# **FLIR Thermal Camera System**

# General

		FOR OFFICE USE ONLY:	Version #	APP # 7044	11			
1	Ар	plicant Information						
	a.	Applicant Name	San Francisco Police Depa	artment				
	b.	Organizational Unit						
	c.	Address	1245 3rd Street					
	d.	Address 2						
	e.	City	San Francisco	State CA	Zip 94158			
	f.	Federal ID Number	94-6000417	Reference No.				
	g.	Agency Type						
		City		C Co	unty			
		State Agency		C Dis	trict			
2	Pro	ject Information						
	a.	Project Name	FLIR Thermal Camera Syst	tem				
	b.	Is implementing agency same as Appl	icant		💽 Yes 🛛 C No			
	c.	Implementing Agency Name						
	d.	Project Start Date	Oct-01-2020	End Date	Sep-01-2021			
	e.	Amount of Funds Requested	\$101,859.00	Project Cost	\$101,859.00			

		FOR OFFICE USE	EONLY: V	ersion #		APP # 7	04411	
3	Contacts							
a.	Project Administrator							
	Name		Keith Mat	thews				
	Title		Sergeant					
	Mailing Address		1245 3rd	St				
	City		San Franc	cisco	State	CA	Zip	94158
	Telephone		(415) 409	-1010			Fax	
	E-mail Address		keith.matt	hews@sfgov.or	9			

# **Minimum Qualifications**

		FOR OFFICE USE ONLY:	Versio	on #		APP # 70441	l
1.	Minimum Q	ualifications					
		Letter of Intent as required b ents' area.	y Title 14	I. A temp	late letter is	in the 'Show	25582_0_801_SFPD Letter of Intent - DBW - Signed.pdf
	Manage	ocontractor for this federal gra ment (https://www.sam.gov/S current in that system at the	SAM/page	es/public/	/searchReco	ords/search.jsf) Ye	•
		a screenshot showing your rea e in the 'Show Documents' ar		is active	. (A sample	screenshot is	25584_0_393_SAM Registration Status.pdf
1 :	- <b>)</b>	have an active Boating Safety Law Enforcement Patrol?	// 6	Yes	C No		
11	agency	aining and/or authorization do have to perform boating safet law enforcement in your juris	ty and	Unit sta authori	affed by swo zed with pov 830.1(a) P0	rn California Pea vers of arrest unc	aintains a full-time Marine ce Officers who are ler California Penal Code our law enforcement
1 (	required required Navigati if award submit a	certify that you know you are I to submit all boating accider I in Section 656 of Harbors ar ion Code for the 15-year gran ed this grant? An agency's fa a report may result in ineligibil rant funds for up to 5 fiscal ye	nd t term ilure to lity of	Yes	C No		

