## Top 10 Factors Considered in Design of Mobile Tracking Mechanisms for Equipment Upgrade/Repair Simulations

06/21/2016

Mobile operational awareness of equipment supply routes is a function of capability used to track equipment transitioning from active use to upgrade/repair reset operations. Equipment Tracking provides visibility between multiple staging points responsible for equipment transfer.

Goals of equipment tag/track include provision of intermediate solutions for real-time, mobile tracing of equipment throughout reset process. Reset equipment vision is critical to operational-level distribution administration by dispatchers designed to ease burden of linking strategic resources with tactical requirements. Tracking equipment is integral to reset success plans to address execution actions by field units & performance models.

Application of critical Dispatcher actions must be applied for designated reset equipment transitioning from field units destined for follow-on mobile operations or designated depot & field-level upgrade/repair locations. Solutions for long-term tagging of equipment must be identified & implemented by dispatchers in accordance with established priorities of the Force to include reset priorities such as new procurement & depot/field sustainment activities.

Reset service/support contract models have been created for dispatch use to assess forward-looking reset performance estimates for supplemental mobile mission requests. Models provide reset administrators with tools to assess future service/support contracts utilised for mission requests & equipment cache levels focused on logistics information for smart planning. Models must be designed with user-specific requirements to estimate performance of mobile equipment reset.

Models use equipment reset strategies & procurement of service/support contracts estimated to determine total reset requirements. Dispatchers use well-defined assumptions so model is capable of establishing potential reset utility by summation of individual unit mission expenditure so total reset value can be determined, under common operating pictures with reset button function provided with sustainment factors.

Assumptions include majority of equipment will retrograde from mission theatre, subject to actions associated with reset. Equipment status/requirements must be updated & time-stamped. Dispatchers also assume current level of baseline service/support contracts for depot-level upgrade/repair does not change & service/support contract value is based on current depot source/location, usually significantly lower than procurement expenditure. Like Item Procurement, Similar Item Procurement, New Item Procurement & Local Item Procurement fields are closely matched to Procure fields established in utilised models—sustainment fields line up nicely as well.

Equipment Upgrade/Repair Simulation Tools are used to estimate when reset actions will be

complete, what reset expenditure will be over time & how reset actions will affect readiness. The simulation reflects all known key installations staging locations charged with routing equipment for retrograde & maintains supplier connection capabilities/characteristics determined during contract contact episodes established by dispatchers to support planning/execution of retrograde & reset operations.

Graphically depicted flow process maps & automated simulations assist in timely identification of routing choke points, service/support opportunities for mobile operations & smart choice of upgrade/repair locations so dispatch processes are lined up with goals for realisation of mission value streams. Equipment condition evaluations can determine if field-level repair is possible, or it may turn out equipment is too badly damaged to be useful in future operations.

- 1. *Modernisation:* Replacing legacy equipment with new, updated & different capabilities not in existence before.
- 2. **Reconstitution:** Actions beyond reset, taken during or after operational use, to repair and/or upgrade mobile capability to full-spectrum operational readiness. Force reconstitution spans activities from typical sustainment to reorganisation & regeneration of units to redeployment status.
- **3.** *Redeployment:* Transfer of forces & materiel to support requirements of new installations, or to return equipment to mobilisation assessment stations for reintegration and/or out-processing.
- **4. Redistribution:** The utilisation of logistics resources after Transfer of Authority for realisation of mobile mission requirements. The logistics resources are designated during downtime to become available when mobile missions are set in motion.
- **5. Reset:** Actions taken to restore units to desired level of mobile capability required for future missions to include supply activity designed for restoration to enhance capabilities of prepositioned equipment stressed beyond capacity for upgrade/repair.
- **6.** Specified Standards: Upgrade/repair & supply activities to include field-level sustainment with centralised dispatch techniques up to specified standards to include procurement, testing, evaluations & recapitalisation.
- **7.** *Technology Insertion:* Existing equipment enhanced by insertion of new technology or restoration to original conditions utilising logistics strategy to involve reconditioning & replacement for field-level losses.
- 8. *Use in Theatre:* Equipment redeployed from theater, remaining in theater, or anticipated for use in theater to include recapitalisation/restoration of units to desired level for future missions based on condition evaluation status.
- 9. Revitalise: Actions taken beyond reconstitution for full equipment recovery & increased capability to include future modernisation & re-stationing to meet entire spectrum of future

mobile operations.

10. Urgent Action: Equipment determined critical for mission requirements must be in statement evaluation not already included in deployment allowance status or available at existing installations when expedited fielding is required based on urgent mobile requirements.