



DEPARTMENT OF THE NAVY  
INDIAN HEAD DIVISION  
NAVAL SURFACE WARFARE CENTER  
3767 STRAUSS AVENUE,  
SUITE 201  
INDIAN HEAD MD, 20640-5150

JUSTIFICATION AND APPROVAL  
FOR USE OF OTHER THAN FULL AND OPEN COMPETITION

JUSTIFICATION

1. Contracting Activity

The Naval Sea Systems Command (NAVSEA), Naval Surface Warfare Center (NSWC), Indian Head Division, Procurement Department, Code A23. The requiring activity is the Naval Explosive Ordnance Disposal Technology Division (NAVEODTECHDIV), Indian Head, Maryland 20640.

2. Description of the Action Being Approved

This is a sole source action to be awarded without full and open competition. The proposed contract action is a Firm Fixed Priced contract to be awarded to: The Machine Lab, Inc., 1281 E. Magnolia, Unit D, Suite 1193, Fort Collins, CO 80524.

3. Description of Supplies

The contract is for MMP-30-EOD Tracked Mobile Robot System and accessories. This is in support of Foreign Military Sales (FMS) case [REDACTED] and [REDACTED]. Total cost for this purchase is estimated at \$17,089,588.

The MMP-30-EOD tracked mobile robot system with 2.4 GHz wireless control and 5.8 GHz audio and video system features include swappable Li-FePO4 rechargeable batteries, three color cameras (pan/tilt/drive, rear facing and gripper mount), Operator Control Unit with 6" color LCD monitor, and 10 channel Spread Spectrum robot controller with failsafes. The robot also includes a 4 axis manipulator arm. Arm features will include an 8 pound lift and carry payload capacity. Axis of motion are shoulder, elbow, wrist rotate and gripper. Robot and controller weight is 60 pounds. Ships in a durable Pelican case and includes 2 robot batteries, 2 Operator Control Unit batteries, and chargers.

Accessories include the following:

- 4 axis manipulator arm for MMP-30-EOD robot. Arm features include an 8 pound minimum lift and carry payload capacity, color wide angle camera mounted on gripper and all necessary wiring to mount on MMP-30-EOD robot. Axis of motion are shoulder, elbow, wrist rotate and gripper.

- Complete Pan/Tilt mechanism for MMP-30-EOD robot. Item comes with IR color camera, pedestal mount, hinge, hardware and all necessary wiring for use with the MMP-30-EOD robot.
- Drive Motor. Drive motor assembly for MMP-30-EOD robot. Unit is 24 Volts, 136 RPM, Right Angle gear drive with hex output shaft. Item comes with all mounting hardware.
- Color Video Camera - Wide angle color video camera used for rear facing view on MMP-30-EOD robot. Camera comes pre wired for plug and play installation.
- Idler axle assembly complete with pillow block, bearings, wheel spacer and hardware.
- Video adapter cable for 1st generation MMP-30-EOD video electronics to interface with 2nd and 3rd generation MMP-30-EOD video electronics.
- 3rd generation monobox robot control module for MMP-30-EOD mobile robot. Module is plug and play and is compatible with new and old MMP-30-EOD robot models. Comes complete with all necessary internal electronics for power distribution, 4-axis arm control, track drive, Pan/Tilt and 3 camera switching system. The wireless video has been upgraded to a 7 channel 5.8 GHz transmission system. Monobox comes with a matched A/V receiver and antenna. Receiver is ready for installation on an MMP-30-EOD operator control unit. All monobox electronics are mounted in a single waterproof enclosure.
- Upgrade kit for Pan/Tilt camera boom mast. Includes stainless steel post, spring pin, lanyard and all necessary hardware to replace original Pan/Tilt boom thumb screw.
- Attachable mechanism for MMP-30-EOD Operator Control Unit that modifies the motion of the arm control switch. This retrofittable device enables the arm control switch to spring back to a center position by default.

The total cost, unit cost and quantities for the MMP-30-EOD Tracked Mobile Robot System are summarized at Table 1.

