

COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report

ANNEX A - FUNDAMENTALS

LESSON ID: C-03A01

HOURS: 7.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: ENGINEERS IN THE MAGTF

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
IL	7.00	20 : 1

MEDIA: CPU, DB, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Provided a mission, commander's intent and resources, arrange external support for engineer projects/operations to provide all required support for a project or operation to meet the desired endstate. (1371-EOPS-2012)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Provided an operations order, identify engineer units to provide all required support for a project or operation per the concept of operations, commander's intent and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012a)
- 2 . Provided an operations order, identify capabilities of engineer units to provide all required support for a project or operation per the concept of operations, commander's intent and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012b)
- 3 . Provided an operations order, identify missions of engineer units to provide all required support for a project or operation per the concept of operations, commander's intent and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012c)
- 4 . Provided an operations order, identify procedures required to coordinate with engineer units to provide all required support for a project or operation per the concept of operations and in accordance with



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CATEGORY: Training

TITLE: ENGINEERS IN THE MAGTF

PHASE:

GROUP

MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012d)

NOTE(S):

This class covers Marine Corps specific engineer operations (Group, Wing, Division) that support the MAGTF. Aviation Ground Support (AGS) will be covered in this class. Explosive Ordnance Disposal (EOD) operations and specialized equipment (w/operator requirements) will also be included. Testing LOs to standards will be accomplished during performance exams in Concept Cards C-03D01XP Obstacle Planning and C-03E01XP Survivability Planning.

ORM Statement: There are no hazards associated with this lesson.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Aviation Ground Support	MCWP 3-21.1	
Engineering Operations	MCWP 3-17	
Joint Engineer Operations	JP 3-34	
Logistics Operations	MCWP 4-1	
MAGTF Command and Control	MCWP 3-40.1	
SeaBee Operations in the MAGTF	MCWP 4-11.5	



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ANNEX A - FUNDAMENTALS

LESSON ID: C-03A02

HOURS: 3.50

TYPE: Task Oriented

CATEGORY: Training

TITLE: MILITARY BRIEFING

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
D	0.50	20 : 1
IL	2.00	20 : 1
PA	1.00	20 : 1

MEDIA: CPU, DB, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

1. Given a mission, commander's intent, and references, deliver a military brief to provide an oral description of the current engineer situation, proposed execution, and logistical support capabilities and limitations. (1371-ADMN-2002)

ENABLING LEARNING OBJECTIVE(S)

1. Given a mission, commander's intent, and reference, select the type of brief to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002a)
2. Given a mission, commander's intent, and references, design the brief (research) to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002b)
3. Given a mission, commander's intent, and references, develop the brief to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002c)



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LESSON ID: C-03A02

HOURS: 3.50

TYPE: Task Oriented

CATEGORY: Training

TITLE: MILITARY BRIEFING

PHASE:

GROUP

- 4 . Given a mission, commander's intent, and references, prepare supporting documents for the brief to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002d)

- 5 . Given a mission, commander's intent, and references, advise the commander of the engineer situation/mission by employing effective briefing techniques to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002e)

NOTE(S):

This class is covers standard procedures for conducting information and mission briefs. Students will be conducting multiple briefs throughout the course to master this subject. Engineer T&R task 1371-ADMIN-2006 "Deliver a Military Brief" will be evaluated during performance exams for C-03D01XP Obstacle Planning, and C-03E01XP Survivability Planning.

ORM Statement: There are no hazards associated with this lesson.

REFERENCE - TITLE

PUBLICATION ID

CHAPTER/PAGE

Engineering Operations

MCWP 3-17

MAGTF Command and Control

MCWP 3-40.1



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ANNEX A - FUNDAMENTALS

LESSON ID: C-03A03

HOURS: 3.50

TYPE: Task Oriented

CATEGORY: Training

TITLE: ENGINEER PLANNING

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
D	0.50	20 : 1
IL	3.00	20 : 1

MEDIA: CPU, DB, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . As a member of an operations planning team in a operating environment, given a higher headquarter's order, commander's guidance, and the reference, participate in the Marine Corps Planning Process (MCP) to produce plans and orders products which support the accomplishments of the mission and commander's intent in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given an operating environment, higher headquarters order, commander's guidance and the reference, while implementing the orders process, conduct problem framing to identify all engineer requirements while participating in the Marine Corps Planning Process (MCP) and in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001a)
- 2 . Given an operating environment, higher headquarters order, commander's guidance and the reference, while implementing the orders process, assist in the development of courses of action (COA) while participating in the Marine Corps Planning Process (MCP) and in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001b)
- 3 . Given an operating environment, higher headquarters order, commander's guidance and the reference, assist in course of action comparison while participating in the Marine Corps Planning Process (MCP)



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LESSON ID: C-03A03

HOURS: 3.50

TYPE: Task Oriented

CATEGORY: Training

TITLE: ENGINEER PLANNING

PHASE:

GROUP

and in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001c)

- 4 . Given an operating environment, higher headquarters order, commander's guidance and the reference, develop required products while participating in the Marine Corps Planning Process (MCP) in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001d)
- 5 . Given an operating environment, higher headquarters order, commander's guidance and the reference, while implementing the orders process, assist in transitioning while participating in the Marine Corps Planning Process (MCP) in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001e)

NOTE(S):

This class will introduce the student to Marine Corps Planning Process (MCP). Student will participate in planning preparation, course of action development, and mission preparation.

