

Proceedings of the 3<sup>rd</sup> Annual World Conference  
of the Society for Industrial And Systems Engineering,  
San Antonio, TX, USA  
October 20-22, 2014

## Optimizing BOLC Scheduling for Commissioning Second 2LTs in the United States Army

A. Kunkle<sup>1</sup> and E. Schott<sup>2</sup>

<sup>1</sup>Systems Engineering Major with Honors, United States Military Academy, West Point, New York USA

<sup>2</sup>Academy Professor, Department of Systems Engineering, United States Military Academy, West Point, New York USA

Corresponding author's Email: [elizabeth.schott@usma.edu](mailto:elizabeth.schott@usma.edu)

**Author Note:** 2LT Adam Kunkle graduated from the United States Military Academy at West Point, NY, in May 2014, earning a Bachelor of Science with Honors in Systems Engineering. LTC Elizabeth Schott is an Academy Professor in the Department of Systems Engineering. Either can be reached through the Department of Systems Engineering, United States Military Academy, West Point, NY 10996, (845) 938-5578.

**Abstract:** This project addresses issues concerning the current method of scheduling and filling Basic Officer Leaders Course slots for new second 2LTs. The goal of this project was creating a simple model that scheduled BOLC windows for newly commissioned second 2LTs while optimizing costs to the Army and meeting class diversity and dispersal constraints originally set forth by Army Human Resources Command. This model focused on USMA, OCS, and ROTC commissioned officers who attended BOLC and reported to their new units afterwards, with no additional training involved. The model used in addressing this problem was a pure integer programming model run using the Solver add-in of Microsoft Excel. This model provided a flexible tool for addressing future BOLC scheduling demands in an Army facing reductions in force and budget capabilities.

**Keywords:** BOLC Scheduling, Discrete Event Simulation, USMA Pilot Program.