# Sole Source
# Written Determination

**Agency Identification:** The Citadel, Department of Physics

**Description of the agency need that this procurement fulfills:**

Over 20 years ago, The Citadel engaged in competitive procurement for hardware and software needed to execute its physics lab curriculum and support innovative development in upper-level physics classes. A contract was issued to Pasco Scientific for this procurement based on the determination that their equipment and software was the best fit for the Citadel mission. Since this initial acquisition, the Citadel Physics Department has continued to work with Pasco to acquire items needed to replace damaged or failed items. The items on this procurement are to replace individual items that have failed and therefore need to be from this vendor to interface appropriately with our existing Pasco hardware and software. Replacing any of these items with equipment from another vendor would require substantial investment in funds and resources to accommodate a replacement that could be engineered to work with our existing systems. The required items are proprietary to Pasco and cannot be acquired elsewhere.

**Describe the Market Based on Research Performed:**

At this time, there are several vendors who provide the hardware and software needed to execute the physics lab curriculum and development in upper-level physics classes. To select an alternative to Pasco, it would require full replacement of all equipment which would be both costly in time and money. Seamless integration with the existing equipment that utilizes our labs, and development is essential for success.

**Sole Source Vendor Name:** Pasco Scientific

**Based upon the following determination, Agency proposes to acquire the supplies, construction, information technology, and/or services described herein from the vendor named above per SC Code Ann § 11-35-1560 and SC Regulation 19-445.2105, Sole Source Procurement.**

**Description of supplies, construction, information technology, and/or services vendor will provide under the contract:**

Pasco Scientific will provide the equipment identified below to accomplish the specific missions listed:

Pasco PASPORT Digital Adaptor -Conversion of analog to digital signals interfaced to Pasco software
• Pasco Photogate Head- measures light signals interfaced to Pasco software
• Pasco PASPORT Temperature Sensor-sense temperature changes interfaced to Pasco software
• Pasco PASPORT Rotary Motion Sensor- device to sense rotary motion actions interfaced to Pasco software
• Pasco PASPORT High Res Force Sensor- high resolution force sensor interfaced to Pasco software
• Pasco Time-of-Flight Accessory- sensor to measure time of flight of projectiles interfaced to Pasco software
• Pasco Helmholtz Coils, 200 Turns sensors to measure Helmholtz waves interfaced to Pasco software
• Pasco Centripetal Force Apparatus- device for observing and studying centripetal force interfaced to Pasco software
• Pasco Small "A" Base- equipment mount for Pasco systems
• Pasco Basic Optics Light Source- basic optics light source integrated with Pasco software

- Pasco AirLink Interface- device to provide wireless connectivity for Pasco sensors.
- Pasco Voltage-Current Sensor- sensor to measure voltage and current interfaced with Pasco software
- Pasco High Current Sensor- sensor to measure high current interfaced with Pasco software
- Pasco Power Supply, 18 VDC, 5A- Power supply to provide current to Pasco equipment
- Pasco Ohaus Scout SKX Balance 2200g- balance used to provide measurements in Pasco experiments

**Explain why the described solution is the only solution that meets the agency's need and how no other identified solutions were sufficient.**

No other solution will interface seamlessly with Pasco proprietary hardware and software.

**Required Signatures:**

**Prepared by:** _Dr. John Bradham (signature)_           Date: 08_/_13_/2025__

**Printed Name:** Dr. John Bradham           **Title:** Lab Manager, Department of Physics

**Approved by:** _____           **Approval Date:** ___/___/_____

**Printed Name:**           **Title:**