

Top 10 Instructions for Logistics Tools Define Work Order Framework Utilise Modern Application for Job Site Execution

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We have shaped future aircraft sustainment enterprise to examine subsystem part component commonality across weapon systems so effects of new or emerging equipment upgrade/repair simulation work order technology for subsystem Logistics strategies have potential to be evaluated by Site Visit Executive.

Logistics frameworks inform decisions about equipment product support activities, such as improving quality of supply line component dispatch or work order engineering practise. For example, framework info can inform Site Visit Executive decision making for reliable/maintain parameters by providing basis for comparison with information from previous model aircraft.

Site Visit Executive has determined Gaps exists between traditional Logistics techniques for determination of work order content and rapid purchasing processes detailed in Supply Line Connections. Balance must be achieved between providing new capabilities required for real-world, mobile aircraft tasking and resulting effects on long-term support of that capability.

Although field-level mission modeling/simulation has been used at military installations for a long time, the emphasis has always been on war-gaming simulation. We have illustrated the utility of new “Impact Proximity” work order modeling/simulation created for military aviation logistics applications.

Recent advances in modeling/simulation technology, especially in detailing supply line route connection quality for critical equipment components, have made simulation implementation easier because Site Visit Executive has created ability to quickly identify scope of work order problems, creating potential to choose appropriate Logistics model to be utilised, and execute smart solutions.

Current DoD Equipment Repair Models scenarios where future supply/support allocations tend to be extrapolated from historical aircraft mission requirements. These models are not flexible enough to predict repair work order scenarios when there are significant changes to mission requirements e.g., mobilisation

Despite best efforts to improve field-level aircraft sustain work order forecasts, Site Visit Executive remains skeptical about predicting workload growth for future maintenance & modification requirements. The size of workload or category uncertainty of aircraft sustain grows with projection of aircraft fleet utility beyond original plans for service life tasking military has typically planned for real-world, mobile aircraft operations.

As such, we have cited major deficits in established forecasting models. Site Visit Executive has

identified Logistics mechanisms for multiple factors such as new materiel consumption processes and operational functions to influence work order growth likely to emerge as aircraft fleets continue to be pushed past expected service life.

It is difficult to project cost/benefit of new Logistics/Support Operations to bottom line of executing military flight sorties. System wide work order implementation can be achieved once supply line routing connections are established for system components. Multiple types of aircraft are subject to service/support scan for equipment component commonality prospects. Site Visit Executive signs off on work orders completed with status updates.

Forecasting aircraft system component requirements typically calculate ratio of future flying hours to past flying hours for aircraft using specific part component estimates before applying ratio to historical demand for part components. We conclude this technique results in misdirected work order utilisation mostly because 1) correlation of specific parts to specific aircraft types is not accurate, 2) does not base projections on many combinations of aircraft employing part, and 3) does not incorporate influence of lengthy procurement times into future flying-hours projections.

DoD officials have been forced to recognise limitations of current policy in defining the term “work”, included in current statute mandates. Specifically, policy does not define the scope of work included in sustainment availabilities or when measuring of that work, i.e estimating the number of days needed to execute the availability, should take place. DoD officials stated efforts are underway to draft revision to policy so term “work” is defined as meaning “work for the overhaul, repair, or maintenance of fleet component.”

While the complexity of the aircraft may at first seem overwhelming to the do-it-yourself mechanic, work order design can be simplified and more easily understood by viewing the aircraft as an assembly of simpler systems, each performing its own independent functions.

This section of the manual is intended to help the beginner get started smartly with aircraft maintenance and repair. The section begins with system component Form/Function determination, a general description of the aircraft and its individual systems, followed by discussions mediated by Site Visit Executive on How to Use This Manual utilising established work order techniques.

Tips on mechanic skills and workshop practices designed to assist beginner in performing faster, complete, and more thorough work orders can be found under Getting Started. Here we describe basic tools required to execute most procedures in this manual for simple Gearbox Repair Simulation. The section ends with a quick reference guide of what to do when Gearbox requires repair, including basic troubleshooting and information on how to gauge the seriousness of a problem.

For example, once aircraft component gearbox is received at the depot maintenance facility, a maintenance request form is completed and the gearbox is logged into the work order system using standardised maintenance request template to update status. The gearbox is then moved to the appropriate back shop for disassembly, cleaning, inspection, and repair.

The back shop technician initiates work order process with an aircraft technical inspection status updates, entering design specification of the gearbox with the type of inspection—in this case overhaul. This is when the various inspection intervals are updated; i.e., initial, in-progress, and final. All repair actions associated with the overhaul are included on associated maintenance action work order status update.

The gearbox is completely disassembled and all sub-components are cleaned. This is followed by an in-depth inspection of sub-components, with any unserviceable sub-components discarded. An initial inspection would likely be conducted at this point to verify work order details assigned for determination of sub-component service potential.

Reassembly of the gearbox begins with in-progress inspections completed at critical assembly points. Any outstanding status updates to work orders are established by completing an equipment modification record. Any design specifications of replaced components are recorded on the related maintenance work order action record. All component parts replaced are captured on the maintenance request form, along with time/resources it took to complete the maintenance so Site Visit Executive can plan allocations for subsequent Upgrade/Repair Simulations.

Once the gearbox is fully assembled and all maintenance entries are completed, final inspections are performed. Updated aircraft component removal and repair/overhaul record is filled in on work order, showing zero time since overhaul. That aircraft component removal and repair/overhaul record is packed with the gearbox. If status update to work order was completed, the equipment modification record is also included.

Finally, a serviceable materiel tag is completed, signed by Site Visit Executive, and attached to the gearbox. The serviceable materiel tag reflects same information used to create the aircraft component removal and repair/overhaul record, in case critical work order information is lost.

The maintenance request is then completed, the maintenance work order is closed out, the maintenance design specifications filed, and the gearbox is returned in a ready-for-issue condition for use in Field-level operations.

We assign your scheduled maintenance requests to a single equipment, or add multiple equipment if needed. Your scheduled maintenance work requests are automatically generated in advance of their due date and are made available for assignment and review. You can even add reminders to main menu for important scheduled maintenance activities.

Either your organisation prefers highly automated rules-based system to get work order request into hands of a technician virtually automatically, or a more manual system where Help Desk Dispatchers make decisions about when and who handles a particular work order.

1. ***Create, receive and route application-based work requests:*** Work request is basic communication tool for reporting Job Site problem so action can be initiated to get it fixed.

2. ***Obtain approvals as part of workflow if necessary:*** Generate workflows to mirror

organisation processes for getting work done.

3. ***Receive alerts on critical issues in workflow:*** Allow for prioritising work must to be done and ability to work orders.

4. ***View comprehensive list of work orders in process:*** Provide activity feeds, grids and reporting capability to see what work has yet to be completed and how long work in backlog.

5. ***Highlight overdue work, or sort work orders on space or technician basis:*** Offers Job Site tools and reports so available information to keep the operations running smoothly.

6. ***Link related work orders:*** Being able to group work orders allows for more efficient assignment of work to be done.

7. ***Attach drawings and specs, etc.:*** See drawings, pages of repair manuals and other documents to speed up asset repair and maintenance process.

8. ***Define work order schedule:*** Schedule work to be done so field-levels can submit work requests or query requests to see when it will be done.

9. ***Create and update Task Schedule of pending work orders:*** Use task schedules to keep track of what work is being done and when.

10. ***Schedule proactive Jobs:*** Any work request can be made repetitive by filling out additional checks defining dates, times and frequency; add reminders.