Students will be tested during performance examinations in Breach Planning (C-03C02XP), Obstacle Planning (C-03D01XP), and Survivability Planning (C-03E01XP).

ORM Statement: No hazards associated with this lesson.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
MAGTF Planner's Reference Manual	MSTP PAM 5-0.3	
Marine Corps Planning Process (MCP)	MCWP 5-1	
Operational Planning Team Guide	MSTP PAM 5-0.2	



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ANNEX A - FUNDAMENTALS

LESSON ID: C-03A04

HOURS: 7.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: PROJECT MANAGEMENT

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
D	1.00	20 : 1
IL	5.00	20 : 1
PA	1.00	20 : 1

MEDIA: CPU, DB, PPT, SH, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Provided a mission, construction drawings/blueprints, specifications, a calculator, writing materials, activity estimate sheets, and the reference, establish project/operation schedules to detail all personnel, equipment, and materials necessary to accomplish the mission while establishing a defined duration for each subtask and the overall project/operation and graphically depict the schedule in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a construction directive, project specifications, and the references, create an activities list to support the project/operaton in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011a)
- 2 . Given a construction directive, a complete activity list, and references, create an activity estimate sheet for each activity in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011b)
- 3 . Given a completed project schedule, notional TO/TE constraints, and references, perform resource leveling in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011c)



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ANNEX A - FUNDAMENTALS

LESSON ID: C-03A04

HOURS: 7.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: PROJECT MANAGEMENT

PHASE:

GROUP

NOTE(S):

This class covers projects/operations resource and scheduling management. Also, database software tools (JCMS and Microsoft Projects) overview will be covered. Students will be tested during performance exams in Obstacle Planning Exam (C-03D01XP) and Survivability Planning Exam (C-03E01XP).

ORM Statement: No hazards associated with this lesson.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Construction Estimating	MCRP 3-17.7M	
Construction Project Management	MCRP 3-17.7F	
Project Management	FM 5-412	



COMBAT ENGINEER PLATOON SERGEANT
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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B01

HOURS: 17.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: VERTICAL CONSTRUCTION

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
D	1.00	20 : 2
IL	10.00	20 : 1
PA	6.00	20 : 2

MEDIA: CPU, DB, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Provided specifications, writing/sketching materials, a calculator, and references, plan wood frame structure to conform to the construction drawings, blueprints, or specifications; and that identifies the type of materials and proper spacing; and support all loads considered in accordance with MCRP 3-17.7C Carpentry. (1371-VERT-2001)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given construction drawings, blueprints or specifications, analyze the design drawings to determine critical dimensions and design specifications in accordance with MCRP 3-17.7C Carpentry. (1371-VERT-2001a)
- 2 . Given construction drawings, blueprints or specifications, a calculator, and a blank materials take-off sheet, develop in writing the required amount of material needed for a temporary structure per the drawing specifications while keeping within established waste parameters in accordance with MCRP 3-17.7C Carpentry and other applicable references. (1371-VERT-2001b)
- 3 . Given construction drawings, blueprints or specifications, a calculator, and a blank materials take-off sheet, develop in writing a Bill of Materials (BOM) for a temporary structure based off the materials



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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B01

HOURS: 17.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: VERTICAL CONSTRUCTION

PHASE:

GROUP

take-off sheet in accordance with MCRP 3-17.7C Carpentry and other applicable references.
(1371-VERT-2001c)

NOTE(S):

Students will be taught intermediate and advance layout/estimations of woodframe structures from foundation to roof. Information obtained will allow students to develop materials take off sheets and bill of materials (BOM) needed to execute projects.

ORM Statement: There are no hazards associated with this lesson.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Basic Construction Techniques for Houses and Small Buildings	NAVPERS 0-486-20242-9	
Carpentry	MCRP 3-17.7C	
Construction Estimating	MCRP 3-17.7M	
Modern Carpentry, 11 Edition Wagner/Smith	ModCarp 2008	



**COMBAT ENGINEER PLATOON SERGEANT
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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: VERTICAL CONSTRUCTION EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(P)	4.00	20 : 1

