CONCEPT

Military Vehicle and Weapon Systems Maintenance Course: Readiness, Echelons and Sustainment

3 – 7 January 2027
Riyadh - KAFD district five-star



Military Vehicle and Weapon Systems Maintenance Course: Readiness, Echelons and Sustainment

Ref: 1624_25835 **Date:** 3 – 7 January 2027 **Location:** Riyadh - KAFD district five-star **Fees:** 20000 SAR

Introduction:

Military vehicle and weapon systems maintenance, organised around readiness, maintenance echelons and sustainment, is the subject of this 1-week course for fleet maintenance, depot, integrated logistics support and support-contract managers, ending with a Fleet Sustainment and Readiness Plan. Fleets lose availability when repair work sits at the wrong echelon, repairable spares are under-provisioned and support contracts reward activity instead of readiness outcomes. Nominees already manage vehicle, armament or depot maintenance, and teaching is by modelling build on availability, spares and repair-level data for a case armoured fleet. CoreConcept Training Center delivers this military vehicle and weapon systems maintenance course.

Course Objectives:

- Allocate maintenance tasks for hulls, powerpacks, turrets and armament to field, intermediate and depot echelons with defined responsibilities
- Calculate operational availability for a fleet and trace downtime to corrective repair, logistics delay and fault isolation causes
- Apply logistics support analysis and level of repair analysis to decide where each assembly is repaired or discarded
- Size repairable spares pools and depot overhaul induction plans from removal rates, turnaround times and workshop capacity
- Set condition-based support triggers from health and usage monitoring data and plan the localisation of MRO work packages
- Structure performance-based support agreements around availability metrics and produce a Fleet Sustainment and Readiness Plan

Target Audience:

- Fleet maintenance managers accountable for the availability of armoured, tactical and logistic vehicle fleets
- Weapon system sustainment managers who plan support for armament, turret and fire-control assemblies
- Depot and base workshop managers who plan overhaul induction, workshop capacity and turnaround
- Integrated logistics support and provisioning managers who set spares ranges, quantities and repairable pools
- Support contract and defence-industry MRO managers who negotiate and monitor availability-based agreements

Course Outline:

Day 1: Fleet Readiness Context and Maintenance Echelons

- Operational Availability Definition and Fleet Readiness Reporting Basics
- Field, Intermediate and Depot Maintenance Echelon Responsibilities
- Integrated Logistics Support Elements Mapped to Vehicle Fleets
- Weapon System Breakdown Structure for Hulls, Turrets and Armament
- Current-State Readiness Baseline Using Fleet Downtime Records

Day 2: Supportability Analysis, Repair Levels and Availability Models

- S3000L Logistics Support Analysis Tasks for Land Systems
- SAE AS1390A Level of Repair Analysis Decision Logic
- RAMT Measures Linking Reliability, Maintainability and Testability
- Operational Availability Model with Logistics Delay and Fault Isolation
- S4000P Preventive Maintenance Task Development for Armoured Vehicles

Day 3: Spares Provisioning, Depot Repair and Maintenance Data

- Initial and Follow-On Spares Provisioning by Range and Scale
- Repairable Pool Sizing from Turnaround Time and Removal Rates
- Depot Overhaul Induction Planning and Workshop Capacity Loading
- S1000D Technical Publications for Crew and Workshop Tasks
- Usage Data Capture for Kilometres, Rounds and Engine Hours

Day 4: Condition-Based Support, MRO Localisation and Performance-Based Contracts

- Health and Usage Monitoring Data for Condition-Based Support
- Barrel Wear, Powerpack and Track Condition Trigger Thresholds
- MRO Localisation Roadmap with Industry Capability Gap Assessment
- Performance-Based Logistics Contract Metrics and Payment Mechanisms
- Product Support Integrator Roles and Public-Private Partnership Risks

Day 5: Modelling Build and the Fleet Sustainment and Readiness Plan

- Case Fleet Availability Model for an Armoured Vehicle Fleet
- Case Repair-Level Allocation Across Field, Intermediate and Depot
- Case Repairable Spares Pool and Provisioning Budget Build
- Case Support Agreement Comparison Using Availability Outcomes
- Fleet Sustainment and Readiness Plan Completion and Peer Challenge

Skills You Will Gain:

- Operational Availability Modelling
- Maintenance Echelon Allocation
- Level of Repair Analysis
- Repairable Spares Provisioning
- Depot Induction Planning
- Condition Trigger Setting
- Performance-Based Agreement Design
- MRO Localisation Planning

Why Attend This Course:

- Deliver a Fleet Sustainment and Readiness Plan to the fleet support staff and the sustainment directorate that funds maintenance
- Decide which assemblies are repaired forward, inducted to depot or discarded, on cost and availability evidence
- Avoid vehicles standing idle for want of repairable spares, misplaced repair work and contracts that pay for activity rather than readiness
- Brief workshop, supply and contract colleagues on the availability measures and repair-level rules the plan sets

Conclusion:

Back at work, the participant hands the Fleet Sustainment and Readiness Plan to the fleet support staff and the sustainment directorate, who use it to agree availability targets, fix repair levels for each major assembly, fund the repairable spares pool and set depot induction slots. Contract managers use its availability metrics when negotiating or renewing performance-based support with industry partners. After the first readiness reporting cycle, the unit should compare achieved availability and logistics delay with the model's figures and adjust pool sizes, condition triggers and echelon allocations where the gap is largest.

Frequently Asked Questions FAQ:

What should participants know before a military vehicle and weapon systems maintenance course?

Participants should already manage or support vehicle, armament, depot or provisioning work and read basic maintenance records. Bringing anonymised fleet downtime, removal and turnaround data from their own unit makes the modelling build more useful.

How does military vehicle and weapon systems maintenance differ from a general maintenance management course?

It focuses on fleet readiness: maintenance echelons, repair-level decisions, repairable spares pools, depot induction and availability-based support agreements for vehicles and armament. General maintenance management courses cover plant strategy, crews and performance without these defence sustainment models.

Why does performance-based logistics matter for military vehicle and weapon systems maintenance?

Performance-based logistics pays a support provider for outcomes such as system availability and maintenance cycle time rather than for parts or labour. It shifts attention to readiness, but only works when metrics, data access and responsibilities are defined clearly.

What do participants take back from the military vehicle and weapon systems maintenance course?

Participants take back a Fleet Sustainment and Readiness Plan: an availability model, a repair-level allocation across echelons, a repairable spares pool and provisioning budget, condition triggers, a localisation roadmap and a support agreement comparison, ready to apply to their own fleet.