## **District and County Information**

	FOR OFFICE L	ISE ONLY: Ve	ersion #		APP # 7044	11	
1.	California State Senate Dis	stricts					
	Select one or more of th and Paste the URL (http to determine the State S	://www.legislature.	Senate Dist ca.gov/legis	ricts where slators_and	the proposed pro _districts/districts	ject activities will occur. C /districts.html) in your brow	Copy wser
	🗖 State Senate 01	State Senate 02	🗖 State S	Senate 03	C State Senat	e 04 🛛 🗖 State Senate 05	5
	🗖 State Senate 06	State Senate 07	🗖 State S	Senate 08	C State Senat	e 09 🛛 🗖 State Senate 10	0
	🔽 State Senate 11	State Senate 12	🗖 State S	Senate 13	C State Senat	e 14 🛛 🔲 State Senate 15	5
	State Senate 16	State Senate 17	🗖 State S	Senate 18	C State Senat	e 19 🛛 🔲 State Senate 20	0
	State Senate 21	State Senate 22	🗖 State S	Senate 23	C State Senat	e 24 🛛 🔲 State Senate 25	5
	State Senate 26	State Senate 27	🗖 State S	Senate 28	C State Senat	e 29 🛛 🗖 State Senate 30	0
	State Senate 31	State Senate 32	🗖 State S	Senate 33	C State Senat	e 34 🛛 🔲 State Senate 38	5
	State Senate 36	State Senate 37	🗖 State S	Senate 38	C State Senat	e 39 🛛 🗖 State Senate 40	0
2.	California State Assembly	Districts					
	Select one or more of the Copy and Paste the UR browser to determine the the the the the the the the the th	L (http://www.legisl	ature.ca.go	istricts whe v/legislators	re the proposed ps_and_districts/di	project activities will occur. istricts/districts.html) in you	ur
	C State Assembly 01	<b>State</b> Assen	nbly 02	🗖 State A	Assembly 03	C State Assembly 04	
	C State Assembly 05	<b>State</b> Assen	nbly 06	🗖 State A	Assembly 07	C State Assembly 08	
	State Assembly 09	<b>State</b> Assen	nbly 10	🗖 State A	Assembly 11	State Assembly 12	
	C State Assembly 13	<b>State</b> Assen	nbly 14	🗖 State A	Assembly 15	C State Assembly 16	
	State Assembly 17	<b>State</b> Assen	nbly 18	🗖 State A	Assembly 19	State Assembly 20	
	State Assembly 21	<b>State</b> Assen	nbly 22	🗖 State A	Assembly 23	State Assembly 24	
	State Assembly 25	<b>State</b> Assen	nbly 26	🗖 State A	Assembly 27	State Assembly 28	
	State Assembly 29	<b>State</b> Assen	nbly 30	🗖 State A	Assembly 31	State Assembly 32	
	State Assembly 33	<b>State</b> Assen	nbly 34	🗖 State A	Assembly 35	State Assembly 36	
	State Assembly 37	State Assen	nbly 38	State A	Assembly 39	State Assembly 40	
	State Assembly 41	<b>State</b> Assen	nbly 42	🗖 State A	Assembly 43	State Assembly 44	
	State Assembly 45	<b>State</b> Assen	nbly 46	🗖 State A	Assembly 47	State Assembly 48	
	State Assembly 49	<b>State</b> Assen	nbly 50	🗖 State A	Assembly 51	State Assembly 52	
	C State Assembly 53	State Assen	nbly 54	🗖 State A	Assembly 55	C State Assembly 56	
	C State Assembly 57	State Assen	nbly 58	🗖 State A	Assembly 59	C State Assembly 60	
	C State Assembly 61	<b>State</b> Assen	nbly 62	🗖 State A	Assembly 63	C State Assembly 64	
	State Assembly 65	<b>State</b> Assen	nbly 66	🗖 State A	Assembly 67	State Assembly 68	
	State Assembly 69	State Assen	nbly 70	C State A	Assembly 71	State Assembly 72	
	State Assembly 73	State Assen	-		Assembly 75	State Assembly 76	
	State Assembly 77	C State Assen	-		Assembly 79	State Assembly 80	

#### 3. California Congressional Districts

Select one or more of the California Congressional Districts where the proposed project activities will occur. Copy and Paste the URL (https://www.govtrack.us/congress/members/CA) in your browser to determine the Congressional district(s).

Congressional District 1	Congressional District 2	Congressional
Congressional District 4	Congressional District 5	Congressional
Congressional District 7	Congressional District 8	Congressional
Congressional District 10	Congressional District 11	Congressional

District 3 District 6 District 9 District 12 4/30/2020 District and County Information for Boating Safety and Enforcement Equipment Grant - FY 2020 / 21 Agency: San Francisco Police Department Application: FLIR Thermal Camera System