MEDIA: BP, CALC, HO, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Provided specifications, writing/sketching materials, a calculator, and references, plan wood frame structure to conform to the construction drawings, blueprints, or specifications; and that identifies the type of materials and proper spacing; and support all loads considered in accordance with MCRP 3-17.7C Carpentry. (1371-VERT-2001)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given construction drawings, blueprints or specifications, analyze the design drawings to determine critical dimensions and design specifications in accordance with MCRP 3-17.7C Carpentry. (1371-VERT-2001a)
- 2 . Given construction drawings, blueprints or specifications, a calculator, and a blank materials take-off sheet, develop in writing the required amount of material needed for a temporary structure per the drawing specifications while keeping within established waste parameters in accordance with MCRP 3-17.7C Carpentry and other applicable references. (1371-VERT-2001b)
- 3 . Given construction drawings, blueprints or specifications, a calculator, and a blank materials take-off sheet, develop in writing a Bill of Materials (BOM) for a temporary structure based off the materials take-off sheet in accordance with MCRP 3-17.7C Carpentry and other applicable references. (1371-VERT-2001c)



Date: 20150604

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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: VERTICAL CONSTRUCTION EXAM

PHASE:

GROUP

NOTE(S):

Students will be tested on wood frame structure design based on a written scenario and blue prints provided.

ORM Statement: There are no hazards associated with this exam.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Basic Construction Techniques for Houses and Small Buildings	NAVPERS 0-486-20242-9	
Carpentry	MCRP 3-17.7C	
Construction Estimating	MCRP 3-17.7M	
Modern Carpentry, 11 Edition Wagner/Smith	ModCarp 2008	



**COMBAT ENGINEER PLATOON SERGEANT
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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B02 **HOURS:** 19.00
TYPE: Task Oriented
CATEGORY: Training
TITLE: CONCRETE CONSTRUCTION
PHASE:
GROUP:

METHOD	HOURS	S:I RATIO
IL	13.00	20 : 1
PA	6.00	20 : 2

MEDIA: AIO, BP, CALC, CPU, DB, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Provided construction drawings, blueprints, specifications, writing materials, a calculator, and the reference, determine required concrete mixture to achieve proper PSI per the specifications in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-HORZ-2005)

- 2 . Provided specifications, writing/sketching materials, a calculator, and the reference, design concrete structures to specify type of materials to be used, proper spacing of all components, and quantity and type of material required for finished structures capable of supporting all loads considered per the specifications and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a construction directive and reference, design concrete mixtures capable of meeting the specifications of the construction directive in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-HORZ-2005a)

- 2 . Given a construction directive and reference, determine proportions of concrete to meet the specifications of the construction directive in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-HORZ-2005b)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B02

HOURS: 19.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: CONCRETE CONSTRUCTION

PHASE:

GROUP

3. Given a construction directive and reference, determine required forming material needed for a concrete structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005a)
4. Given a construction directive and reference, determine required reinforcement material needed for a concrete structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005b)
5. Given a construction directive and reference, determine required materials needed for a concrete block wall structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005c)
6. Given a construction directive and reference, determine required slump needed for a concrete structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005d)
7. Given a construction directive and reference, determine required materials needed for a concrete structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005e)

NOTE(S):

This class will cover concrete structure designs, mixtures, and logistical requirements needed for planning projects. Concrete masonry unit (CMU) design and estimations are also covered.

ORM Statement: There are no hazards associated with this lesson.

REFERENCE - TITLE

PUBLICATION ID

CHAPTER/PAGE



Date: 20150604

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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B02

HOURS: 19.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: CONCRETE CONSTRUCTION

PHASE:

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Basic Construction Techniques for Houses and
Small Buildings

NAVPERS 0-486-20242-9

Concrete and Masonry

MCRP 3-17.7D



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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B02X

HOURS: 3.00

TYPE: Exam

CATEGORY: Training

TITLE: CONCRETE CONSTRUCTION EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(W)	3.00	20 : 2

MEDIA: BP, CALC, HO, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Provided construction drawings, blueprints, specifications, writing materials, a calculator, and the reference, determine required concrete mixture to achieve proper PSI per the specifications in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-HORZ-2005)
- 2 . Provided specifications, writing/sketching materials, a calculator, and the reference, design concrete structures to specify type of materials to be used, proper spacing of all components, and quantity and type of material required for finished structures capable of supporting all loads considered per the specifications and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a construction directive and reference, design concrete mixtures capable of meeting the specifications of the construction directive in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-HORZ-2005a)
- 2 . Given a construction directive and reference, determine proportions of concrete to meet the specifications of the construction directive in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-HORZ-2005b)
- 3 . Given a construction directive and reference, determine required forming material needed for a concrete



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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B02X

HOURS: 3.00

TYPE: Exam

CATEGORY: Training

TITLE: CONCRETE CONSTRUCTION EXAM

PHASE:

GROUP

structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005a)

- 4. Given a construction directive and reference, determine required reinforcement material needed for a concrete structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005b)
- 5. Given a construction directive and reference, determine required materials needed for a concrete block wall structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005c)
- 6. Given a construction directive and reference, determine required slump needed for a concrete structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005d)
- 7. Given a construction directive and reference, determine required materials needed for a concrete structure to meet specifications of the construction directive and in accordance with MCRP 3-17.7D Concrete & Masonry. (1371-EOPS-2005e)

NOTE(S):

This class will test the students on acquired knowledge for designing and estimating concrete structure based on a scenario exercise. Students will also be graded on skills acquired during wood structure design for estimating concrete forms needed.

