



Screenshot of the JCMS application highlights some of the data produced and curated by the AFCS Program. A standard CMU barracks building is displayed in a 3D model walkthrough, construction quality .pdf plans, and editable 2D AutoCAD files.

Contained within the application are more than 762 individual, standardized, UFC, and doctrinally compliant initial and temporary facility designs, all fully customizable by the user to fit their individual project needs. These detailed designs, come with a National Stock Number (NSN) complete Bill of Material (BoM), manpower/labor estimate and cost. The system also allows the user to create site-adapted customizations to include editing designs, BoMs, labor estimates, and project schedules.

JOINT CONSTRUCTION MANAGEMENT SYSTEM (JCMS)

Initial and temporary troop constructible designs at your fingertips!

What is JCMS and Why Should You Care?

In 1951, Headquarters of the Army tasked the Office of the Chief of Engineers to develop a system to facilitate contingency construction planning and serve as a guide to field units. Over time this evolved into the Theater Construction Management System (TCMS). The Air Force also adopted this system and referenced it in many of its contingency publication. Overtime, TCMS became an outdated system with many inaccurate designs and costs.

In 2013, the Joint Operations Engineer Board (JOEB) collectively voted and agreed to develop a new Joint Construction Management System (JCMS) to replaced Theater Construction Management System (TCMS). The US Army Corps of Engineers (USACE) Army Facilities Components System (AFCS) Program was identified as lead in development of JCMS, partnering with the Navy, Marines and Air Force to ensure a fully joint collaboration. Currently, there are 762 individual standardized, Unified Facilities Criteria (UFC) based and doctrinally compliant initial and temporary facility designs in

JCMS. Through consistent review and revalidation of construction designs and data, the AFCS program reported it has decreased the average facility cost from \$472,9083 to \$390,323 (17.5% decrease) and average man-hours per facility from 6,272 to 3,368 (46.3% decrease).

JCMS software provides a standardized joint tool to manage initial (up to 6 months), temporary (up to two years), and semi-permanent (up to 10 years) contingency construction projects that comply with UFC 1-201-01 Non-Permanent DoD Facilities in Support of Military Operations. JCMS can be accessed either online or at a stand-alone computer via the software. It provides drawings for troop labor construction, reports on required manpower/labor and BoM for every facility type available in its database down to the construction activity. These construction documents and BoMs are customizable to meet specific requirements and can be exported to Microsoft project. AFCS Program states this provides an individual designed facility that can save the warfighter between 40-150 man-hours of design, estimating, scheduling, and ordering time.

Today, only the Army, Navy and Marine Corps have design agent teams working to input designs into JCMS. The Air Force Civil Engineer Center (AFCEC) is currently working with the 235 CEF Air National Guard S-Team to stand up the Air Forces first design agent team. The goal is to have the team fully trained to begin inputting designs into JCMS by mid-year FY21, providing total force integration in the designs offered in JCMS. This joint effort provides the Air Force with cost and time savings on initial and temporary contingency construction in addition to Basic Expeditionary Airfield Resources (BEAR) assets.

The integration of JCMS into the Air Force's contingency planning and development workflow provides an additional tool that combines functional user requirements with the Red, Blue and Sand Book for Expeditionary Civil Engineer Squadrons (ECES) and RED HORSE squadrons in their Area of Responsibility (AOR). JCMS is a system that gives Joint engineers secure access to efficiently planned and designed contingency facilities and infrastructure. For more information about JCMS contact the AFCEC Reachback Center. afcec.rbc@us.af.mil