Top 10 Equipment Condition Monitor Status During Sustainment Phases Trigger Supply Line Connection Component Delivery

10/01/2016

Dispatchers control administration of operational parameters to result in extension of the equipment service life beyond expectations & arrive at a plan for DoD to deal with changes in operational tempo with goal to define work order strategies in terms of controlling mission requirements & expensive sustainment operations. The bottom line is to reduce number of equipment failures by monitoring condition indices to predict problems & enable remedial actions to be taken to achieve availability for critical mission tasks. Even while upgrade/repair operations are usually performed by DoD at individual installation levels, a successful strategy must take a global approach to the entire system; addressing real-time supply line connection systems integration & trend evaluation.

Dispatchers describe impacts of urgent equipment upgrade/repair processes to result in unpredictable performance at the expense of DoD objectives as evidenced by high downtime, supply line connection materiel disruptions, upgrade/repair time, deficits in operational tempo associated with the loss of function & equipment component replacement requirements in work orders. Operational Downtime affects productive/functional capability of equipment, resulting in a reduction of availability, increasing operational expenses per unit performance indication episode.

Dispatchers report instances DoD command becomes inundated with supply line connection information, choosing to not utilise emerging useful aspects of technology solutions offering information to achieve considerable time of value in executing field-level missions. Report generation becomes a time-consuming task for DoD of sifting through piles of unsorted work order information to find relevant measures for achieving operational availability. With over-stretched installations absorbed in day-to-day functioning of equipment upgrade/repair simulations, DoD is tempted to put off monitor/entry until reports are almost due or when upgrade/repair simulation results must be sent out, compromising potential for operations to succeed under increased demand signals during surge contingency scenarios.

Dispatchers create systematic & responsive work order approaches to equipment upgrade/repair simulations designed to mitigate competing sets of risks to availability for missions. Accurate, up to date information about condition enable predictions to made & acted on by DoD. With information collected at the right time, supply line connection schedules can be immediately updated to react to the latest trends. Real-time condition monitoring systems deliver better sustainment results, while still ensuring supply line connections remain reliable & efficient. The dominant factor is often the organisational challenge of responding effectively to a changing situation, not technical ability to detect it in the first place.

Dispatchers assess potential for work orders to use changed equipment condition in

determination of when an operational failure is likely to happen. For example, as component of operating life progresses, requirements for upgrade/repair are bound to occur. It becomes immaterial what the reasons are for performance deficits; fact is that equipment can no longer meet the original function for DoD requirements and/or its level of performance falls. Detecting deficits in the condition of items serves as advanced warning that supply line connection updates are required. If changes in performance level monitors can be detected in advance, ways & means to forecast future operational availability will have been realised.

Dispatchers observe condition/performance of equipment from conclusions drawn by the monitoring system, and all subsequent supply line connection operational decisions must be based upon receipt of accurate information in work orders with the right properties measured from the outset. If systems are designed to collect/compare information describing operational tempos affecting performance & manner of its operation, DoD will have a much wider context within which to judge current and future condition. Monitoring system recommendations are only as strong as speed of information collection/transfer, critical properties essential to availability.

Dispatchers combine/integrate multiple work order approaches & principles to equipment upgrade/repair operations. DoD has demonstrated decent understanding of principles, techniques & policy for achieving availability in isolation, but true organisational change will only be realised when requirements for teamwork between divisions & capacity for creative assessments are implemented. Several common principles are found at the core of each monitor design. Processes must capture information to determine current state of equipment components, flagging early warnings of problems & updating results of monitoring into a central registered source of verification. Decision support must allow for best course of supply line connection action to be identified, based on the latest operational information, as well as implementation of strategy for inspection & sustainment.

Dispatchers evaluate many factors when selecting and prioritising conditions to monitor such as the work order frequency schedule, determination of equipment components to be selected & what actions must be taken by DoD. To make the process simple, equipment condition monitor candidates are prioritised based criticality assessments aimed at identification of components have the greatest effect on availability if they were to fail. Decisions based on condition/performace fault diagnosis & trends predicting problems become critical for planning & control of supply line connection updates critical to upgrade/repair operations.

Dispatchers administer installation only work order requirements to monitor equipment components condition systems & quality of supply line connections. DoD is likely to be content with availability information that is stored during operations and downloaded at a later date, it can probably manage with a simple equipment upgrade/repair information system with on-board monitor of mission condition/performance indices. Although system alerts are not real time in this case, areas for concern are marked & stand out when information is compiled, alerting command about equipment components to require attention.