ORM Statement: There are no hazards associated with this test.

REFERENCE - TITLE

PUBLICATION ID

CHAPTER/PAGE

Basic Construction Techniques for Houses and Small Buildings

NAVPERS 0-486-20242-9



Date: 20150604

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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B02X

HOURS: 3.00

TYPE: Exam

CATEGORY: Training

TITLE: CONCRETE CONSTRUCTION EXAM

PHASE:

GROUP

Concrete and Masonry

MCRP 3-17.7D



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Concept Card Report

ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B03

HOURS: 8.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: MILITARY ROADS

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
IL	5.00	20 : 1
PA	3.00	20 : 1

MEDIA: CALC, CPU, DB, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a map, an operations order, size and type of unit, and references, plan a base camp to meet or exceed the unit requirements and the commander's intent, while accounting for future expansion, in accordance with MCRP 3-17.7N Base Camps. (1371-PLAN-2002)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a mission to design a military road and references, compute Average Daily Traffic (ADT) in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road Design. (1371-PLAN-2002g)
- 2 . Given a mission to design a military road and references, calculate Design Hourly Volume (DHV) in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road Design. (1371-PLAN-2002h)
- 3 . Given a mission to design a military road and references, establish geometric controls in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road Design. (1371-PLAN-2002i)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B03

HOURS: 8.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: MILITARY ROADS

PHASE:

GROUP

- 4 . Given a mission to design a military road and references, determine structural design in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road Design. (1371-PLAN-2002j)

- 5 . Given a mission to design a military road and references, develop a maintenance plan in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road Design. (1371-PLAN-2002k)

NOTE(S):

This class will introduce the student to the planning and estimating process to construct a military road.

ORM Statement: There are no hazards associated with this lesson.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Base Camps	MCRP 3-17.7N	
Construction Estimating	MCRP 3-17.7M	
Construction Project Management	MCRP 3-17.7F	
Earthmoving Operations	MCRP 3-17.7I	
Engineer Field Data	MCRP 3-17A	
Engineer Operations	MCWP 3-17	
Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Road Design	MCRP 3-17.7A	



COMBAT ENGINEER PLATOON SERGEANT
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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B03X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: MILITARY ROADS EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(W)	2.00	20 : 1

MEDIA: CALC, HO, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a map, an operations order, size and type of unit, and references, plan a base camp to meet or exceed the unit requirements and the commander's intent, while accounting for future expansion, in accordance with MCRP 3-17.7N Base Camps. (1371-PLAN-2002)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a mission to design a military road and references, compute Average Daily Traffic (ADT) in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road Design. (1371-PLAN-2002g)
- 2 . Given a mission to design a military road and references, calculate Design Hourly Volume (DHV) in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road Design. (1371-PLAN-2002h)
- 3 . Given a mission to design a military road and references, establish geometric controls in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road Design. (1371-PLAN-2002i)
- 4 . Given a mission to design a military road and references, determine structural design in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road



COMBAT ENGINEER PLATOON SERGEANT

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ANNEX B - GENERAL ENGINEERING

LESSON ID: C-03B03X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: MILITARY ROADS EXAM

PHASE:

GROUP

Design. (1371-PLAN-2002j)

- 5 . Given a mission to design a military road and references, develop a maintenance plan in accordance with MCRP 3-17.7A Planning and Design of Roads, Airfields, and Heliports in Theater of Operations-Road Design. (1371-PLAN-2002k)

NOTE(S):

Students will be given a scenario and are tested on planning and estimating a military road to support requirements based on a notional commander's intent and concept of operations. Questions consist of knowledge based (fill-in and multi-choice) standards.

ORM Statement: There are no hazards associated with this test.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Construction Estimating	MCRP 3-17.7M	
Construction Project Management	MCRP 3-17.7F	
Earthmoving Operations	MCRP 3-17.7I	
Engineer Field Data	MCRP 3-17A	
Engineer Operations	MCWP 3-17	
Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Road Design	MCRP 3-17.7A	



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C01

HOURS: 18.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: STANDARD BRIDGING

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
IL	9.00	20 : 1
PA	9.00	20 : 2

MEDIA: AIO, C, CALC, CPU, DB, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Provided a mission specifying a military load class requirement, a map, reconnaissance report(s), and references, determine tactical bridging assets required to span a gap; for a wet gap crossing, determine the length of bridge, number and type of IRB bays required, number of BEBs required, anchoring system to be employed, all logistical requirements, and calculate total time to construct the bridge in accordance with TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual; for a dry gap crossing, determine the MGB configuration, calculate pallets required, determine all logistical requirements, and calculate total time to construct the bridge in accordance with TM 5-5420-212-12 Medium Girder Bridge (MGB). (1371-MOBL-2007)
- 2 . Provided a mission specifying a military load class requirement, completed engineer reconnaissance reports with hydrographic information, and references, determine raft size required for wet gap crossing to meet mission requirements based on available resources and to deliver the troops and equipment across the gap with a minimum number of trips in accordance with MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2006)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a tactical scenario, critical deminsions, a military load class (MLC) and references, select in writing a military standard bridge (MGB/IRB) configuraton to support the required military load class in accordance with applicable references. (1371-MOBL-2007a)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C01

