

Contact: Andrea Anania

### **IOWA STATE UNIVERSITY EQUIPMENT PURCHASE**

**Actions Requested:** Consider ratification of the Executive Director's June 4, 2010, emergency approval for ISU to purchase a Large Scale Virtual Reality Display and Tracking System (LSVRDTS) for a total of \$3,172,525.

**Executive Summary:** Equipment purchases at the Regent institutions costing more than \$1 million are required by Board policy to be approved by the Board of Regents. The Executive Director may approve emergency purchases exceeding \$1,000,000 to be followed by Board ratification.

#### **LARGE SCALE VIRTUAL REALITY DISPLAY AND TRACKING SYSTEM (LSVRDTS)**

##### Description of the Equipment

ISU's Virtual Reality Applications Center (VRAC) is requesting approval to purchase a LSVRDTS, which is referred to as the Mixed Reality Adaptive Generalizable Environment (MIRAGE) system.

The MIRAGE system is comprised of multiple high resolution video projectors, specialized screens, tracking devices, stage components, and computer control systems. It is designed to simulate ground combat experience. A large wall provides a panoramic interactive background and mobile display modules, which interactively simulates people or devices in vehicles, sections of buildings, obstacles, etc.

##### Justification of the Need for the Equipment

The University reports that this equipment is needed to meet the requirements associated with special appropriations provided through the U.S. Army and U.S. Air Force. An instrument configured for this specialized application is currently not available at ISU.

##### Any Known Alternatives to the Equipment Proposed

The University reports that the MIRAGE system will be customized and the only instrument capable of meeting the unique requirements of the U.S. Army and U.S. Air Force.

Specifications for the MIRAGE hardware were competitively bid under the formal bid process as required by Regent policy. ISU will develop the operating software.

The offer determined to be the most compliant bid to meet the needs of the VRAC was submitted by Mechdyne, a company located in Iowa.

##### Estimated Cost and Source of Funding

The University reports that the estimated cost of the MIRAGE system will be approximately \$3,172,525, with the final cost depending on whether various options are added or deleted and during negotiation of the final contract. Sources of funding include special appropriations provided through the U.S. Army and U.S. Air Force; \$1 million is from an Air Force appropriation and the balance is from two Army appropriations.

**Board Policy:** Chapter 7.06B(12) of the Regent Policy Manual requires that:

- ◆ Equipment costing more than \$1,000,000 must be submitted to the Board for approval; and
- ◆ Requests submitted to the Board Office for approval must include the following information:
  - ◆ Description of the equipment;
  - ◆ Justification of the need for the equipment;
  - ◆ Any known alternatives to the equipment proposed; and
  - ◆ Estimated cost and source of funding.