range charters in the past. He previously worked for Pacific Shipyards International as a welder and a competent person. Dell is a very experienced free diver, and he has competed in multiple spear fishing tournaments.

Mark Hoppis, *Electrician*, *Navatek Ltd.* Mark joined the company in 2001 as a marine electrician. Mark is also an excellent deckhand, and he has crewed many of our vessels in the past. Mark enjoys spending time on the water, especially fishing is involved.

Navatek TLB-Cat



Navateks 45' Tandem Lifting Body Catamaran was initially built in 2010 to demostrate the application of tandem lifting body concept to a multihull vessel. The TLB-Cat has demonstrated excellent motions in high sea states and provides exceptional efficiency due to the reduced drag afforded by the lifting bodies. Combined with Navatek ARES (Adaptive Ride Enhancement system) the TLB-Cat is a stable working platform with a large enclosed cabin and ample space to accommodate a large group of passengers or crew.

PERFORMANCE:	
Speed Maximum	27 kts
Cruise Speed	20 kts
Maximum Time at Sea	5 Days
GENERAL DIMENSIONS:	
Length Overall	45' 6"
Beam Overall	20'6"
Draft (Full Load)	4' 2"
Displacement at Full Load	16 LT
PROPULSION AND AUXILIARIES: Main engines x2	nnmar 370 hp
TANK CAPACITIES:	
Fuel	360 Gallons

Navatek *BLB-65*



Navatek's bow lifting body (BLB) hull form achieved the greatest combination of efficiency, sea keeping, and cost of any Navatek lifting body. Official Navy trials were conducted aboard the BLB-70 in 2007. Their subjective assessment stated: "most impressive was the smoothness and stability of the ride..." and "...the active system was highly effective in reducing the amount of severity of impacts and motions." In 2008, the BLB-70 was modified to become the BLB-65. Its waterline length was shortened slightly, and Navatek installed its new, dihedral bow lifting body with trailing edge flaps. The vessel provides a stable platform from which to conduct at sea operations, a weather proof helm station and long range capabilities.

PERFORMANCE:	
Speed Maximum	. 40 kts
Speed Maximum Cruise Speed	. 25 kts
Maximum Time at Sea	. 5 Days
GENERAL DIMENSIONS:	
	642 022
Length Overall	04 9
Beam Overall	18' 11"
Draft (Full Load)	5' 3"
Displacement at Full Load	
PROPULSION AND AUXILIARIES:	
	C. T. C. 48 TO 41
Main engines x 2	CAT C-12 704 hp
TANK CAPACITIES:	
	4000 C II
Fuel	1000 Gallons

Navatek *Aronow-40*



Navatek first demonstrated the aft lifting body-integrated propulsion pod (ALB/IPP) concept in 2006, installing an ALB/IPP unit with a Navatek ARES adaptive ride enhancement system on a commercial, Don Aronow-designed, 40-foot, high-speed catamaran to validate the benefits of a podded propulsor shaped as a lifting body. Navatek has demonstrated that an aft lifting body (**ALB**) can significantly enhance motion control across a wide speed range, and is applicable to vessels ranging from small craft to large ships. ALBs can be used on conventional monohulls or multi-hulls as well as advanced hull forms. Installed on small craft, an ALB can reduce vertical accelerations by 50 percent and slamming to an even greater extent. Because the ALB adds damping to the boat, it noticeably reduces zero speed motions in waves. Installed on monohull small craft, roll motions are reduced by a factor of three. This damping effect results in the Aronow-40 being a comfortable work platform for station keeping or while in transit.

PERFORMANCE.

PERFORMANCE:	
Speed Maximum	35 kts
Cruise Speed	26 kts
Cruise Speed	2 Days
GENERAL DIMENSIONS:	
Length Overall	41' 6"
Beam Overall	11' 7"
Draft (Full Load)	4' 2"
Displacement at Full Load	8 LT
PROPULSION AND AUXILIARIES:	
Main engines x2	maha 300 hp
TANK CAPACITIES:	
Fuel	110 Gallons

Navatek *Bladerunner-35*



Navatek's ETM ® Bladerunner-35 RIB, developed in 2006, is optimized for very high speed. It features a multi-stepped hull and ventilated tunnel for air entrapment. It is a militarized version of ICE Marine's successful commercial Bladerunner-34 sport boat. The 35-foot "Mosquito" has a 9.5 foot beam, twin 300 HP outboards, and can carry 14 persons (a 12 man boarding party plus 2 crew) at a top speed of 44 knots (60 knots light load). Design features include:

- Superior stability and seakindliness in open ocean waves at all speed ranges (including zero/loiter speed)
- Shallow draft (21 inches) for near shore operations
- Wider gunwales and walk-around deck for safer boarding operations
- Hybrid inflatable/foam collar for safer alongside fendering
- High-strength, low maintenance, carbon-reinforced composite hull
- Reduced fuel costs/extended range due to low-drag hull form

