

The U. S. Marine Corps is seeking commercial solutions to a near term project (1-3 years) called the Small Unit Riverine Craft (SURC). In 1999, the Marine Corps solicited Purpose:

information on potential craft that might fulfill a set of draft requirements. Since that effort, the Marine Corps is in the process of finalizing their requirements . Funding has been identified and the Marine Corps intends to purchase 46 systems with an option for an additional 20. It is our intent to craft a Specification and Statement of Work which are feasible, in line with the market place and provides advantages to both the government and the vendor. The Marine Corps has recently contacted numerous vendors as part of a business case analysis, to gain insight into corporate nature of the industry and general technical capability. We now would like to further our inquiry and examine specific technical issues. Therefore, the Marine Corps wishes to confirm the market's ability to provide the solution to the SURC requirements. Once technical feasibility is determined, we will release a revised draft specification and statement of work for industry comment. This will be a full and open competition to buy an undetermined number of prototype craft prior to the production order.

We request vendors using existing technology and designs respond to the technical feasibility of meeting the SURC requirements. Interested parties should visit [www.marcorsyscom.usmc.mil](http://www.marcorsyscom.usmc.mil). Click " business opportunities" and click "SURC industry questionnaire." We urge all interested parties to fill out the questionnaire regardless of their ability to directly meet each requirement. We plan to host an industry day for interested parties.

Please print out requirements before taking survey. Survey follows the SURC requirements below.

CHARACTERISTIC	REQUIREMENT
Hard Beam, Height and Length (on trailer)	less than 9.0', less than 8.5' and less than 40' (C-130 transportable)
Weight (with trailer)	Less than 14,600 lbs for (CH-53D external lift) <i>without passengers and packs</i>
Capacity	minimum of 13 troops (up to 18 desired) and 2 crew at 285 lbs/person, plus a nominal allowance for weapons and ammo in both space and weight
Propulsion	must be capable of operating on JP-5, JP-8 and marine diesel # 2. Primarily JP-5
Speed	greater than 30 knots cruise/ 35 knots sprint (up to 35 cruise and 40 knots sprint desired) at full load in calm water (water depth greater than 2/3 times the craft length)
Acceleration	Accelerate to 25 knots in 15 seconds, in full load and SS 2 (average wave height 1.8 feet; average wave period 3.9 seconds; average wind speed of 13.5 knots)
Turning	Turn 180 deg in 120 feet, in full load and SS 2
Draft	less than 24" static, in full load, AND continuous operation with 24" below the keel for 1 hour (2 hours desired)
Range	greater than 200 nm with craft starting in full load (up to 300 nm desired)
Stability	Integral flotation system to keep a fully loaded, swamped craft afloat, level and upright, with no less than 6 inches freeboard remaining.
Operating Environment	Craft will be expected to operate during full exposure to air temperatures ranging from minus 20 degrees Fahrenheit (F) to 125 degrees F in fresh, salt and brackish water temperatures ranging from 28 degrees Fahrenheit (F) to 95 degrees F. Water types ranging from fresh, salt and brackish. Should be fully operation in SS2 and able to maintain headway in SS 3. (average wave height 2.9 feet; average wave period 4.6 seconds; average wind speed of 16 knots)
Water Conditions	Cooling system should have capability to adequately cool the engine during prolonged beaching operations.
Hull	The hull should be durable, to withstand beaching on a variety of surfaces (grass, mud, sand, gravel) and against various structures.

Weapons	The craft will have hard points for 4 heavy machinegun mounts. <i>(Mounts to be provided as GFE)</i>
Hoisting Fittings	Suitable for ship and helo lifting
Towing	The craft will be required to tow a like, fully loaded, disabled craft at a minimum speed of 6 knots.
Ballistic Protection	Protect propulsion system against mobility kill against 7.62mm (AK-47)
Human Factors	Each passenger is to have support to endure craft maneuvers and provide ride comfort. Craft shall have remove-able overhead cover. Controls suitable for day, night, cold and aggressive maneuver operations
Night Vision Compatibility	Gauges, controls and displays compatible with current Night Vision Goggles (AN/PVS-7Bs) and the unaided human eye for day and night operations.
Visual Signature	Non-identifiable to unaided human eye at 1800m (In ground combat operations, non-identifiable is to not be able to discriminate between recognizable objects as being friendly or enemy, or the name that belongs to the object as a member of a class.)
Electro-Optical Signature	Non-identifiable to Gen II goggles at 500m (300m desired)
Acoustic Signature	Less than 50 dBA at: 300m at idle speed and 500m at cruise speed (100m at idle and 300m at cruise desired)
Navigation	GPS and magnetic compass
Communications	2 X SINCGARS (VHF Tactical) and 6 VIC 3 stations <i>(equipment to be provided as GFE)</i>
Electrical	24 VDC
Contractor Logistics Support (CLS)	The Marine Corps desires a comprehensive logistics support program (supply parts, maintenance, configuration control, training) for the duration of the SURCs estimated 10 year life cycle. The support program should focus on a minimal augmentation of existing maintenance capabilities at the operating unit and a more robust capability at the intermediate and depot levels. The program must be capable of worldwide support.

