Implementing ARFORGEN
Implementing ARFORGEN: Installation Capability and Feasibility Study of Meeting ARFORGEN Guidelines

SERCO, Inc. 1818 Library Street, Suite 1000 Reston, VA 20190

Implementing ARFORGEN

10-12 June 2008

Presentation to Military Operations Research Society Symposium

Dr. Steven P. Wilcox (presenter)
BG Dorian Anderson, USA (Ret)
Ms. Pamela Blackmon
Mr. Hal Hogan

Mr. Paul Coviello
Mr. Doug Rogers
Mr. Brendan Curvey
A new force generation model
- Promotes decentralized decision-making and redefined readiness
- Eliminates traditional division-based structure replacing it primarily with a brigade-based structure

Smaller units are designed for flexibility
- Agile, expeditionary
- Tailored to specific circumstances
  - nature of threat, climate, terrain, etc.
- Capable of rapid assembly

Builds predictability in a cyclic way of producing forces

Places new demands on the installations

Three-stage force generation cycle

Cyclical Approach, R-Day “Reset”

```
"CSA Corollary:" Every unit is focused against future mission(s) as early as possible in ARFORGEN process, then task organized into Expeditionary Force Packages
```

Implementing ARFORGEN
Study, analyze and validate the capability and feasibility of the installation infrastructure to meet ARFORGEN implementation guidelines.

Scope
- Active Component installation infrastructure
- Feasibility of 30-day reset period

Area of focus
- Logistical capability to move Soldiers out and others into the reconstituted unit according to Army standards
- 30-day window for re-staffing and the move into permanent housing at the start of a unit lifecycle

- 70% Unit Reset of a 7,000 Soldier unit (as baseline)

- Current resources (July 2007) as baseline

- Resetting of equipment and training/readiness were not modeled

- Processes studied include check-in/out, move in/out, transportation & administration, housing maintenance, cleaning & inspection
- R-Date = time until 85% of incoming Soldiers are fully in
  - Including move into permanent housing
- Completion date: 100%
- Check-in only (requires temporary housing availability)
- Questions: Can it be done in 30 days?
  - What if a head start is allowed?
Interviews with subject matter experts
- Including the Army Staff and special staff, IMCOM and HRC

Site visits & group discussions
- Interviewed IMCOM staffs, unit leaders and garrison commanders or their representatives
- Obtained qualitative and quantitative information

Determined each base’s process steps, personnel counts and types, processing time requirements, work schedules
- Under normal conditions
  - Counts of temporary and permanent housing
  - Availability of moving teams

Soldier survey
- 486 out-processing responses, 639 in-processing responses
Process map implemented as a discrete event simulation model

Primarily networks of queues with limited service resources and hours of operation
  - Parallel and sequential relationships
  - Holding gates and release

Implemented in Java using Simkit (Arnold Buss at NPS)
Simulated installations did not meet ARFORGEN reset guidelines
- Based on resources on base at the time
- The goal is R-date at 120 days or less.
- The larger base the faster -- Bragg and Hood did the best

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Status</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hood</td>
</tr>
<tr>
<td>A- 70% Reset of 7,000</td>
<td>R-date (85%) **</td>
<td>168</td>
</tr>
<tr>
<td>Soldier Unit</td>
<td>Completion Date (100%)</td>
<td>186</td>
</tr>
<tr>
<td></td>
<td>Check-In Only ###</td>
<td>141</td>
</tr>
<tr>
<td>B-50% Reset of 7,000</td>
<td>R-date (85%) **</td>
<td>144</td>
</tr>
<tr>
<td>Soldier Unit</td>
<td>Completion Date (100%)</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>Check-In Only ###</td>
<td>95</td>
</tr>
<tr>
<td>C-30% Reset of 7,000</td>
<td>R-date (85%) **</td>
<td>122</td>
</tr>
<tr>
<td>Soldier Unit</td>
<td>Completion Date (100%)</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Check-In Only ###</td>
<td>94</td>
</tr>
</tbody>
</table>
Fort Bragg Rate of Progress

- Check-in is rapid
- Full move-in takes time and starts happening 30 days into the reset period.
Example—

The most congested queues are

- Transportation officer
- Movers
- CIF clerk
Biggest resource utilization issues

- Transportation officer
- Movers
- Maintenance
- Contractors
Quantitative

- The simulations of Unit Reset at Hood, Bragg, Campbell, and Jackson show that the criterion of 85% of the unit’s personnel fully in-processed is not doable within the 30-day objective
  - Based on current staffing and resource levels as well as processing times under current procedures
- Smaller bases have a longer turnaround time than the larger ones
  - Due to constraints and bottlenecks, limited installation and community resources

From interviews & surveys

- All installations are different
- The in/out process lacks rigorous definition
- Massive skepticism concerning the ability to perform rapid, large-scale base drawdown and reconstitution given current resources

Get the report on DTIC

- “Implementing ARFORGEN: Installation Capability and Feasibility Study of Meeting ARFORGEN Guidelines” (ADA471909)