Congressional District 13	Congressional District 14	Congressional District 15
Congressional District 16	Congressional District 17	Congressional District 18
Congressional District 19	Congressional District 20	Congressional District 21
Congressional District 22	Congressional District 23	Congressional District 24
Congressional District 25	Congressional District 26	Congressional District 27
Congressional District 28	Congressional District 29	Congressional District 30
Congressional District 31	Congressional District 32	Congressional District 33
Congressional District 34	Congressional District 35	Congressional District 36
Congressional District 37	Congressional District 38	Congressional District 39
Congressional District 40	Congressional District 41	Congressional District 42
Congressional District 43	Congressional District 44	Congressional District 45
Congressional District 46	Congressional District 47	Congressional District 48
Congressional District 49	Congressional District 50	Congressional District 51
Congressional District 52	Congressional District 53	

#### 4. County

Select one or more of the California Counties where the proposed project activities will occur.

🗖 Alameda	Alpine	Amador	🗖 Butte	Calaveras	🗖 Colusa
Contra Costa	C Del Norte	🗖 El Dorado	<b>F</b> resno	🗖 Glenn	🗖 Humboldt
🗖 Imperial	🗖 Inyo	Kern	🗖 Kings	🗖 Lake	Lassen
🗖 Los Angeles	Madera	Marin	🗖 Mariposa	🗖 Mendocino	Merced
Modoc	🗖 Mono	Monterey	🗖 Napa	🗖 Nevada	C Orange
Placer	Plumas	Riverside	Sacramento	🗖 San Benito	San Bernardino
🗖 San Diego	🗹 San Francisco	🗖 San Joaquin	San Luis Obispo	🗖 San Mateo	Santa Barbara
Г Santa Clara	🗖 Santa Cruz	🗖 Shasta	<b>Sierra</b>	🗖 Siskiyou	🗖 Solano
🗖 Sonoma	🗖 Stanislaus	C Sutter	🗖 Tehama	🗖 Trinity	🗖 Tulare
🗖 Tuolumne	Ventura	T Yolo	🗖 Yuba		

# **Application Information**

	FOR OFFICE USE ONLY: Version #	APP # 704411	
2. Ci	tation Authority		
2 a.	Number of Full-Time Boating Safety and/or Boating Law Enforcement Officers do you have?	9	
2 b.	Number of Part-Time Boating Safety and/or Boating Law Enforcement Officers do you have?	0	
	How many hours per year do they work?	1,860	
	Is this work seasonal or continuous?	Continuous	
3.	Does your boating safety and enforcement unit have citation authority?	💽 Yes 🔿 No	
	If YES, Code #	830.1(a) PC	
	How many boating related citations did you have last year (2019)?	3	
4.	Does your boating safety and enforcement unit have arrest authority?	💽 Yes 🥂 No	
	If YES, Code #	830.1(a) PC	
	How many boating related arrests did you have last year (2019)?	3	

5. How many outreach events did your agency participate in to promote boating safety education in 2019? Please list these events.

7 Major events - United States Coast Guard Station Golden Gate Open House, Treasure Island Sailing Center Open House, China Town New Year's Celebration, Law Enforcement Appreciation Night by the San Francisco Giants, Make a Wish Foundation Swim, Polar Plunge for Special Olympics, Brave the Bay Plunge.

Numerous static displays of "Quadski" amphibious vessel at various street fairs, open houses and City of San Francisco events.

#### 6. Jurisdiction Table

List All Waterbodies That Are In Your Jurisdiction and Fill in the Chart for Each

Waterbody	Size (area)	Boating activities (fishing, watersports, paddlecraft, etc.)	How many hours/year is this waterbody patrolled by your agency. If seasonal, list active months	Do you share jurisdiction on this waterbody	If shared jurisdiction, list other agency(s)
San Francisco Bay, Pacific	64 sq. Miles	Commercial - Ferries, Cargo	1825 (365 days @ 5Hrs	Yes	United States Coast Guard
Ocean Coastal waters;		Vessels, Fishing, Container Shipping, Tanker Vessels, Cruise	per day)		California State Fish and Wildlife
		Ships, Charter Boats, Water Taxis.			California Highway Patrol (no patrol or response function)
		Recreational - Fishing, Watersports,			
		Paddlecraft, Kayaks, Kite Boarding,			
		Windsurfing, Pleasure Boats, Sailing Craft.			
Golden Gate Park lakes	10	Rowing, paddling; fishing	0	No	
Lake Merced	614 acres	Rowing, paddling; fishing	0	No	