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## Section Small Craft Survey

**Q. Information**

Company Name: \_\_\_\_\_  
Suite \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_  
ZIP \_\_\_\_\_  
Country \_\_\_\_\_

**Q. POC**

Name \_\_\_\_\_  
Phone Number \_\_\_\_\_  
Fax Number \_\_\_\_\_  
E-mail address \_\_\_\_\_

**Q. 1**

**Would you be able to produce a boat that meets all the above requirements?**

- Yes
- No
- Don't Know or need more information

*Please contact Maj Alan Greenwood (703) 784-2006 ext. 2742 or Jason Marshall (757) 686-7331 if you need more information.*

**Q. 2**

**Chose the statement that best describes the level of effort required to produce a craft that would meet the above requirements.**

- We already produce a craft that will meet the requirements. (Provide base craft information in remarks.)
- We already have a design that will meet the requirements. (Provide base craft information in remarks.)
- We would have to slightly modify a current design or craft to meet all the requirements. (Provide base craft information in remarks.)
- We could meet the requirements but a new design would be needed.
- Teaming would be required to meet some/all requirements.
- Other

**Q. 2a**

**If Other was chosen for question 2 above, please provide an explanation.**

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\_\_\_\_\_  
\_\_\_\_\_

**Q. Instructions**

**Please compare the capabilities of your current craft or design with the**

**following requirements. Choose whether your craft/design can meet the requirement, or whether the requirement should be modified or deleted. If modifying the requirement is your choice, please state your desired value. If deleting the requirement is your choice please indicate your reason. A choice is also available if you are unsure of your craft/design's ability to meet a requirement.**

Q. 3

**Height:** Less than 8.5 feet

Currently meet  Modify  Delete  Unsure

Q. 3a

Modified to or Deleted because:

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Q. 4

**Hard Beam:** Less than 9.0 feet

Currently meet  Modify  Delete  Unsure

Q. 4a

Modified to or Deleted because:

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Q. 5

**Length:** Less than 40 feet

Currently meet  Modify  Delete  Unsure

Q. 5a

Modified to or Deleted because:

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Q. 6

**Weight:** Less than 14,600 lbs for (CH-53D external lift) without passengers and packs

Currently meet  Modify  Delete  Unsure

Q. 6a

Modified to or Deleted because:

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Q. 7

**Capacity:** Minimum of 13 troops (up to 18 desired) and 2 crew at 285 lbs/person, plus a nominal allowance for weapons and ammo in both space and weight

Currently meet  Modify  Delete  Unsure

Q. 7a

Modified to

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Q. 8

**Propulsion:** Must be capable of operating on JP-5, JP-8 and marine diesel # 2. Primarily JP-5

Currently meet  Modify  Delete  Unsure

Q. 8a

Modified to or Deleted because:

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Q. 9

**Speed:** Greater than 30 knots cruise/ 35 knots sprint (up to 35 cruise and 40 knots sprint desired) at full load in calm water (water depth greater than 2/3 times the craft length)

Currently meet  Modify  Delete  Unsure

Q. 9a

Modified to or Deleted because:

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Q. 10

**Acceleration:** Accelerate to 25 knots in 15 seconds, in full load and SS 2 (average wave height 1.8 feet; average wave period 3.9 seconds; average wind speed of 13.5 knots)

Currently meet  Modify  Delete  Unsure

Q. 10a

Modified to or Deleted because:

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Q. 11

**Turning:** Turn 180 deg in 120 feet, in full load and SS 2

Currently meet  Modify  Delete  Unsure

Q. 11a

Modified to or Deleted because:

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Q. 12

**Draft:** Less than 24" static, in full load, AND continuous operation with 24" below the keel for 1 hour (2 hours desired)

Currently meet  Modify  Delete  Unsure

Q. 12a

Modified to or Deleted because:

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Q. 13

**Range:** Greater than 200 nm with craft starting in full load (up to 300 nm desired)

Currently meet  Modify  Delete  Unsure

Q. 13a

Modified to or Deleted because:

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Q. 14

**Stability:** Integral flotation system to keep a fully loaded, swamped craft afloat, level and upright, with no less than 6 inches freeboard remaining.

Currently meet  Modify  Delete  Unsure

Q. 14a

Modified to or Deleted because:

Q. 15

**Operating Environment:** Craft will be expected to operate during full exposure to air temperatures ranging from minus 20 degrees Fahrenheit (F) to 125 degrees F in fresh, salt and brackish water temperatures ranging from 28 degrees Fahrenheit (F) to 95 degrees F. Water types ranging from fresh, salt and brackish. Should be fully operation in SS2 and able to maintain headway in SS 3. (average wave height 2.9 feet; average wave period 4.6 seconds; average wind speed of 16 knots)

Currently meet  Modify  Delete  Unsure

Q. 15a

Modified to or Deleted because:

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Q. 16

**Water Conditions:** Cooling system should have capability to adequately cool the engine during prolonged beaching operations.