PERFORMANCE: Speed Maximum 60 kts 35 kts Cruise Speed Maximum Time at Sea. 2 Days **GENERAL DIMENSIONS:** Length Overall 35' 6" Beam Overall 20'6" Draft (Full Load) 21" 4LT Displacement at Full Load PROPULSION AND AUXILIARIES: Main engines x2 300 HP TANK CAPACITIES: 160 Gallons Fuel

Navatek Small Boat Fleet







Navatek maintains and operates a fleet of small boats under 30' for use in the research and development of its prototype technologies. These vessels range in length from 15-30' and provide a wide variety of capabilities. All boats are specific designs optimized for use in Hawaiian coastal waters and are capable of handling the usually rough conditions encountered.

PERFORMANCE:

Speed Maximum	25-35 kts
Cruise Speed	18-25 kts
Maximum Time at Sea	~2 Days
GENERAL DIMENSIONS:	
Length Overall	15'-30'
Beam Overall	6'-10'
Draft (Full Load)	2'-3'
Displacement at Full Load	1.5-5 LT
-	
PROPULSION AND AUXILIARIES:	
Main engines x2	150-300 HP
TANK CAPACITIES:	
Fuel	60-120 Gal

Navatek *Bladerunner-51*



ICE Marine pioneered Bladerunner technology starting in 1975, and has built 34 foot sport/recreational boats. In 2003, Navatek teamed with ICE Marine to develop commercial and military craft incorporating Bladerunner technology. These include the BR-35 "Mosquito" RIB interdiction/boarding boat; and the BR-51hull form. In Aug. 2005, a sports version of the BR-51, the *Bradstone Challenger*, set a new Round-Britain world speed record. It has been tested to speeds of greater than 70 knots. Navatek's Bladerunner 51RIB offers a large open deck that is reconfigurable to accommodate operation specific goals.

PERFORMANCE:	
Speed Maximum	55 kts
Cruise Speed	30 kts
Maximum Time at Sea	3 Days
GENERAL DIMENSIONS:	
Length Overall	51'
Beam Overall	16' 6"
Draft (Full Load)	4' 9"
Displacement at Full Load	18 LT
PROPULSION AND AUXILIARIES:	
Main engines	anmar 440 hp
1 x CAT 1000 Hp	
TANK CAPACITIES:	
Fuel	1000 Gallons

Navatek *HDV-100*



The HDV-100 ship features an anti-slamming, deep-vee monohull as the parent hull, mated to a Navatek experimental "blended-wing" lifting body. The HDV-100 initially operated without a lifting body allowing Navatek to conduct additional research on large deep-vee hullforms. The lifting body was installed in Fall 2005 and sea trials were conducted in 2006, proving the feasibility of installing underwater lifting bodies on monohulls as well as catamaran hull forms. Navatek currently operates the HDV-100 as a technology test bed. It is an extremely stable platform and has long range capability.

PERFORMANCE:	
Speed Maximum	. 40 kts
Cruise Speed	25 kts
Maximum Time At Sea	.14 Days
GENERAL DIMENSIONS:	
Length Overall	94.5'
Beam Overall	
Draft (Full Load)	12.1'
Displacement at Full Load	
PROPULSION AND AUXILIARIES:	
Main engines x 4	MTU 16V 2000
TANK CAPACITIES:	
Fuel	4000 Gallons

V. Personnel: Project Organization and Staffing

A. Proposed Staffing, Staff Qualifications, Supervision and Training

The applicant shall describe the proposed staffing pattern and proposed service capacity appropriate for the viability of the request. The applicant shall provide the qualifications and experience of personnel for the request and shall describe its ability to supervise, train and provide administrative direction relative to the request.

The staffing will be allocated over the term of project consistent with the Scope of Work and the tasks. Technical and program staff will be involved in the first month establishing the plan and procedures. Vessel operating crew and observers will be involved during the 8 month long survey phase. Technical staff will conduct data reduction and report generation. Finally, management staff will oversee the project and support all phases of task activity.

