

Officer Accessions Flow Timing Improvement

Vertical

Manufacturing	Pharmaceutical	Healthcare	Portfolio	Logistics	Financial	DoD	Business
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Genre

Case Study	Project Review:	White Paper	Technology Overview
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Author

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Client



Situation

In 2006, the Army replaced the Cold War-era linear readiness and deployment model with ARFORGEN (Army Force Generation) a “supply-based model” that builds unit readiness over time. The Army has systems for organizing, staffing, equipping, training, deploying, sustaining, modernizing and mobilizing – however, these systems are not, in themselves, self-synchronizing.

Each year, the Army accesses (graduates and assimilates into the Army) more than 7,000 officers from across several commissioning sources - West Point, the Reserve Officer Training Corps (ROTC), and Officer Candidate School (OCS), to meet the national security needs of the Army and the Nation. After graduation and commissioning, each of these officers negotiates a customized training pipeline to complete their military specialty technical training. Upon completion of this training, they join their assigned unit during its current readiness cycle.

As the Army made the recent transition to the new ARFORGEN readiness model, it became evident that a greater level of precision was necessary in placing newly commissioned officers into deploying units. Due to training allocation and scheduling business rules, there were examples of Lieutenants, assigned to lower priority units, attending specialty training well before Lieutenants assigned to higher priority units. U.S. Army Accessions Command requested development of an enterprise-level model that could highlight current process inefficiencies and facilitate “what if” analysis of revised policies or adjusted business rules.

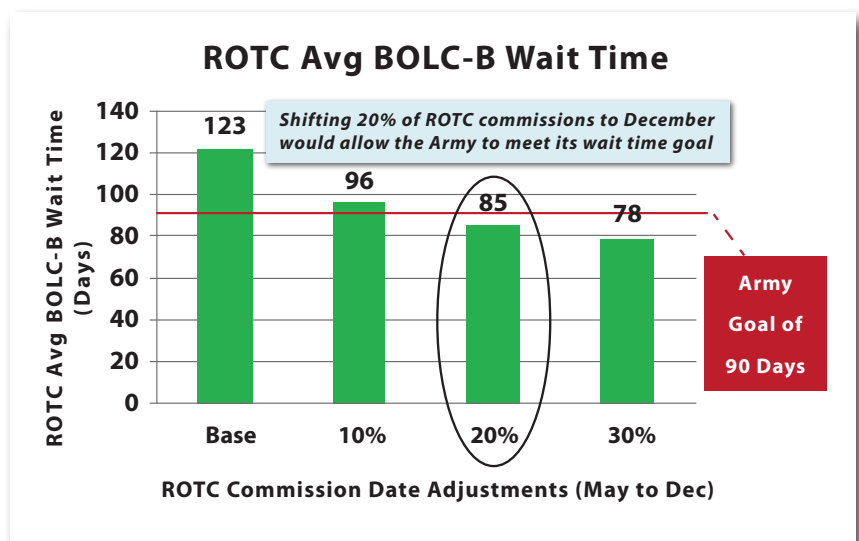
Objectives

U.S Army Accessions Command requested development of a model of the current officer accessions flow to both highlight the current process and facilitate exploration of the following research questions:

- Can changes in training capacity improve key enterprise performance metrics?
- Can adjustments to course allocations and scheduling business rules improve key enterprise performance metrics?
- What impacts do adjustments in the accessions commissioning date profile have on key enterprise performance metrics?

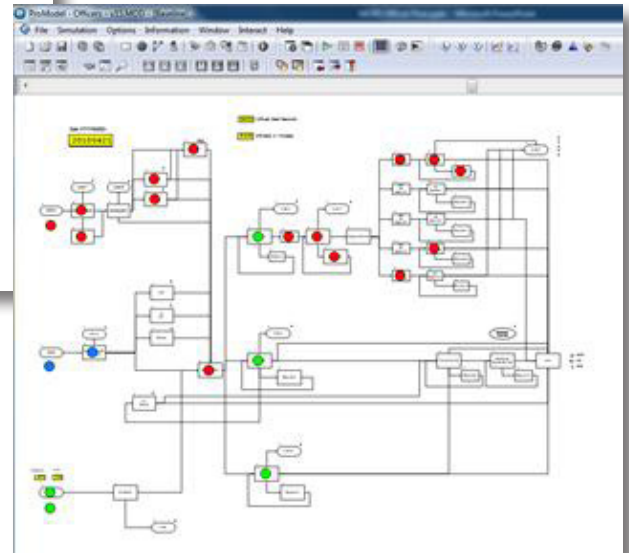
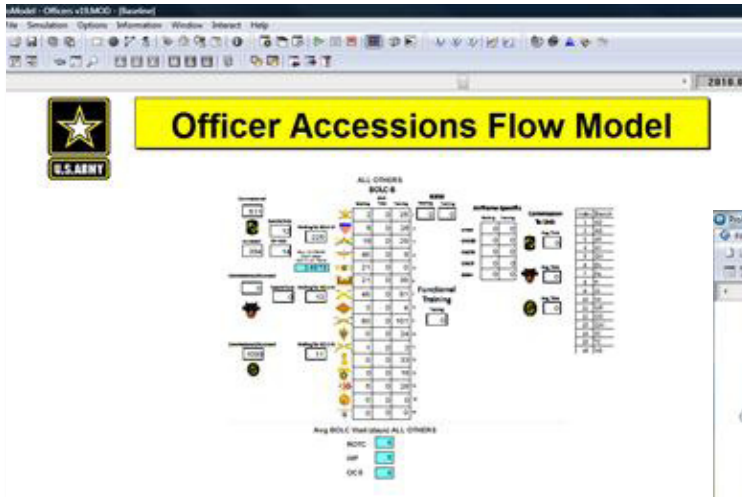
Results