#### 7. Clearly identify the top three safety issues related to your request in your jurisdiction.

1) Search and Rescue / Victim Recovery Operations - The Marine Unit responds in all environmental conditions for the purpose of both search and rescue (SAR) and victim recovery. The extreme environmental conditions of the San Francisco Bay make locating victims even more dangerous and difficult in periods of rough seas, heavy weather and limited visibility. The potential for victim survival decreases rapidly if a person in the frigid water cannot be quickly located and rescued.

2) Operational Safety of Mixed-Use Waterways - SF Bay is the largest harbor on the West Coast and has more annual USCG issued Marine Event Permits than anywhere in the country. Our waterways consist of heavy commercial activity including tour boats, passenger ferries, and cruise ships, as well as the largest commercial fishing fleet on the West Coast. Year round, these vessels simultaneously operate on the San Francisco Bay within close proximity to dozens of organized swims, sailing regattas, paddlecraft and recreational fishing boats.

3) Critical Infrastructure Protection – There are numerous federally identified Critical Infrastructure and Key Resources located along our Bay waterfront. Effective inspection of critical ferry and cruise terminals, bridges, mass transit sub-Bay ventilation structures, and large public gathering piers, along with enforcement of security restrictions set in place to prevent and deter terrorist activity at these locations is critical.

#### 8. Inventory

List all patrol boats, PWCs and inflatables in your current inventory (County and State owned)

Year	Make	CF Number	How many hours/y ear is this used?	What waterbodies is it used on?	Is this boat current ly being surplus ed?	Is this a boat that was funded by a DBW Grant?	Vessel Status?
2,003	SAFE Boat	5361 XC	300	San Francisco Bay	No	No	Operational
2,003	SAFE Boat	5435 XC	200	San Francisco Bay	No	No	Operational
1,988	Zodiac	5362 XC	50	San Francisco Bay	No	No	Operational
1,997	Zodiac	5363 XC	50	San Francisco Bay	No	No	Operational
2,012	Moose Boat	5412 XC	750	San Francisco Bay	No	No	Operational
2,013	Moose Boat	5494 XC	0	San Francisco Bay	No	No	Non- Operational
2,014	Gibbs	9999 XC	10	San Francisco Bay	No	No	Operational
2,019	BRP- SeaDoo	5979 XC	10	San Francisco Bay	No	Yes	Operational
2,019	BRP- SeaDoo	5978 XC	10	San Francisco Bay	No	Yes	Operational
2,013	Kawasaki	5459 XC	65	San Francisco Bay	No	No	Operational
2,013	Kawasaki	5460 XC	65	San Francisco Bay	No	No	Operational
1,988	Avon	5367 XC	0	San Francisco Bay	No	No	Non- Operational

#### 9. Project Type

Are you requesting a new Patrol Boat/PWC or Misc. Equipment.?

New Patrol Boat/PWC

Equipment / Repairs

\* All items purchased with funding provided by the Division of Boating and Waterways are for the exclusive use of the Boating Safety and Enforcement Unit.

## **Patrol Boat**

FOR OFFICE USE ONLY: Version # \_\_\_\_\_ APP # 704411

#### Patrol Boat Instructions

#### PLEASE READ THE FOLLOWING CAREFULLY

#### ENTER INFORMATION IN THIS SECTION ONLY IF YOU SELECTED 'PATROL' AS A PROPOSAL TYPE

IF YOU DID NOT SELECT 'PATROL BOAT' AS A PROPOSAL TYPE, CLICK ON THE NEXT TAB TO NAVIGATE TO THE NEXT SECTION

- 10 a. Describe exactly what you are requesting and how this equipment will help mitigate the boating safety issues you identified in Question 7.
- 10 b. Describe any negative impacts to boating safety and/or boating enforcement if you do not get this grant.
- 10 c. Classify this request by choosing one of the following options and present a strong justification for the request.

