PUBLICATION

EXAM-TM40B-PRE

PRE-TEST — SL 4B: FIRES

Maven Smart System (MSS) — USAREUR-AF

HEADQUARTERS
UNITED STATES ARMY EUROPE AND AFRICA
(USAREUR-AF)
Wiesbaden, Germany

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DRAFT — UNOFFICIAL — NOT FOR OPERATIONAL USE

PRE-TEST — SL 4B: FIRES

MAVEN SMART SYSTEM (MSS) — USAREUR-AF

Field	Detail
Course	SL 4B: Fires WFF Track
Form	Pre-Test
Level	SL 4B (WFF Track)
Audience	FSE staff, fire support officers, targeting teams, artillery/mortar officers; prerequisite: SL 1 + SL 2 + SL 3 complete
Time Allowed	20 minutes
Passing Score	N/A — diagnostic only

INSTRUCTIONS

This diagnostic assessment establishes your baseline knowledge before training. Your score does not affect course eligibility. Answer honestly — results help the instructor tailor instruction to identified gaps.

SECTION 1 — MULTIPLE CHOICE

Circle the letter of the best answer. (2 points each)

1. The primary purpose of fires data displayed on the MSS COP is to:

A. Provide fire support officers and targeting teams a shared, current picture of target status, fire support coordination measures (FSCMs), and effects data to support targeting decisions B. Automatically generate fire missions and route them to firing elements without fire support officer review C. Replace the

targeting process by automatically scoring targets based on collected data D. Record completed fire missions for post-operation historical archiving only

2. Fire support coordination measures (FSCMs) displayed in MSS are important because:

A. MSS uses FSCMs to automatically approve or deny fire mission requests in real time B. FSCMs are classified above the BCT level and should not be displayed in MSS at battalion or brigade echelon C. FSCMs are only relevant for joint fires; they do not affect organic battalion fires tracked in MSS D. FSCMs define areas, boundaries, and conditions that govern the employment of fires — displaying them on the COP ensures all staff share the same understanding of coordination constraints

3. Battle damage assessment (BDA) data displayed in MSS is most accurately described as:

A. A real-time, automatically verified confirmation that a target has been destroyed B. Reported post-strike assessment data — which may be initial, follow-on, or confirmed — each requiring explicit sourcing and currency marking when displayed C. A legal record generated by MSS to document fires compliance with the law of armed conflict D. BDA is tracked separately from MSS; fires personnel do not use MSS for BDA reporting

4. Target acquisition data in MSS supports the fire support section by:

A. Replacing the duty of the FSO to verify target validity before calling for fire B. Automatically generating call-for-fire messages and routing them to the appropriate firing element C. Displaying sensor-derived and reported target locations, types, and timestamps so that the FSO can assess target quality and currency before engaging the targeting process D. Limiting target display to confirmed, approved targets only — unconfirmed target data is hidden until the targeting board approves it

5. A Friendly Forces Information Requirement (FFIR) differs from a PIR in the fires context in that:

A. FFIRs are submitted by higher headquarters; PIRs are generated by the targeting officer B. Both are types of CCIRs that focus exclusively on fires data and are not used outside the fires community C. FFIRs are unclassified; PIRs are classified D. An FFIR is information the commander needs about friendly forces — such as ammunition status or firing unit readiness — that is critical to a fires decision; a PIR concerns the enemy or environment

6. When displaying fires data on the MSS COP before a targeting working group, the fire support officer should verify:

A. That all targets shown have approved lethal engagement authorities attached in MSS before displaying them B. That each target record shows a data-as-of timestamp, a source attribution, and a confirmed vs. unconfirmed status before the product is briefed C. That MSS has automatically de-conflicted all targets against current FSCMs before the board convenes D. That the MSS fires module has been updated to the latest version within the past 30 days

7. Fire mission data entered into MSS during an exercise should be treated with the same OPSEC discipline as operational data because:

A. Exercise fire mission data, target locations, and engagement records may reveal TTPs, fires capabilities, and targeting preferences even if the specific scenario is notional B. MSS cannot distinguish between exercise and operational data — all entries are stored in the same database accessible to all users C. There is no OPSEC concern for exercise data since all exercises use unclassified training scenarios D. MSS automatically sanitizes exercise data before storing it, eliminating the need for OPSEC procedures during training

8. When fires data displayed in MSS is 8 hours old and the targeting board is convening in 30 minutes, the fire support officer should:

A. Brief the data as current since 8 hours is within the standard reporting cycle B. Delete the stale fires data layer and rebuild it from scratch before the board C. Caveat all affected fires data elements with the actual data-as-of time; contact the fires reporting chain to determine whether updated data is available; characterize the currency gap explicitly when briefing the targeting board D. Postpone the targeting board until fires data is refreshed to avoid decisions based on stale information

SECTION 2 — SHORT ANSWER

Answer in 2–4 sentences. (5 points each)

9. You are the FSE preparing for a targeting working group. You open MSS and find that the BDA layer for two previously engaged targets has not updated since the strikes were executed 12 hours ago. What actions do you take before the TWG, and how do you address the missing BDA data during the brief?