Dispatchers demonstrate typically high demands for real-time work order information to monitor progress of equipment upgrade/repair operations designed to determine whether corrective action

is needed to compensate for slips in availability schedules. Information about current status of equipment components greatly enhance opportunities to change supply line connections on the fly. Upgrade/repair schedules can be rebuilt at central stations & transit to appropriate installations.

Dispatchers detail requirements for frequency of reporting back to the central station responsible for building work orders-- another issue that distinguishes system effectiveness. Most installation systems are now moving toward exception reporting, whereby an equipment component only reports into the central station when it is outside pre-established on-time condition/performance indices parameters, with monitor information collected at an interval established according to operational tempos. Times for individual supply line connection pick-up could be pre-established with systems employed at installations complete with internal controls to find out where and when actions to increase availability are required.

Dispatchers notice equipment upgrade/repair simulation factors contributing to well-designed work orders are not clear cut & defined within current DoD protocols responsible for supply line connections establishment. It might be perfectly acceptable for different instances of the same equipment component type to perform within widely defined range provided it does so consistently. In these cases, absolute availability models are usually too restrictive to add value. Assuming upgrade/repair simulations have been set up correctly from the outset, the key aim of monitor design solution is to detect, categorise and report changes in mission effectiveness. No two equipment components are set up alike & monitor systems must ensure the right parameters are set up within allowable tolerances & remain stable, critical steps forward to take by DoD.

Dispatchers experience equipment upgrade/repair instances when monitoring systems detect a change in the state of equipment condition to require immediate intervention. DoD must be certain availability information signals are communicated to work order builders in the form of a system alert as soon as possible, to the right recipient, using the right medium. To ensure timeliness of supply line connection response & minimise the chances of additional problems, systems must detect/report operational changes as close to the occurrence as possible. At minimum, the alert message should contain equipment component identity, date/time monitor picked up change occurred with clear description of events & confidence measurement of the diagnosis.

Dispatchers conclude equipment upgrade/repair monitoring systems are powerful tools for DoD to implement so operations can be protected to maximise availability, reliability & performance of the Force. In short, making equipment components work harder & smarter and allows for the delivery of greater value in combination with both existing & new work order technologies to produce an integrated repair/upgrade simulation. Effectiveness of supply line connections in providing mission-critical components is rooted in strong design & this is particularly true of equipment upgrade/repair simulations. A well-implemented system can impact every part of an organisation, increasing operational uptimes, reducing problems associated with sustainment & enhancing reputation of the unit.

1. Baseline work order comparison studies of opportunities for new equipment condition/performance requirement assessments must updated as changes occur to identify areas to establish sustainment support for design modifications.

2. Updates to upgrade/repair work orders must be identified & sourced for each modification to phase & schedule. Design trade-off reviews must be enacted as design/tech changes for possible introduction of new processes for equipment reset goals.

3. Equipment upgrade/repair work orders must be adaptable as programmes progress. Efforts must be responsive to design modification timelines to ensure accurate condition/performance assessments reflective of current configurations.

4. Equipment upgrade/repair work order plans must continue to identify, schedule & support design constraints, requirements & sustainment activities for all component sourcing phases. Each installation must enact new review & information collection processes.

5. Equipment reset approaches must continue to consider work order tech advances & put mechanisms in place to identify & consider cost/benefit of incorporation of new technologies for insertion into design processes.

6. Equipment upgrade/repair work orders must identify lessons learned from review of similar fielded programmes & must be periodically updated for application to improve condition/performance assessments & consideration of reset strategies.

7. Effective approach for equipment reset programme progression, use & update of upgrade/repair work order modifications based on in-service sustainment reviews must be in place based on up-to-date information.

8. Equipment upgrade/repair work order results must be incorporated into technical updates detailing sustainment operations & provisions must be in place to ensure condition/performance assessment requirements are not changed without review.

9. Component sourcing phase schedule plans must be reviewed/updated for use in upgrade/repair work orders & reset programmes for in-service equipment. Condition/performance assessments must continue periodically to be responsive to advances in process inputs.

10. Equipment upgrade/repair work order programmes must continue to be integral to overall sustainment approaches, including incorporation into tech updates as appropriate. Review results must update condition/performance assessments requirements based on availability schedule factors.