#### Classify this request by choosing one of the following options.

- C "Critical" (operations would cease without it)
- C "Increased efficiency" (if it would save staff time, identify how much time)
- C "Convenience" (it would make life a little easier)
- Protection" of existing equipment (ex: shade structure, hoists to get the vessels out of the water, etc. to extend longevity)

Justification

10 d. If you are not awarded your full request, would your agency be C Yes C No able to supplement the difference?

If yes, what percentage can you supplement?

10 e. How and why did you select this particular vessel? Explain if this is a standard patrol boat or do you need something specialized for your waterbody to meet your agency's needs? List less expensive models considered and explain why they are not being requested.

#### 10 f. Patrol Boat - Informational

- 10 f. What body(s) of water will this boat be used on?
- 10 g. How many hours per year will this equipment be used by your BS&E Unit for Boating Safety Enforcement?

Will it be used year-round or seasonally? Explain. (limit this to 100 characters?).

10 h. Will this equipment be used for anything Yes No besides Recreational Boating Safety Enforcement (ie. Junior lifeguard, swimming rescues, enforcing commercial activities, etc.)?

If so, list activities and percentage of time vs. Recreational Boating Safety Enforcement

- 10 i. Upload boat/trailer specifications for review. The Specification Guidelines are in the 'Show Documents' area. You cannot proceed without attaching specs.
- 10 j. Estimate the cost of the patrol boat and trailer
- 10 k. Attach two quotes. If you cannot provide a quote now, you must provide if you are awarded a grant.

	Name					Attachment
10 I.	Will this replace an existing boat?	C	Yes	c	No	
	Year, make and CF # of boat being replaced.					
10 m.	Has the vessel being replaced ever had it's engine or electronics replaced?	C	Yes	C	No	
	If yes, how many times? Explain.					

# Misc. Equipment

FOR OFFICE USE ONLY:	Version #	APP # 704411	
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#### **Misc Equipment Instructions**

#### PLEASE READ THE FOLLOWING CAREFULLY

ENTER INFORMATION IN THIS SECTION ONLY IF YOU SELECTED 'MISC. EQUIPMENT' AS A PROPOSAL TYPE

IF YOU DID NOT SELECT 'MISC. EQUIPMENT' AS A PROPOSAL TYPE, CLICK ON THE NEXT TAB TO NAVIGATE TO THE NEXT SECTION

#### Misc. Equipment Items

11. Describe what you are requesting. You may group "like" items.

Item	Cost	Quantity	Total	Priority	Comments
Thermal Camera with display	101,859.00	1.00	101,859.00	1	Camera, Display and Installation
		TOTAL	101,859		

#### Misc. Equipment Items Questions (Thermal Camera with display)

#### 11. Item Details

- 11 a. Is this equipment general all-purpose gear? NOTE: person-specific 💽 Yes 🕐 No items will not be funded.
- 11 b. Describe exactly what you are requesting and how this equipment will help mitigate the boating safety issues you identified in Question 7.

#### **Request:**

One (1) long range, gyro-stabilized, forward looking thermal camera system with multi-function touch display. To be mounted aboard our all-weather, enclosed cabin response vessel, "SF Marine 3", and replace the current inoperative camera. System shall have automatic target tracking, and will integrate with our existing vessel computer communication and navigation systems for rapid identification. Touch screen display allows rapid, intuitive camera control while underway in unstable conditions.

#### Mitigation of Boating Safety Issues:

Search and Rescue (SAR) and Victim Recovery Operations - Boat mounted thermal camera systems are a proven mission critical asset for locating and recovering victims in the water in order to preserve life. This camera's stabilization and long-range scanning and tracking features will increase the success of SAR missions, especially during rough seas, blinding fog and darkness. Having proper equipment to effect these missions as quickly as possible is critical to the safety of both the victims and the responding officers operating in dangerous waters.