Currently meet  Modify  Delete  Unsure

Q. 16a

Modified to or Deleted because:

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Q. 17

**Hull:** The hull should be durable, to withstand beaching on a variety of surfaces (grass, mud, sand, gravel) and against various structures.

Currently meet  Modify  Delete  Unsure

Q. 17a

Modified to or Deleted because:

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Q. 18

**Weapons:** The craft will have hard points for 4 heavy machinegun mounts. (Mounts to be provided as GFE)

Currently meet  Modify  Delete  Unsure

Q. 18a

Modified to or Deleted because:

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Q. 19

**Hoist Fittings:** Suitable for ship and helo lifting

Currently meet  Modify  Delete  Unsure

Q. 19a

Modified to or Deleted because:

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Q. 20

**Towing:** The craft will be required to tow a like, fully loaded, disabled craft at a minimum speed of 6 knots.

Currently meet  Modify  Delete  Unsure

Q. 20a

Modified to or Deleted because:

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Q. 21

**Ballistic Protection:** Protect propulsion system against mobility kill against 7.62mm (AK-47)

Currently meet  Modify  Delete  Unsure

Q. 21a

Modified to or Deleted because:

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Q. 22

**Human Factor:** Each passenger is to have support to endure craft maneuvers and provide ride comfort. Craft shall have remove-able overhead cover. Controls suitable for day, night, cold and aggressive maneuver operations

Currently meet  Modify  Delete  Unsure

Q. 22a

Modified to or Deleted because:

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Q. 23

**Night Vision Compatibility:** Gauges, controls and displays compatible with current Night Vision Goggles (AN/PVS-7Bs) and the unaided human eye for day and night operations.

Currently meet  Modify  Delete  Unsure

Q. 23a

Modified to or Deleted because:

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Q. 24

**Visual Signature:** Non-identifiable to unaided human eye at 1800m. (In ground combat operations, non-identifiable is to not be able to discriminate between recognizable objects as being friendly or enemy, or the name that belongs to the object as a member of a class.)

Currently meet  Modify  Delete  Unsure

Q. 24a

Modified to or Deleted because:

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Q. 25

**Electro-Optical Signature:** Non-identifiable to Gen II goggles at 500m (300m desired)

Currently meet  Modify  Delete  Unsure

Q. 25a

Modified to or Deleted because:

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Q. 26

**Acoustic Signature:** Less than 50 dBA at: 300m at idle speed and 500m at cruise speed (100m at idle and 300m at cruise desired)

Currently meet  Modify  Delete  Unsure

Q. 26a

Modified to or Deleted because:

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Q. 27

**Navigation:** GPS and magnetic compass

Currently meet  Modify  Delete  Unsure

Q. 27a

Modified to or Deleted because:

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Q. 28

**Communications:** 2 X SINCGARS (VHF Tactical) and 6 VIC 3 stations (equipment to be provided as GFE)

Currently meet  Modify  Delete  Unsure

Q. 28a

Modified to or Deleted because:

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Q. 29

**Electrical:** 24 VDC

Currently meet  Modify  Delete  Unsure

Q. 29a

Modified to or Deleted because:

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Q. 30

**CLS:** The Marine Corps desires a comprehensive logistics support program (supply parts, maintenance, configuration control, training) for the duration of the SURCs estimated 10 year life cycle. The support program should focus on a minimal augmentation of existing maintenance capabilities at the operating unit and a more robust capability at the intermediate and depot levels. The program must be capable of worldwide support.

Currently meet  Modify  Delete  Unsure

Q. 30a

Modified to or Deleted because:

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**Q. 31**

**Which requirements or other aspects of this program present the largest challenges to your organization?**

- Height
- Hard Beam
- Length
- Weight
- Capacity
- Propulsion
- Speed
- Acceleration
- Turning
- Draft
- Range
- Stability
- Operating Environment
- Water Conditions
- Hull
- Weapons
- Hoisting Fittings
- Towing
- Maintenance
- Ballistic Protection
- Human Factors
- Night Vision Compatibility
- Visual Signature
- Electro-Optical Signature
- Accoustic Signature
- Navigation
- Communications
- Electrical
- CLS
- Other

**Q. 31a**

**Please provide amplifying remarks why these were chosen.**

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**Q. 32**

**Which requirements or other aspects of this program present the largest cost drivers to your organization?**

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If you have any further information that you would like to provide please e-mail or call Maj Alan Greenwood.

Thank you for taking time to complete this survey. Your answers will aid in the development of this program!