HOURS: 18.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: STANDARD BRIDGING

PHASE:

GROUP

2. Given a tactical scenario, a Medium Girder Bridge (MGB) or Improved Ribbon Bridge (IRB) configuraton and references, determine the best crossing site based on reconnaissance information in accordance with applicable references. (1371-MOBL-2007b)
3. Given a tactical scenario, a Medium Girder Bridge (MGB) or Improved Ribbon Bridge (IRB) configuraton and references, determine length of bridge needed for mobility requirements and site in accordance with applicable references. (1371-MOBL-2007c)
4. Given a tactical scenario, a Medium Girder Bridge (MGB) configuraton, site reconnaissance reports, and reference, complete the MGB Pro Forma worksheet based on reconnaissance information in accordance with TM 5-5420-212-12 Medium Girder Bridge (MGB). (1371-MOBL-2007d)
5. Given a tactical scenario, a gap (wet) to be crossed by Improved Ribbon Bridge (IRB), site reconnaissance reports and references, determine bridging assets required based on calculations from reconnaissance information in accordance with TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual. (1371-MOBL-2007e)
6. Given a tactical scenario, a gap (wet or dry) to be crossed by MGB/IRB and references, determine resources/time required to support construction of military standard bridges in accordance with applicable references. (1371-MOBL-2007f)
7. Given a tactical scenario, reconnaissance information, commander's intent and references, identify the equipment needed for rafting operations in accordance with MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2006a)
8. Given a tactical scenario, a mission statement, commander's intent and references, select a raft configuration using the Improved Ribbon Bridge (IRB) that will satisfy the scenario's traffic in



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C01

HOURS: 18.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: STANDARD BRIDGING

PHASE:

GROUP

accordance with MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2006b)

- 9 . Given a tactical scenario, a mission statement, commander's intent and references, plan the assembly of a Improved Ribbon Bridge (IRB) raft that will utilize the minimum number of assets, in the shortest amount of time, and to satisfy the scenario's traffic in accordance with MCWP 3-17.8 Combined Arms Mobility Operations, TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual, and TM 10020C-OI Bridge Erection Boat (MKIII) Operator's Manual. (1371-MOBL-2006c)

- 10 . Given a tactical scenario, a mission statement, commander's intent and references, determine the rafting cycle needed to cross all personnel and equipment in the shortest amount of time to support the commander's intent and concept of operations in accordance with MCWP 3-17.8 Combined Arms Mobility Operations and TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual. (1371-MOBL-2006d)

- 11 . Given a tactical scenario, a mission statement, commander's intent and references, identify all risks associated with rafting operations to cross all personnel and equipment to support the commander's intent and concept of operations in accordance with MCWP 3-17.8 Combined Arms Mobility Operations, MCO 3500.27_ Operational Risk Management (ORM), and TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual. (1371-MOBL-2006e)

NOTE(S):

This class will cover various obstacle (gap) situations and present the student with planning options to utilize military standard bridges to allow maneuver support to the Operating Forces. Students will plan and estimate types of bridges or rafts needed for crossing wet gaps. Students will also estimate/calculate the logistical requirements needed for gap crossing operations and Bridge Erection Boat (BEB) employment.

ORM Statement: There are no hazards associated with this lesson.

REFERENCE - TITLE

PUBLICATION ID

CHAPTER/PAGE

Bridge Erection Boat (MKIII)Operator's Manual

TM 10020C-OI



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C01

HOURS: 18.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: STANDARD BRIDGING

PHASE:

GROUP

Combined Arms Mobility Operations	MCWP 3-17.8
Engineer Field Data	MCRP 3-17A
Engineer Reconnaissance	MCWP 3-17.4
Improved Ribbon Bridge (IRB) Operators Manual	TM 11518A-OR
Link Reinforcement Set	TM 5-5420-212-12-1
Medium Girder Bridge	TM 5-5420-212-12
Operational Risk Management (ORM)	MCO 3500.27_



COMBAT ENGINEER PLATOON SERGEANT**Concept Card Report****ANNEX C - MOBILITY****LESSON ID:** C-03C01X**HOURS:** 2.00**TYPE:** Exam**CATEGORY:** Training**TITLE:** STANDARD BRIDGING EXAM**PHASE:****GROUP**