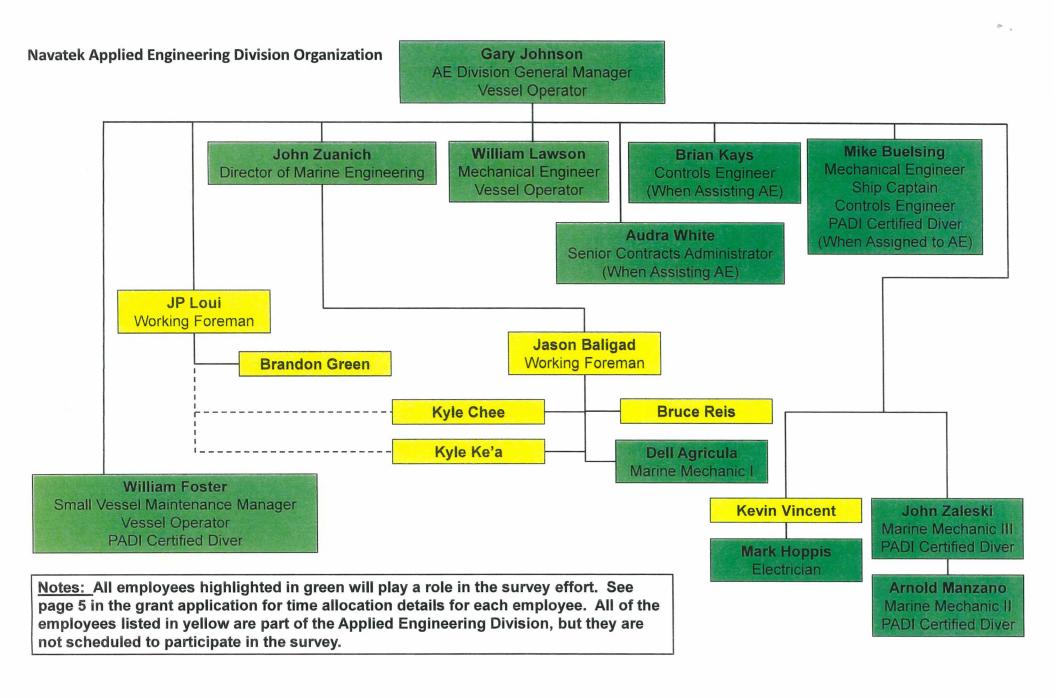
Please see attached sheets which detail the staff experience and qualification.

Navatek regularly conducts large scale project operations for research and technical design and engineering. Project value ranges from \$50,000 to \$25,000,000. Staffing levels range from 1 to 50. Project terms range from 1 month to 3 years or more. Navatek has never been debarred, cited or restricted in any manner from participating in State, Federal, or other agency bid, procurement or competitive solicitations. Navatek has contracted with numerous State and Federal agencies including HI St. DOT, US Navy, US Air Force, US SOCOM and others.

B. Organization Chart

The applicant shall illustrate the position of each staff and line of responsibility/supervision. If the request is part of a large, multi-purpose organization, include an organizational chart that illustrates the placement of this request.

Please see attached organization chart following this section:



VI. Other

A. Litigation

The applicant shall disclose any pending litigation to which they are a party, including the disclosure of any outstanding judgement. If applicable, please explain.

There is no litigation pending with Navatek.

B. Licensure or Accreditation

Specify any special qualifications, including but not limited to licensure or accreditation that applicant possesses relevant to this request.

Please also refer to experience descriptions.

Staff includes personnel with the following licensure/accreditation:

- Hawaii St. Professional Engineer
- USCG Ocean Operator's License
- Honolulu City & County Lifeguard Certification
- CPR
- PADI Scuba Certifications including; Master Diver and Rescue Diver

DECLARATION STATEMENT OF APPLICANTS FOR GRANTS AND SUBSIDIES PURSUANT TO CHAPTER 42F, HAWAI'I REVISED STATUTES

The undersigned authorized representative of the applicant certifies the following:

, C

- 1) The applicant meets and will comply with all of the following standards for the award of grants and subsidies pursuant to Section 42F-103, Hawai'i Revised Statutes:
 - a) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant or subsidy is awarded;
 - b) Complies with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
 - c) Agrees not to use state funds for entertainment or lobbying activities; and
 - d) Allows the state agency to which funds for the grant or subsidy were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and ensuring the proper expenditure of the grant or subsidy.
- 2) The applicant meets the following requirements pursuant to Section 42F-103, Hawai'i Revised Statutes:
 - a) Is incorporated under the laws of the State; and
 - b) Has bylaws or policies that describe the manner in which the activities or services for which a grant or subsidy is awarded shall be conducted or provided.
- 3) If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawai'i Revised Statutes:
 - a) Is determined and designated to be a non-profit organization by the Internal Revenue Service; and
 - b) Has a governing board whose members have no material conflict of interest and serve without compensation.

Pursuant to Section 42F-103, Hawai'i Revised Statutes, for grants or subsidies used for the acquisition of land, when the organization discontinues the activities or services on the land acquired for which the grant or subsidy was awarded and disposes of the land in fee simple or by lease, the organization shall negotiate with the expending agency for a lump sum or installment repayment to the State of the amount of the grant or subsidy used for the acquisition of the land.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

Michael Schmicker_/Navatek	
(Typed Name of Individual or Organization)	
	1-31-13
,	(Date)
Michael Schmicker	VP Corporate Communications
(Typed Name)	(Title)