



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, MID-ATLANTIC
9324 VIRGINIA AVENUE
NORFOLK, VIRGINIA 23511-3095

J&A No. ML-18-2

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

1. Contracting Activity. Naval Facilities Engineering Command, Mid-Atlantic, Joint Expeditionary Base Little Creek-Fort Story Virginia Beach, Virginia.

2. Description of the Action Being Approved. This Justification and Approval (J&A) authorizes and approves the use of a single vendor, **Strategic Systems, Incorporated (SSI)**, to perform all technical activities required for the installation of a new Close Quarter Combat Recording (CQCR) system to be installed during the second phase of construction for the Small Arms Testing and Evaluation Complex (SATEC) Special Operations Urban Complex (SOUC) training range as well as all activities required to integrate the new CQCR equipment with the existing SATEC SOUC CQCR system. The second phase of construction will involve the addition of six new "target" buildings and a Range Control Building. All buildings will require the installation of numerous audio, visual, lighting, and special-effects items that must be properly integrated into the range's existing CQCR system.

3. Description of Supplies/Services.

The Small Arms Testing and Evaluation Complex (SATEC) is a Special Operations Urban Complex (SOUC) training range for special operations units to conduct Research, Development, Testing and Evaluation (RDT&E) of weapon systems, small arms, explosive and mechanical breaching systems in a realistic urban combat environment. The first phase of construction provided seven "target" buildings of various types, floor plans and levels consisting of over 64,000 square feet of tactical space on approximately 104 acres. Phase two will provide an additional six buildings with over 68,000 square feet and a Range Control Building which will house the Close Quarter Combat Recording (CQCR) system.

The NSWDC Close Quarters Combat Recording (CQCR) system requires unique capabilities that far exceed those of standard, commercial-off-the-shelf (COTS) video cameras and their associated monitors. The CQCR is a highly specialized system of interdependent, specialized cameras and controls that incorporate integrated Hollywood-type special effects and High-Risk Training (HRT) safety controls. This system has been designed to control the technical equipment required to provide realistic combat simulations replicating those encountered by Special Operations Forces (SOF) in high-threat environments as well as record the performance of training participants.

SSI has developed the CQCR system with NSWDC's assistance over the years. As an initial step, SSI installed a fiber-optic cable backbone connecting the Range Control Building to all other buildings in the range. The system operates all of the range's audio, visual, and special-effects components via a graphic human-machine interface created entirely by SSI using a

supervisory control and data acquisition (SCADA) software program called Wonderware. While the Wonderware program provides an integrator with the graphic tools to create an interface/control system, it does not have any inherent or pre-programmed control system. Instead, SSI was required to assess each and every technical component of the SOUC range and use the Wonderware software to create a detailed, accurate schematic to act as the current interface/control of the range equipment.

While SSI's creation of the detailed Wonderware application was one step in allowing SATEC personnel to control the SOUC effects from a remote control center, SSI also had to physically connect each and every special-effects component to the system. This activity further required SSI to program numerous devices called Programmable Logic Controllers (PLC) as well as create hard-wired and wireless Ethernet IP systems to control the actual functioning of one or more effect components. Only manufacturer-authorized integrators have access to the PLC software or communications software that allows the various components to communicate with the Wonderware SCADA program. SSI is an authorized installer/integrator of all equipment utilized at the SATEC range, which includes:

- Networked audio system (manufactured by Digigram)
- Lighting (controlled by Allen-Bradley controllers)
- Video control system (Pelco)
- IED simulators (Allen-Bradley)
- Environmental control / scent systems (Allen-Bradley)
- SSI proprietary range/shooting targets (SSI)

The portion of the project to which this justification and approval applies is estimated to be [REDACTED] and will be funded by FY18 MILCON funding. The project is estimated to be completed by August 2020.

4. Statutory Authority Permitting Other Than Full and Open Competition.

Pursuant to FAR 6.302-1, this acquisition will be acquired under the authority of 10 U.S.C. 2304(C)(1), Only one responsible source and no other supplies or services will satisfy agency requirements.

5. Rationale Justifying Use of Cited Statutory Authority.

The SATEC SOUC range provides a crucial service to the Navy by preparing special operations units for combat deployments through hyper-realistic training scenarios. The realism of these training evolutions is created, in large part, by the range's CQCR system, which coordinates audio, video, and special-effects components. It is crucial to the successful operation of the expanded range that the CQCR system works properly throughout all facilities in the range. Use of any company other than SSI to install and integrate the referenced components into the range's existing CQCR system greatly increases the potential for unsuccessful system operations. Improper operation of the CQCR system could also have a direct impact on overall range safety and raise the potential for serious injury, or even death, of training participants or range personnel.