METHOD	HOURS	S:I RATIO
X(P)	1.50	20 : 1
X(W)	0.50	20 : 1

MEDIA: C, CALC, HO, SO**TERMINAL LEARNING OBJECTIVE(S)**

1. Provided a mission specifying a military load class requirement, a map, reconnaissance report(s), and references, determine tactical bridging assets required to span a gap; for a wet gap crossing, determine the length of bridge, number and type of IRB bays required, number of BEBs required, anchoring system to be employed, all logistical requirements, and calculate total time to construct the bridge in accordance with TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual; for a dry gap crossing, determine the MGB configuration, calculate pallets required, determine all logistical requirements, and calculate total time to construct the bridge in accordance with TM 5-5420-212-12 Medium Girder Bridge (MGB). (1371-MOBL-2007)
2. Provided a mission specifying a military load class requirement, completed engineer reconnaissance reports with hydrographic information, and references, determine raft size required for wet gap crossing to meet mission requirements based on available resources and to deliver the troops and equipment across the gap with a minimum number of trips in accordance with MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2006)

ENABLING LEARNING OBJECTIVE(S)

1. Given a tactical scenario, reconnaissance information, commander's intent and references, identify the equipment needed for rafting operations in accordance with MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2006a)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C01X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: STANDARD BRIDGING EXAM

PHASE:

GROUP

2. Given a tactical scenario, a mission statement, commander's intent and references, select a raft configuration using the Improved Ribbon Bridge (IRB) that will satisfy the scenario's traffic in accordance with MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2006b)
3. Given a tactical scenario, a mission statement, commander's intent and references, plan the assembly of a Improved Ribbon Bridge (IRB) raft that will utilize the minimum number of assets, in the shortest amount of time, and to satisfy the scenario's traffic in accordance with MCWP 3-17.8 Combined Arms Mobility Operations, TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual, and TM 10020C-OI Bridge Erection Boat (MKIII) Operator's Manual. (1371-MOBL-2006c)
4. Given a tactical scenario, a mission statement, commander's intent and references, determine the rafting cycle needed to cross all personnel and equipment in the shortest amount of time to support the commander's intent and concept of operations in accordance with MCWP 3-17.8 Combined Arms Mobility Operations and TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual. (1371-MOBL-2006d)
5. Given a tactical scenario, a mission statement, commander's intent and references, identify all risks associated with rafting operations to cross all personnel and equipment to support the commander's intent and concept of operations in accordance with MCWP 3-17.8 Combined Arms Mobility Operations, MCO 3500.27_ Operational Risk Management (ORM), and TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual. (1371-MOBL-2006e)
6. Given a tactical scenario, critical deminsions, a military load class (MLC) and references, select in writing a military standard bridge (MGB/IRB) configuraton to support the required military load class in accordance with applicable references. (1371-MOBL-2007a)
7. Given a tactical scenario, a Medium Girder Bridge (MGB) or Improved Ribbon Bridge (IRB) configuraton and references, determine the best crossing site based on reconnaissance information in



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C01X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: STANDARD BRIDGING EXAM

PHASE:

GROUP

accordance with applicable references. (1371-MOBL-2007b)

- 8 . Given a tactical scenario, a Medium Girder Bridge (MGB) or Improved Ribbon Bridge (IRB) configuraton and references, determine length of bridge needed for mobility requirements and site in accordance with applicable references. (1371-MOBL-2007c)
- 9 . Given a tactical scenario, a Medium Girder Bridge (MGB) configuraton, site reconnaissance reports, and reference, complete the MGB Pro Forma worksheet based on reconnaissance information in accordance with TM 5-5420-212-12 Medium Girder Bridge (MGB). (1371-MOBL-2007d)
- 10 . Given a tactical scenario, a gap (wet) to be crossed by Improved Ribbon Bridge (IRB), site reconnaissance reports and references, determine bridging assets required based on calculations from reconnaissance information in accordance with TM 11518A-OR Improved Ribbon Bridge (IRB) Operator's Manual. (1371-MOBL-2007e)
- 11 . Given a tactical scenario, a gap (wet or dry) to be crossed by MGB/IRB and references, determine resources/time required to support construction of military standard bridges in accordance with applicable references. (1371-MOBL-2007f)

NOTE(S):

Students will be tested on how to properly plan and estimate wet/dry gap crossing operations utilizing military standard bridges (IRB, IFB, and MGB). Performance ELOs will be tested via a scenario exercise/exam and knowledge based ELOs will be tested by fill-in blank and muple choice written exam.

ORM Statement: There are no safety concerns associated with this test.

REFERENCE - TITLE

PUBLICATION ID

CHAPTER/PAGE

Bridge Erection Boat (MKIII)Operator's Manual

TM 10020C-OI



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C01X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: STANDARD BRIDGING EXAM

PHASE:

GROUP

Combined Arms Mobility Operations	MCWP 3-17.8
Engineer Field Data	MCRP 3-17A
Engineer Reconnaissance	MCWP 3-17.4
Improved Ribbon Bridge (IRB) Operators Manual	TM 11518A-OR
Link Reinforcement Set	TM 5-5420-212-12-1
Medium Girder Bridge	TM 5-5420-212-12
Operational Risk Management (ORM)	MCO 3500.27_



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C02

HOURS: 14.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: BREACH PLANNING

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
D	1.00	20 : 2
IL	5.00	20 : 1
PA	8.00	20 : 2

