Top 10 Equipment Condition States Assess Implement Upgrade/Repair Service Quality Updates for Application to Materiel Only

06/01/2017

It is impossible for Site Visit Executive to be all places at all times to assess degree of Marine Corps equipment maintenance activity/performance only on basis of subjective judgment, first-hand observation, and second-hand information.

All Marine Corps equipment requires maintenance and repair during service life. Since primary mission is to maximise availability equipment so troops can productively do their jobs, the focus of organisation maintenance must be administration of best practises to minimise unscheduled incidents of repair and return equipment requiring repair to service in as little time as possible.

Performance of any equipment maintenance programme is also affected by personnel levels actions to deliver services and must reflect reasonable spans of control and channels of communication consistent with formally defined authority and responsibilities. Staffing levels should be consistent with the amount of effort required to produce desired services in a productive, efficient, and effective manner.

Work orders should be used to track all maintenance and repair services along with procedures required to monitor progress and, where necessary, to expedite completion of work. These include protocols for passing work from one shift to the next, from one technician or shop to another, and from an in-house job sites to vendor.

Procedures also are needed for following up on repairs whose completion by a mechanic or vendor is too slow and on parts whose delivery is overdue. Dispatchers opening a work order should estimate the time and services required to complete a work order, by reference to appropriate flat-rate manuals or in-house time and task standards to estimate the cost of the repair.

Work authorisation procedures must ensure appropriate controls are in place over the services and costs provided by vendors. Such controls are particularly important as equipment approaches planned replacement dates.

In order to ensure cost-effective utilisation of in-house maintenance resources and to minimise maintenance and repair turn-around time and downtime, processes should be in place for scheduling work to take place at Job Site in advance and for performing minor repairs while the troops wait to carry out mission.

Service hours and scheduling processes should be flexible enough to accommodate troop mission schedules, but also should seek to maintain a steady flow of work to mechanics and avoid peaks and valleys associated with unplanned service demands.

Procedures must be in place to distribute work to mechanics to promote high levels of mechanic productivity, efficiency, effectiveness, minimise repair turn-around time; and to assign work to specific mechanic based on an assessment of availability/skills. Additionally, priority systems are often used to identify equipment to be moved ahead in the repair queue based on importance to organisation.

Vendors may be relied upon to perform equipment maintenance and repair services for variety of reasons, including administration of in-house work backlogs; avoiding costly investments in Job Site construction, tooling, training, and staffing; to meet low volumes of service demand in remote areas or for specialty repairs; and to achieve a degree of flexibility in terms of locations, hours of service, etc. not possible with existing service system constraints and sizable investments in fixed equipment maintenance infrastructure.

Cost-effective use of vendors requires, however, that procedures be followed for 1) determining comparative cost effectiveness of performing service in house or using a vendor; 2) controlling vendor performance relative to individual service orders and ongoing service levels in the case of contract providers of services; and 3) capturing all relevant information on vendor-performed services to track equipment maintenance history/costs and provide for timely user billing via a charge-back system.

Repair quality assurance procedures are used to ensure requested services are performed properly. When repairs are not completed correctly, equipment is often returned resulting in "comeback" repairs. When they occur, comebacks are costly, time consuming and difficult, so must be tracked and followed up on.

It is important comebacks be identified and handled properly since comeback may have occurred because the initial defect report failed to clearly describe the problem. If this situation presents itself, reviews of original service request with the service operator may be in order. The mechanic may have improperly diagnosed and/or performed the repair and therefore, some retraining may be needed or parts used may have been defective and some follow-up with the supplier may be needed.

On of the best strategies in dealing with comebacks is avoiding them all together. This usually involves some form of post-repair review process. Quality checks can range from simple field-level tests, to quality checklists, and to complete observation of the repair. No matter what procedure is used, good quality programmes are integral to ensuring field-level satisfaction.

1. New, Repaired or Reconditioned Materiel fit for service issue to all field-level units without limitation or restriction

2. Serviceable and fit for issue for intended purpose but restricted to issue for training use only

3. Serviceable materiel requires or designated for test, alteration, modification, conversion or disassembly not to include items require inspection or testing prior to use

4. Materiel involves only limited expense or effort to restore to serviceable condition accomplished at its location

5. Economically reparable materiel requires rework, repair, overhaul or reconditioning

6. Materiel requires additional parts or components to complete end item prior to issue

7. Materiel determined to be not serviceable and uneconomical to repair

8. Materiel in stock suspended from issue pending condition classification where true condition is not known

9. Materiel returned from field-level use and awaiting condition classification

10. Materiel identified on inventory control record but turned over to repair job site or contractor for procurement