

# JOINT ENGINEER OFFICER COURSE

By Mr. Robert B. McFarland, Jr.

*"We continue to improve joint professional military education to provide more joint experiences, education and training to warfighters—junior and senior officers and noncommissioned officers. At the senior officer level, a modified capstone course will increase the emphasis on jointness while preparing senior officers to lead joint task forces and other joint operations. For junior officers and noncommissioned officers, incorporating joint education and training early in their careers ensures future leaders will more effectively integrate tactical operations with interagency and multinational components."* (The National Military Strategy of the United States of America 2004. A Strategy for Today; A Vision for Tomorrow)

*"Early planning efforts within the C-7 (engineer section) were hampered by a lack of knowledge of capabilities, requirements, and limitations of other service and coalition engineer forces, particularly among junior members of the staff. Action officers are often junior field grade or company grade officers who do not have sufficient joint engineer education or experience to be effective at the beginning of their assignment."* (An after-action review comment from Operation Iraqi Freedom, Engineer, January-March 2004, "Joint Engineer Training, Joint Officer Education of the Future," pp: 19.)

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## Engineer Capabilities Study

The final report of *The Engineer Capabilities Study: A Path to the Future*, 30 September 2002, identified that joint task force (JTF) engineer staffs are comprised of several 0-4 through 0-6 officers who may or may not have been exposed to joint professional military education (PME) and many 0-3s who have not. It further identified that most joint PME has little or no engineer content. Consequently, most officers assigned to JTF engineer staffs have little or no understanding of engineer capabilities outside of their own service and experience a steep learning curve before they are able to function effectively in a joint engineer environment. The report recommended that a 3- to 4-hour joint engineer orientation be presented at service engineer advanced courses (for senior 0-3s), followed by a Web-based, self-paced instruction program.

## Proposal

The Joint Operational Engineering Board (JOEB) is the premier advisory group and proponent for operational engineering issues. Its charter is to oversee efforts to enhance joint engineer processes and capabilities to meet combatant commander's requirements. In an effort to address the JTF staff officer education issue, the board proposed a more formal joint officer education for the targeted engineer population. Joint education for officers already exists in limited amounts at engineer officer service schools, but there is no room for additional schooling without deleting other required subjects. The board's recommended solution was to establish

a stand-alone course that would be more rigorous in its joint education and would better focus and prepare officers for assignment to a joint engineer staff. The proposed course is titled the *Joint Engineer Officer Course (JEOC)*.

## Course Development

The JOEB assigned the JEOC development task to its Doctrine and Training Working Group. After extensive coordination and months of hard work, the working group and other key engineer personnel from all the services met at Fort Leonard Wood, Missouri, for a Training Developers Conference in the fall of 2005. At the conference, the combined efforts of the engineers resulted in a refined concept and course outline for the first JEOC pilot course that will be executed as a two-phase course in the spring and summer of 2006 at Fort Leonard Wood.

## Distance Learning Phase

The 48-hour distance learning (DL) phase, which begins in March 2006, consists of eight modules with associated lessons that introduce students to—

- National security strategy development.
- Joint operations planning.
- Joint engineer capabilities.
- JTF engineer operations and planning.
- Engineer staff organizations and staff responsibilities within a combatant command.

## **Resident Phase**

The 32-hour resident phase, scheduled for 19 – 23 June 2006, consists of eight seminars aligned with six practical exercises (PEs) (27 hours). The PEs are built around JTF scenarios that require students to develop and demonstrate an understanding of different service engineer capabilities and the common functions and responsibilities of a JTF engineer staff officer at the senior 0-3 and junior 0-4 grades. In addition, other PEs include:

- Task organizing engineer forces.
- Understanding the development and expectations of the engineer support plan.
- Understanding the Joint Engineer Planning and Execution System (JEPES).
- Understanding the JTF boards that an engineer staff officer is a member of.
- Understanding the functions and processes involved in financing, contracting, base camp development, and coordination with host nation and nongovernment organizations.

Upon completion of the JOEC, the student will be able to—

- Describe joint operations, joint warfare, and the joint planning system.
- Describe, comprehend, and apply joint engineer doctrine.
- Describe, comprehend, and apply joint engineer planning (to include the JEPES) by using scenarios, historical examples, case studies, and PEs.
- Describe and comprehend service engineer capabilities and support requirements, to include operating as part of a coalition.
- Describe, comprehend, and apply the strengths, effects, and basic doctrinal employment concepts of service engineers.
- Describe, comprehend, and apply employment principles for using service engineer capabilities in support of joint-and service-engineer requirements.

## **Goal**

**T**he JOEC is designed as a joint operations introductory course for junior leaders at the senior 0-3 and junior 0-4 levels, as well as for specified noncommissioned officers at the rank of senior E-7 through E-9 and others associated with joint engineer operations. The goal of the JOEC is to provide selected engineer officers with a basic understanding of the capabilities and organization of engineer forces of the U.S. military to better prepare them for duty on a staff in support of the JTF engineer and joint force commander. The course will provide enough grounding for students to understand the responsibilities of a staff officer assigned to the joint engineer staff section of a JTF. The major focus of the course is to introduce students to joint doctrine, planning and operations (specifically engineer operations), and the type of engineer staff positions and associated products engineers are required to develop.

## **Summary**

**T**he JOEC is a course designed by engineers for engineers. The pilot course will bring together engineers from all the services, who will test the lessons and materials for applicability in the current operational environment, as well as for future application to meet the challenges faced by engineer forces of the U.S. military in the 21st century. All engineers are strongly encouraged to monitor the progress of the JOEC as it develops and provide insight based on their personal experiences while working as a joint engineer staff officer.

Questions or comments pertaining to the JOEC can be addressed to the Training Integration Office, United States Army Engineer School. The point of contact is <[robert.mcfarland@wood.army.mil](mailto:robert.mcfarland@wood.army.mil)>, (573)-563-5402.



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