**Table 1: Estimated Dollar Value**

Item	Description	Quantity	Unit Cost	Total Cost
█	MMP-30-EOD Tracked Mobile robot system	█	█	\$8,280,888
█	4 axis manipulator	█	█	\$5,326,200
█	Pan/Tilt Camera	█	█	\$373,500
█	Drive Motor	█	█	\$214,500

	Video Camera			\$46,650
	Idler Axle			\$12,450
	Video Adapter Cable			\$14,500
	Monobox 3.0			\$2,592,000
	Pan/Tilt Upgrade Kit			\$8,400
	Spring Return Mechanism			\$220,500
	<b>TOTAL</b>			<b>\$17,089,588</b>

The total cost for the MMP-30-EOD Tracked Mobile Robot System with shipping included for case [REDACTED] and [REDACTED] is \$17,089,588.

The delivery for MMP-30-EOD Tracked Mobile Robot System will be a single shipment to [REDACTED] days after award.

**Table 2: Estimated Dollar Value**

ITEMS	FY13	TOTAL
[REDACTED]	\$12,179,836	\$12,179,836
[REDACTED]	\$4,909,752	\$4,909,752
<b>TOTAL</b>	<b>\$17,089,588</b>	<b>\$17,089,588</b>

The Government's minimum needs have been verified by the certifying technical and requirements personnel.

4. Statutory Authority Permitting Other Than Full and Open Competition  
10 U.S.C. 2304(c)(1) as implemented through Federal Acquisition Regulation (FAR) 6.302-1, "Only one responsible source and no other supplies or services will satisfy agency requirements."
5. Rationale Justifying Use of Cited Statutory Authority

MMP-30-EOD is the only supply that can fulfill the current requirement and Machine Lab is the only source that can provide the MMP-30-EOD.

The MMP-30-EOD Tracked Mobile Robot System is quality controlled certified to ISO 9001 and is configured [REDACTED] specifications. The MMP-30-EOD Tracked Mobile Robot System is required by the [REDACTED] safe from Improvised Explosive Devices (IEDs) and Unexploded Ordnance (UXO) due to the system's lightweight maneuverability and current fielding in [REDACTED] Delay in procurement or

testing of a different system will negatively impact the [REDACTED] mission and could result in loss of life or severe injury.

This equipment has been approved for EOD use by the Military Technical Acceptance Board (MTAB). The equipment was tested for safety and operational use and was evaluated for [REDACTED]

[REDACTED] authority to release the equipment to the [REDACTED]. Ordering a similar item from a different vendor will disrupt the continuity of operations among the [REDACTED].

[REDACTED] Interrupting the continuity of operations could result in the potential for the loss of life and interfere in mission success. The equipment listed herein will be used by specially trained, highly skilled, bomb disposal units of the [REDACTED].

At this time, [REDACTED] do not have the equipment necessary to meet today's operational and training demands. This results in the [REDACTED] having very limited ability to [REDACTED]. These limitations are directly attributed to the lack of these items and result in risk to [REDACTED]. Any delays will have a significant negative impact on the [REDACTED].

The MMP 30 EOD Tracked Mobile Robot Systems lifting capacity is 20 pounds and is one of the strongest in the man-portable class. MMP 30 is a multipurpose robot that can be used for SWAT, mine clearing, fire, hazardous materials, and EOD missions without any major modifications to its platform. The MMP boots up and is ready for operation within 60 seconds from a cold start.

The trend in mobile robotics is to get the machines as light and compact as possible without limiting their mobility in urban environments. At 30 pounds this platform is designed to be a "Man Portable" workhorse. The machine can easily carry 20 pounds of payload and has plenty of space to be outfitted with cameras, sensors, computers, tools, test equipment, supplies, etc. The MMP 30 has a water resistant aluminum hard anodized chassis. All drive train components are precision machined and all metal with long life ball bearings in critical areas.

The MMP 30 EOD Tracked Mobile Robot System provides real time video which is critical when operating down range on a threat device such as [REDACTED].

