MEMORANDUM FOR RECORD
FOR
BRAND NAME JUSTIFICATION
Modern Air Combat Environment (MACE)

PURCHASE REQUEST NO.: F2MTL26075A002

Manufacturer Name: Battlespace Simulations Inc.
Street Number/Box Number: 8305 Catamaran CIR
City, State, Zip Code: Lakewood Ranch, Florida, 34202-2105
Cage Code: 4KC80

Estimated Dollar Value: $43K

1. **Description of action being approved:** The Joint Electromagnetic Warfare Center (JEWC) currently is supporting a task to further EMS modeling at the campaign level. An associated subtask is to assess and evaluate current Commercial off the shelf (COTS) and Government off the Shelf (GOTS). As such, JEWC Modeling and Simulation Engineers are evaluating several different existing software and trailing them in real use cases. MACE, along with others, is one of the COTS being evaluated. This requirement shall be solicited as a brand name requirement and shall allow all authorized resellers, including small and other than small businesses, to compete.

2. **Statute and/or Regulation supporting determination:** Pursuant to Revolutionary Federal Acquisition Regulation Overhaul (RFO) 12.102(a), which allows for restricting competition for acquisitions at or below the SAT, and as supplemented by R-DFARS PGI 211.204, this document justifies the use of a brand-name specification. This justification which follows RFO 6.104 is based on a review of the acquisition history, an assessment of government risk, and a determination of the most logical and suitable solution that serves the best interest of the government.

    a. **Agency and Nature/Description of the action being approved:** The purpose of this statement of need is to acquire MACE Extended Warfare and associated equipment. MACE is a full-spectrum battlespace simulation software for building and executing scenarios across multiple domains, simulated in high detail including the full electromagnetic spectrum.

    b. **Description of supplies/services required to meet agency needs:** The MACE software suite is essential to the Government's requirements as no other product can meet the agency's needs without unacceptable schedule delays and duplication of cost.

3. **Rationale:** MACE provides a unique, physics-based, pulse-level modeling of the electromagnetic spectrum. This level of detail is not found in other commercially available simulation products and is critical for providing realistic training for electronic warfare officers. The MACE software is currently approved for use on Department of the Air Force networks per AFI 17-101, Risk Management Framework (RMF). Procuring any other brand would require a new, lengthy, and

costly RMF certification process, causing unacceptable mission delays. MACE is fully integrated into the JEWC's existing Live-Virtual-Constructive training architecture. A different brand would not be compatible, requiring cost-prohibitive re-integration and testing of the entire network *(See Attachment 1 – AFI 17-101).*

Failure to procure the MACE software licenses would result in a significant degradation of advanced electronic warfare training for joint force personnel. Without MACE, warfighters cannot be trained in a high-fidelity, contested electromagnetic spectrum that accurately replicates modern adversary capabilities. This would directly decrease combat readiness and survivability for personnel deploying to operational theaters, creating an unacceptable risk to the mission

4. **Efforts to Obtain Competition:** To maximize competition for this brand name requirement, the contracting team conducted market research that yielded seven responses from capable vendors, including the manufacturer and several small businesses. Initially the results support a 100% Small Business Set-Aside, ensuring robust price competition among authorized providers. However, the lowest quote submitted by small business vendors showcased a price of $109K. This is at least $66k more than the IGCE provided by the customer. In accordance with RFO 12.102(a) and R-DFARS 211.204, utilizing the Mace Software is essential to avoid a substantial duplication of costs related to full system replacement and to preserve existing warranties. The 502 CONS will continue to monitor the market for future opportunities to enhance competition. or modified for compatibility with the Mace Software from other companies to meet the agency's needs (See File element 143 for more information).

5. **Determination of Fair and Reasonable Cost:** The CO anticipates that the resulting price for MACE software will be fair and reasonable if the government intends to solicit it to small and other than small businesses. This determination will be based on adequate price competition among the IGCE and vendor quotes received through source sought VIA NASW SWEP. IGCE is estimated at $43K, while the quotes submitted by multiple small business vendors on their own resulted in the lowest one estimated at $109K, which is a 153.5% increase. Utilizing this brand name specification ensures the continued integrity of existing live virtual constructive training architecture at JBSA, preventing mission disruption. Price reasonableness will be determined in accordance with RFO 12.204(a) and R-DFARS 212.204 (Attachment 2 & 3).

6. **Action taken to Preclude Future Brand Name Awards:** To preclude the need for future brand name awards, the 502 CONS and the requiring activity will continuously monitor the commercial marketplace for emerging MACE software. Prior to subsequent acquisitions, the team will conduct updated market research to determine if other manufacturers have developed non-proprietary or open-architecture components that are fully inter operable with the existing infrastructure. Until such compatible alternatives become available without causing a substantial duplication of costs or avoiding existing warranties, the Government will continue to maximize business competition by restricting requirements to the solicitation via a brand name requirement to small and other than small businesses.

7. **Contracting Officer's Certification that the Justification is accurate and complete:** As evidenced by my signature below, I certify that the justification is accurate and complete to the best of my knowledge and belief. In accordance with RFO 6.101 with a restriction on brand name IAW RFO 6.104, the government shall procure the software via other than full and

open competition for all small and other than small businesses and shall be solicited via SAM.gov.

RAMON MARRUFO, GS-13, DAF
Contracting Officer

3. Attachments:

1. AFI 17-101 - CIPS
2. IGCE
3. Vendor's Quote