Operational Safety of Mixed-Use Waterways - High resolution thermal cameras with long-range capability are highly effective in visually locating and then protecting or redirecting Bay swimmers, paddlers, recreational power boats, and sail regattas, from passing commercial vessel traffic. This is critical to ensuring the safety of all waterway users during the frequent large, organized events.

Critical Infrastructure Protection - During periods of inclement weather (large waves, heavy fog) or low/no lighting, thorough inspection and security of critical maritime infrastructure and resources can be impossible without the use of a gyro-stabilized, high-resolution thermal and long-range visual camera mounted aboard a vessel capable of operating in such conditions. This project, mounted aboard our all-weather vessel, provides the security asset necessary to complete this mission.

#### 11 c. Describe any negative impacts to boating safety and/or boating enforcement if you do not get this grant.

The existing thermal camera system onboard vessel "SF Marine 3", is inoperable, obsolete technology and beyond cost effective repair due to its age. Without the replacement this critical equipment through this project, this all-weather patrol and response vessel is not mission capable during periods of low light/darkness or inclement weather when heavy fog is present. These limited visibility conditions are frequently present during much of the summer boating season on the San Francisco Bay. The result is a greatly diminished ability to provide safety oversight and response to the high waterway use and need that continues during these conditions, including: organized swims; sail regattas; critical infrastructure protection, and search and rescue missions.

#### 11 d. Classify this request

# Classify this request by choosing one of the following options and present a strong justification for the request

- Critical" (operations would cease without it)
- C "Increased efficiency" (if it would save staff time, identify how much time)
- C "Convenience" (it would make life a little easier)
- C "Protection" of existing equipment (ex: shade structure, hoists to get the vessels out of the water, etc. to extend longevity)

#### Justification:

Current thermal camera system on our response vessel recently became inoperable. Without this project, our response vessel is not mission ready during periods of inclement weather, low light, darkness, and periods of fog, thereby drastically reducing the safety of our heavy-use waterways.

11 e. If you are not awarded your full request, would your agency be C Yes C No able to supplement the difference?

If yes, what percentage can you supplement?

# 11 f. What other capabilities exist in your region for this equipment? Justify why it is not feasible to borrow this equipment from a neighboring agency.

Our Agency current operates and utilizes vessel mounted thermal camera systems on two other patrol vessels, neither of which is fully suitable for the all-weather conditions required of this vessel, nor with the capability this camera system will be able to provide.

While other Agencies may employ similar thermal cameras on their vessels, as mounted equipment with hard wired components, it is not practical to borrow and remount such a camera system and display onto our boat for the typically unpredictable and immediate needs this equipment fulfills.

No other neighboring Agency is operational and underway with a capable vessel and mounted thermal camera system to respond to our jurisdictional waters in the timeframe required of a search and rescue missions, nor are they able to provide the frequent oversight and protection of the events and waterfront features previously described.

# 11 g. How and why did you select this particular model? Explain if this is standard equipment or do you need something specialized for your waterbody to meet your agency's needs? List less expensive models considered and explain why they are not being requested.

This camera system is gyro-stabilized and can be networked with the vessel's navigation systems. This allows touchscreen selection of radar and chart identified targets, and then automatically points the camera to visually track the target. This provides more rapid target investigation and identification through darkness or fog and allows crew more time to operate other critical electronics, radios and ships controls.

The FLIR M400XR is the most capable, lowest cost gyro-stabilized camera system available that has video target tracking and other critical features, including 30x visual zoom and 4x thermal zoom. A vessel mounted system must be gyro-stabilized for effective image use while underway on the rough, open waters of the SF Bay and ocean, especially when viewing long-range distances.