As was briefly discussed above, SSI performed all the programming to create the current Wonderware application that controls the CQCR system and integrates all necessary components. By creating the initial system, SSI has an unmatched understanding of the network architecture and programming and integration efforts needed to expand the system and make it interoperable with the new facilities and components.

In addition to creating hyper-realistic training scenarios for Navy special operations units, the CQCR system created by SSI performs vital range-safety actions. First, SSI has custom-built enclosures within the range that include two-way communication links between the enclosure and the Range Control Building as well as duress buttons that control alarms within areas of the range. These enclosures can be used by units performing training to alert the Range Control of injuries to participants in order to stop the evolution and, if necessary, turn on needed lighting. The duress buttons serve a similar purpose by alerting other participants to stop the training evolution due to an injury to a colleague. An additional safety measure performed by the CQCR system is allowing the Range Controllers to view live images throughout the training range prior to or during the training evolution in order to alert participants and/or role-players to dangerous situations. As the training units often employ explosive breaching charges and sometimes use live weapons, it is crucial that role-players used for realistic scenarios do not wander from their instructed location. For example, on at least one occasion, the CQCR system has allowed the Range Controllers to stop a training scenario when a role-player had moved to a location that would have been subjected to an explosive breaching charge.

FAR 6-302-1(a)(2)(iii) states that “services may be deemed to be available only from the original source in the case of follow-on contracts for the continued provision of highly specialized services when it is likely that award to any other source would result in-- substantial duplication of cost to the Government that is not expected to be recovered through competition.” In the case of the CQCR system, SSI has extensive knowledge of the existing system, which should greatly reduce labor costs of integrating the Phase II facilities into the existing system. The increased costs of having the new components integrated into the system by another vendor are unlikely to be offset by any cost savings or other advantages likely to be obtained through competition. In addition, SSI currently warrants its software/hardware installations as long as they are not modified by a third party. If another company is selected to install the Phase II system, SSI’s current warranties would disappear.

6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable.

NAVFAC MIDLANT issued a Sources Sought notice on November 17, 2017 seeking contractors with the necessary qualifications and experience to perform the referenced services. Responses were received from SSI and two other contractors. Contractor 1 did not provide any information demonstrating that it had experience with live-fire military training ranges. Contractor 2 did not demonstrate any experience integrating SCADA and PLC technology in live-fire military ranges. In addition, Contractor 2 did not state that it was an authorized integrator/installer of Digigram or Pelco equipment. Company 2 also stated that its current bonding capacity was only [REDACTED] (though they stated they could seek additional capacity). In light of the vital role performed by the SATEC SOUC in training Navy special operations personnel and the high-risk nature of the training, neither Contractor 1 or 2 is deemed qualified to perform the referenced installation and integration of the CQCR system in Phase II of the

SATEC range. Neither contractor demonstrated that they have the resources and experience to properly install and integrate the new range equipment. Similarly, neither contractor indicated it was licensed to install the specific equipment to be installed in the new range.

7. Determination of Fair and Reasonable Cost.

The Contracting Officer has determined the anticipated cost to the Government of the supplies/services covered by this J&A will be fair and reasonable.

8. Actions to Remove Barriers to Future Competition

For the reasons set forth in Paragraph 5, NAVFAC Mid-Atlantic has no plans at this time to compete future contracts for the types of supplies/services covered by this document. If another potential source emerges, NAVFAC Mid-Atlantic will assess whether competition for future requirements is feasible.

JUSTIFICATION AND APPROVAL #ML-18-2
CONTRACT #N4008518R1101

CERTIFICATIONS AND APPROVAL

TECHNICAL/REQUIREMENTS/FUNCTIONAL LEAD CERTIFICATION

I certify that the facts and representations under my cognizance which are included in this Justification and its supporting acquisition planning documents, except as noted herein, are complete and accurate to the best of my knowledge and belief.

[Redacted Signature Area]

Signature

Name (Printed)

Date

LEGAL SUFFICIENCY REVIEW:

I have determined this Justification is legally sufficient.

[Redacted Signature Area]

Signature

Name (Printed)

Date

CONTRACTING OFFICER CERTIFICATION

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

[Redacted Signature Area]

Signature

Name (Printed)

Date

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

ECH III/IV COMMANDING OFFICER APPROVAL

[Redacted Signature Area]

Signature

Name (Printed)

Date