(Write your answer below)

10. Describe how fire support coordination measures (FSCMs) should be displayed in MSS to support a fires officer managing both lethal and non-lethal effects in a training scenario. What would happen if FSCMs were not kept current on the COP?

(Write your answer below)

SECTION 3 — SCENARIO (10 POINTS)

Read the following scenario and answer the question.

Your battalion fires officer has issued the following fires intelligence requirements before a training exercise: "I need to know immediately if any high-value target (HVT) moves into Target Area of Interest (TAI) ANVIL. I also need to know if our fires readiness — ammunition and firing unit availability — drops below 70%." You have MSS access and permission to configure fires data layers and alerts.

11. Describe how you would configure MSS to support these two requirements. For each requirement, specify: (a) the data layer or feed you would configure, (b) the threshold or trigger condition, and (c) who you would route alerts to and why.

(Write your answer below)

Total points: 30. Diagnostic only — score does not affect course admission.

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ANSWER KEY — INSTRUCTOR USE ONLY

Do not distribute to students. Use to identify baseline gaps and tailor Day 1 instruction accordingly.

Multiple Choice:

1. A — Fires COP provides a shared current picture of target status, FSCMs, and effects data for targeting decisions; MSS does not generate or route fire missions.
2. D — FSCMs define areas, boundaries, and conditions governing fires employment; displaying them ensures shared understanding of coordination constraints across all staff.
3. B — BDA is reported post-strike assessment data — may be initial, follow-on, or confirmed — each requiring explicit sourcing and currency marking when displayed; MSS does not auto-verify it.
4. C — Target acquisition data displays sensor-derived locations, types, and timestamps so the FSO can assess target quality and currency before engaging the targeting process.

5. D — An FFIR is information the commander needs about friendly forces (e.g., ammo status, firing unit readiness) critical to a fires decision; a PIR concerns enemy or environment.
6. B — Each target record must show a data-as-of timestamp, source attribution, and confirmed vs. unconfirmed status before it is briefed; MSS does not auto-de-conflict against FSCMs.
7. A — Exercise fire mission data reveals TTPs, fires capabilities, and targeting preferences even in a notional scenario; MSS does not sanitize exercise data automatically.
8. C — Caveat affected data with actual data-as-of time; contact the fires reporting chain for updates; characterize the currency gap explicitly at the targeting board. Deleting or postponing are not correct responses.

Short Answer Guidance:

SA-9. Full credit (5 pts): Contact the fires element BDA reporting chain to obtain current BDA status; if BDA cannot be confirmed before the TWG, brief affected targets as "BDA Pending — last confirmed status [DTG]"; do not characterize effects as confirmed; explicitly note for the board that strike execution is confirmed but effects assessment is incomplete, and state the expected timeline for follow-up BDA. Partial credit (3 pts): notes the need to caveat BDA but does not describe the steps to obtain updated data or the correct briefing characterization.

SA-10. Full credit (5 pts): FSCMs must be displayed with the establishing authority, effective times (DTG established/expires), and correct symbology per FM 1-02.1; without current FSCMs, fires officers and maneuver staff may attempt to employ fires or maneuver through restricted or coordinated fire areas unknowingly; out-of-date FSCMs on the COP are an operational and safety hazard because coordination constraints change as the situation evolves. Partial credit (3 pts): describes display requirements without addressing the consequence of non-currency.

Scenario Guidance:

Q-11. Full credit (10 pts): Must address both requirements with all three elements (a/b/c) for each.

Requirement 1 — HVT into TAI ANVIL: (a) target tracking layer linked to HVT tracking dataset; (b) geographic trigger — any entity with HVT designation appears within TAI ANVIL boundary polygon; (c) route to fires officer and S3 — fires officer manages targeting engagement; S3 owns the targeting decision.

Requirement 2 — Fires readiness below 70%: (a) fires readiness layer linked to ammunition status and firing unit availability datasets; (b) threshold alert when combined readiness (ammo available + firing unit availability) drops below 70%; (c) route to BSB S4 for resupply action and fires officer for adjusted fires planning.

Partial credit (6 pts): one requirement described correctly with all three elements; second requirement partial or missing routing/threshold. Minimum acceptable: data source, trigger condition, and routing for at least one requirement.