Less expensive models deemed ineffective: FLIR M400 – no visual tracking capability Aydin Displays KMGBL-15T – unable to integrate with navigation systems for selectable target tracking

#### Misc. Equipment - Informational

11		San Francisco Bay Region, Pacific Ocean Coastal Waters of San Francisco County			
11	<ul> <li>How many hours per year will this equipment be used by your BS&amp;E Unit for Boating Safety Enforcement?</li> </ul>	400			
11 ]	<ul> <li>Will this equipment be used for anything besides Recreational Boating Safety</li> <li>Enforcement (ie. Junior lifeguard, swimming rescues, enforcing commercial activities, etc.)?</li> </ul>	Yes 👩 No			
	If so, list activities and percentage of time vs. Recreational Boating Safety Enforcement				
11	<ul> <li>k. Select the PRIMARY purpose this equipment will be used for:</li> <li>Search and rescue</li> <li>Enforcement of state and local measures</li> <li>Inspection of vessels</li> <li>Recovering drowned bodies</li> </ul>				
	Supervising organized water events				

11 I. If this is search and rescue equipment (i.e.dive gear), how many boating-related emergencies did you respond to last year that required this type of equipment? Do not include non-boating emergencies (i.e. swimmers). 84

# Other

		FOR OFFICE USE ONLY:	Version # _		APF	9 # 704411	
Р	reviou	s BSEE Grants					
				FY 19/20	F	Y 18/19	FY 17/18
	Did	your agency apply for a BSEE grant	?	Yes	Yes		No
	Wer No)	e you awarded a BSEE grant? (leav	e blank if	Yes	Yes		
		ount awarded: (List amount or leave or NA)	blank if	65,	828	202,367	
		ount reimbursed: (List amount or leav or NA)	ve blank if	65,	828	202,367	
		the Equipment Purchased: (List e blank if No or NA)	Outboa	ard engines	FLIR th	system, 2 4 Dive	
В	oating	Safety and Enforcement Income					
13.	Rev	enue and Expenditures					
	B	oat Tax Revenue			1,23	4,077.00	
	Oth	er Revenue:					
	a)	Other local revenue sources: (Exa campgrounds, parking, anything the patrol support)	-	-	,	0.00	
	b)	Any State boating funding sources subvention:	s, including	DBW		0.00	
		FAL ANNUAL BOATING INCOME I DGET	N YOUR C	PERATING	1,23	34,077.00	
		AL EXPENDITURES FOR BOATIN	G SAFETY	' AND	1,57	3,102.00	
14.	•	u participated in the subvention prog s expended in the previous closed y	-	all allocated	C Yes	s C No	í NA
	lf NC	D. state percentage of remaining fun	ds.				

If NO, state percentage of remaining funds.

4/30/2020

# Project Cost Estimate

FOR OFFICE USE ONLY: V	/ersion #		APP # 7044	11	
Line Item	Qty	Rate	UOM	Total	Req Amoun
1 Patrol Boat / Equipment					
Search and Rescue Equipment Notes : FIIR M400XR Stabilized Thermal/Visible Camera with JCU, RayMarine Axiom Pro 16 Multifunction Display, FLIR M400 Adapter plate and installation.	1.0000	101859.000	PKG	101,859.00	101,859.00
TAL EXPENDITURES				101,859.00	101,859.00

		Category	Total	Req Amount	Narrative
	1	Patrol Boat / Equipment	101,859.00	101,859.00	
-	TOTAL	EXPENDITURES	101,859.00	101,859.00	

# Certifications

		FOR OFFICE USE ONLY:	Version #	APP # 704411	
A	pplica	nt Certification			
a.	<b>N</b>		conjunction herewith, a	d this application and the document(s), proposal nd that to the best of my information and belief, , and complete.	• • •

b. 🗹 I certify that I am the person authorized to submit this application on behalf of the applicant.

Name:	Patrick Leung
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Title: Chief Financial Officer

Date Signed: 4/30/2020