MEDIA: CPU, DB, M, PPT, SMB, SO, STBL

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, an operations order, a map, current obstacle intelligence, and references, plan breaching of a complex obstacle that will result in a sufficient number of cleared lanes for assured mobility per the commander's intent in accordance with MCWP 3-17.3 MAGTF Breaching Operations. (1371-MOBL-2017)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a tactical breaching scenario, concept of operations, commander's intent, a map, and references, identify breaching fundamentals that conform to MAGTF breaching doctrine and support the concept of operations in accordance with MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017a)
- 2 . Given a tactical breaching scenario, concept of operations, commander's intent, a map, and references, identify probable enemy countermobility capabilities in accordance with MCWP 3-17.3 MAGTF Breaching Operations and other applicable references. (1371-MOBL-2017b)
- 3 . Given a tactical breaching scenario, concept of operations, commander's intent and references, select explosive breaching assets which can be used to execute breaching operations in accordance with the



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C02

HOURS: 14.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: BREACH PLANNING

PHASE:

GROUP

commander's intent, the concept of operations, MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017c)

- 4 . Given a tactical breaching scenario, concept of operations, commander's intent and references, select non-explosive breaching assets which can be used to execute breaching operations in accordance with the commander's intent, the concept of operations, MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017d)
- 5 . Given a tactical breaching scenario, concept of operations and references, list support requirements necessary to execute breaching operations in accordance with the concept of operations, MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017e)
- 6 . Given a tactical breaching scenario, concept of operations, commander's intent, a map, a sand table and references, plan a breaching mission (engineer specific tasks) in accordance with the commander's intent, the concept of operations, MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017f)

NOTE(S):

This class covers doctrinal planning of breaching complex obstacles (explosive and non-explosive) to support the maneuver elements in the Operating Forces. Also covered is enemy threat analysis, intelligence summaries, and other pertinent information or assets needed to execute breaching operations.

ORM Statement: There are no hazards associated with this lesson.

REFERENCE - TITLE

PUBLICATION ID

CHAPTER/PAGE

Combined Arms Mobility Operations

MCWP 3-17.8

Engineer Reconnaissance

MCWP 3-17.4



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C02

HOURS: 14.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: BREACH PLANNING

PHASE:

GROUP

Engineering Operations	MCWP 3-17
Ground Combat Operations	MCWP 3-1
Intelligence Preparation of the Battlefield/Battlespace	MCRP 2-3A
MAGTF Breaching Operations	MCWP 3-17.3



COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C02X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: BREACH PLANNING EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(P)	4.00	20 : 2

MEDIA: HO, M, SO, STBL

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, an operations order, a map, current obstacle intelligence, and references, plan breaching of a complex obstacle that will result in a sufficient number of cleared lanes for assured mobility per the commander's intent in accordance with MCWP 3-17.3 MAGTF Breaching Operations. (1371-MOBL-2017)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a tactical breaching scenario, concept of operations, commander's intent, a map, and references, identify breaching fundamentals that conform to MAGTF breaching doctrine and support the concept of operations in accordance with MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017a)
- 2 . Given a tactical breaching scenario, concept of operations, commander's intent, a map, and references, identify probable enemy countermobility capabilities in accordance with MCWP 3-17.3 MAGTF Breaching Operations and other applicable references. (1371-MOBL-2017b)
- 3 . Given a tactical breaching scenario, concept of operations, commander's intent and references, select explosive breaching assets which can be used to execute breaching operations in accordance with the commander's intent, the concept of operations, MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017c)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C02X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: BREACH PLANNING EXAM

PHASE:

GROUP

- 4 . Given a tactical breaching scenario, concept of operations, commander's intent and references, select non-explosive breaching assets which can be used to execute breaching operations in accordance with the commander's intent, the concept of operations, MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017d)
- 5 . Given a tactical breaching scenario, concept of operations and references, list support requirements necessary to execute breaching operations in accordance with the concept of operations, MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017e)
- 6 . Given a tactical breaching scenario, concept of operations, commander's intent, a map, a sand table and references, plan a breaching mission (engineer specific tasks) in accordance with the commander's intent, the concept of operations, MCWP 3-17.3 MAGTF Breaching Operations and MCWP 3-17.8 Combined Arms Mobility Operations. (1371-MOBL-2017f)

NOTE(S):

This exam will test the students acquired knowledge on MAGTF engineer breaching operations. Students, placed into teams, will conduct planning and notional conduct of a breach based on scenario(s) to support the commander's intent and concept of operations. Teams will utilize sand table(s) to brief the fundamentals of their breach plan. Grading will be based off a performance based checklist.