- Making a 20% shift in ROTC commissions from May to December will allow the Army to meet its goal wait time of 90 days.
- 60,000 man days in idle time can be saved by a 5% increase in capacity for training sources.
- Identified changes such that unit priority Basic Officer Leadership (BOLC-B) training scheduling can get ROTC officers to their units 2.5 weeks earlier.



Solution

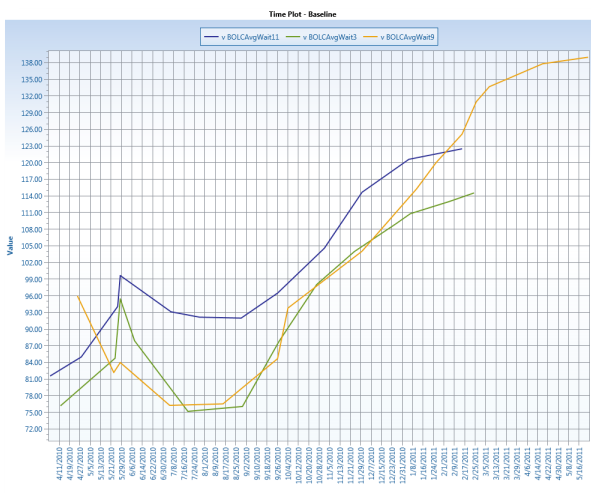
The Department of Systems Engineering at West Point developed a discrete-event simulation to replicate the flow of officers from their commissioning source to their first unit of assignment. The Officer Accessions Flow simulation model provides insight into specialty training wait times, time from commissioning to first unit of assignment (FUA), and unit manning profiles as they relate to established readiness aim points.



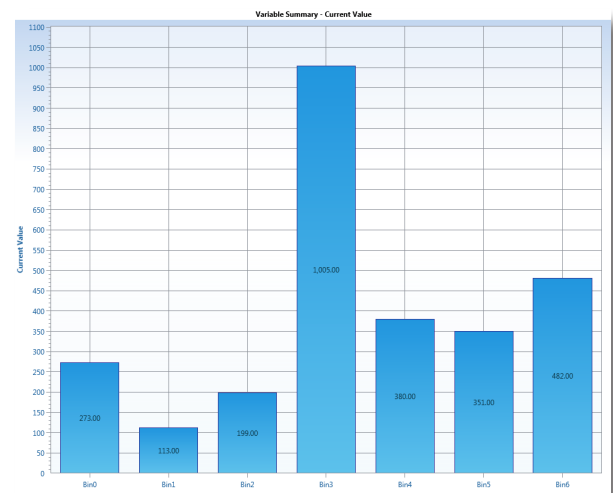
The model is comprised of a series of Excel macros, updateable Excel input files, and a ProModel© simulation. The model provides a tool for decision makers to conduct “what if” analysis – specifically around the following five scenarios:

- FY10 Cohort (Baseline)
- Specialty Training Capacities (Scenario 1)
- Allocations of Specialty Training slots by Source of Commission (Scenario 2)
- Specialty Training Assignment Rules (Scenario 3)
- Graduation/Commission Date distribution (Scenario 4)

A series of output tables and graphics capture the effects of these parameter changes on key stakeholder metrics of interest including: ROTC hold population, specialty training wait times, time from commission to first unit, and timing of officer unit arrivals in relation to unit readiness cycles. Example output graphs below.



Specialty Training Wait Times



Readiness Cycle Arrival Times

The views expressed herein are those of the author and do not reflect the position of the United States Military Academy, the Department of the Army, or the Department of Defense.