The Machine Lab is the only company that manufactures, sells, and provides support for the MMP-30-EOD Tracked Mobile Robot System, and the MMP 30 EOD Tracked Mobile Robot System is the only robot that is capable of meeting all of the above described requirements. At this time, the government does not have the technical data rights required to build or compete the MMP 30. With regard to the MMP-30-EOD Tracked Mobile Robot System, award to any other source would require the design, development, testing and production of entirely new systems, which would result in a substantial duplication of [REDACTED]. This [REDACTED] is based on technical expertise of what it would cost in house from the design stage through the production of an entirely new system. This cost

will not likely be recovered through competition. In addition, this design, development, testing and production would cause a delay of [REDACTED] which is not acceptable to the Government. Therefore, Machine Lab Inc. is the only source for the MMP-30-EOD Tracked Mobile Robot System.

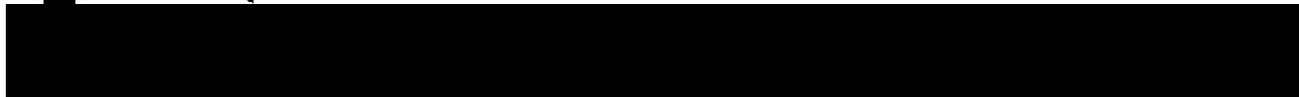
6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable  
Market research was performed and it was determined than no other company can offer a robot that has the same critical features that are part of the MMP-30-EOD Tracked Mobile Robot System and that meet [REDACTED] varied operational needs. The Machine Lab Inc. is the developer, manufacturer and only source for the MMP-30-EOD Tracked Mobile Robot System. The requirement was synopsised in FEDBIZOPS on 2 January 2013, and no other potential sources expressed an interest in this requirement
7. Determination of Fair and Reasonable Costs  
The Contracting Officer will make a price reasonableness determination for the supplies/services covered by this J&A, in accordance with FAR Subpart 15.4, before making award.
8. Actions to Remove Barriers to Competition  
For the reasons set forth in Paragraph 5, Naval Surface Warfare Center (NSWC), Indian Head Division, Procurement Department, Code A23 has no plans at this time to compete future contracts for the types of supplies covered by this document. If another potential source emerges, NSWC will assess whether competition exists. NAVEODTECHDIV will continue to conduct market research in an effort to identify new potential sources.

I&A Number: 13-0018

**TECHNICAL/REQUIREMENTS CERTIFICATION (FAR 6.303-2(c))**

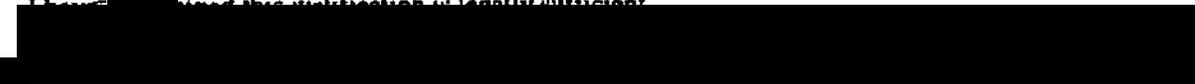
I certify that the facts and representations under my cognizance, which are included in this justification and its supporting acquisition planning data, are complete and accurate to the best of my knowledge and belief.

**TECHNICAL/REQUIREMENTS COGNIZANCE:**



**LEGAL SUFFICIENCY REVIEW (NMCARS 5206.303-90)**

I have reviewed this justification and it is legally sufficient.



Signature Name (Print) and Title (Code) Phone No. Date

**CONTRACTING OFFICER CERTIFICATION (FAR 6.303-2(b) (12))**

I certify that this justification is accurate and complete to the best of my knowledge and belief.



Signature Name (Print) and Title (Code) Phone No. Date

**APPROVAL BLOCK (FAR 6.304 for Approving Official)**

Upon the basis of the above justification, I hereby approve, as Designee of the Head of the Procuring Activity, the solicitation of the proposed procurement using other than full and open competition, pursuant to the authority of 10 U.S.C. 2304(c) (1).

**DESIGNEE OF THE HEAD OF THE PROCURING ACTIVITY**



*CINDY R. SHAVER* 2/7/2013  
Name (Print) Date