

Improved Environmental Control Units (IECU)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Provides standardized environmental control capabilities to the Department of Defense (DoD) in support of national security.

DESCRIPTION

The Improved Environmental Control Units (IECU) program consists of four standard sizes: 9,000 BTUH (British thermal units per hour), 18,000 BTUH, 36,000 BTUH, and 60,000 BTUH — all in five configurations. Once fielded, these systems will provide critical cooling to vital command, control, communications, computers, and intelligence (C4I), and other military electronic and support systems equipment for the U.S. Army and the wider DoD. The IECUs:

- Use R-410A refrigerant, a commercial industry standard that is compliant with all current environmental legislative requirements
- Increase reliability and decrease weight and power consumption compared to current military standard systems
- Leverage current industry standards while being ruggedized for military environments

- Are organically supportable
- Are fully operable up to more than 125 degrees Fahrenheit
- Provide quality cooling, heating, and dehumidification for command posts; command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems; weapon systems; and other battlefield support equipment while using a non-ozone-depleting refrigerant

Additional improvements to the Warfighter in theatre are the IECU's soft start and limited inrush current; nuclear, biological, and chemical compatible and electromagnetic interference protected interface; fully embedded diagnostics; automatic safety controls; and remote control capability for operations that require users to be out of the direct area.

SYSTEM INTERDEPENDENCIES

None

PROGRAM STATUS

- **1QFY11-4QFY11:** 60k IECU Full-Rate Production (FRP)
- **1QFY11-4QFY11:** 9/18/36k IECU Engineering and Manufacturing Development (EMD) Phase II

PROJECTED ACTIVITIES

- **1QFY12-3QFY15:** 60k IECU Full-Rate Production (FRP)
- **1QFY12-2QFY13:** 9k/18k/36k IECU Engineering and Manufacturing Development (EMD) Phase II
- **2QFY13:** 9k/18k/36k IECU Milestone C—Enter Production and Deployment
- **3QFY13-4QFY14:** 9k/18k/36k IECU Low-Rate Initial Production (LRIP)
- **4QFY13:** 120k IECU Milestone B—Enter Engineering and Manufacturing Development (EMD)
- **1QFY14-4QFY16:** 120k IECU Engineering and Manufacturing Development (EMD)

ACQUISITION PHASE

Technology Development

Engineering and Manufacturing Development

Production and Deployment

Operations and Support

Improved Environmental Control Units (IECU)

FOREIGN MILITARY SALES

None

CONTRACTORS

9,000, 18,000, and 36,000 BTUH IECU

(EMD Phase II):

Mainstream Engineering (Rockledge, FL)

60,000 BTUH IECU:

DRS-ES (Environmental Systems)

(Florence, KY)