ORM Statement: There are no hazards associated with this test.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Combined Arms Mobility Operations	MCWP 3-17.8	
Engineer Reconnaissance	MCWP 3-17.4	
Engineering Operations	MCWP 3-17	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C02X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: BREACH PLANNING EXAM

PHASE:

GROUP

Ground Combat Operations

MCWP 3-1

Intelligence Preparation of the
Battlefield/Battlespace

MCRP 2-3A

MAGTF Breaching Operations

MCWP 3-17.3



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C03

HOURS: 13.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: ROUTE AND AREA CLEARANCE (RAAC)

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
D	2.00	20 : 2
IL	3.00	20 : 1
PA	8.00	20 : 4

MEDIA: AIO, CPU, DB, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

1. Given a tactical situation, a route/area to be cleared, clearance equipment, a map, and an operation order, lead Route and Area Clearance Operations to locate, identify, mark, and/or reduce all explosive/non-explosive obstacles on the designate route/area. (1371-MOBL-2021)

ENABLING LEARNING OBJECTIVE(S)

1. Given the requirement, define the tenets of the IED-D framework in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations. (1371-MOBL-2021a)
2. Given the requirement, identify the phases of route clearance in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations. (1371-MOBL-2021b)
3. Given the requirement, identify the route clearance team roles and responsibilities in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021c)
4. Given the requirement, a route/area clearance scenario, map, and references, determine the task



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C03

HOURS: 13.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: ROUTE AND AREA CLEARANCE (RAAC)

PHASE:

GROUP

organization to conduct route and area clearance per the scenario in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021d)

5. Given the requirement, a route/area clearance scenario, map, and references, determine specific equipment required for the task organized teams to conduct route and area clearance per the scenario in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021e)
6. Given the requirement, a route/area clearance scenario, intelligence information, map, and references, determine probable locations of explosive/non-explosive obstacles per latest intelligence information for the conduct route and area clearance per the scenario in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021f)
7. Given the requirement, a route/area clearance scenario, concept of operations, commander's intent, map and references, develop a route clearance patrol order to conduct route sweep operations to ensure sufficient mobility to support the concept of operations and commander's intent in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021g)
8. Given the requirement, a route/area clearance scenario, concept of operations, commander's intent, map and references, brief the route/area clearance to be conducted to locate, mark or reduce all hazards within the route/area per the leader's decision considerations, commander's intent, and the concept of operations in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021h)

NOTE(S):

This class focuses on intermediate and supervisory fundamentals of mounted and dismounted explosive/non-explosive



COMBAT ENGINEER PLATOON SERGEANT**Concept Card Report****ANNEX C - MOBILITY****LESSON ID:** C-03C03

HOURS: 13.00

TYPE: Task Oriented**CATEGORY:** Training**TITLE:** ROUTE AND AREA CLEARANCE (RAAC)**PHASE:****GROUP**

clearance operations. Students will be introduced to planning, emerging assets, estimating logistical requirements and techniques, tactics and procedures (TTPs) for support of the maneuver forces in the MAGTF. Students will utilize acquired skills from other classes and plan the conduct of explosive hazard detection, marking, and clearing operations for routes, areas, and emergency destruction of enemy cache ordnance. Students will also conduct a walk-through (hands on) of clearance assets and equipment.

ORM Statement: Initial RAC=3, Residual RAC=4.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Appropriate Equipment Manual		
Combined Arms Improvised Explosive Device Defeat Operations	MCIP 3-17.01	
Combined Arms Mobility Operations	MCWP 3-17.8	
Engineer Field Data	MCRP 3-17A	
Engineer Forms and Reports	MCRP 3-17B	
Engineer Operations	MCWP 3-17	
Explosive Hazard Operations	MCRP 3-17.2D	
Explosives and Demolitions	MCRP 3-17.7L	
MAGTF Breaching Operations	MCWP 3-17.3	
Supported Battalion SOP		



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C03X

HOURS: 5.00

TYPE: Exam

CATEGORY: Training

TITLE: ROUTE AND AREA CLEARANCE (RAAC) EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(P)	4.00	20 : 4
X(W)	1.00	20 : 1

MEDIA: AIO, HO, PECL, SCN, SO, STBL

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a route/area to be cleared, clearance equipment, a map, and an operation order, lead Route and Area Clearance Operations to locate, identify, mark, and/or reduce all explosive/non-explosive obstacles on the designate route/area. (1371-MOBL-2021)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given the requirement, define the tenets of the IED-D framework in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations. (1371-MOBL-2021a)
- 2 . Given the requirement, identify the phases of route clearance in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations. (1371-MOBL-2021b)
- 3 . Given the requirement, identify the route clearance team roles and responsibilities in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021c)
- 4 . Given the requirement, a route/area clearance scenario, map, and references, determine the task organization to conduct route and area clearance per the scenario in accordance with MCIP 3-17.01



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C03X

HOURS: 5.00

TYPE: Exam

CATEGORY: Training

TITLE: ROUTE AND AREA CLEARANCE (RAAC) EXAM

PHASE:

GROUP

Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021d)

- 5 . Given the requirement, a route/area clearance scenario, map, and references, determine specific equipment required for the task organized teams to conduct route and area clearance per the scenario in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021e)

- 6 . Given the requirement, a route/area clearance scenario, intelligence information, map, and references, determine probable locations of explosive/non-explosive obstacles per latest intelligence information for the conduct route and area clearance per the scenario in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021f)

- 7 . Given the requirement, a route/area clearance scenario, concept of operations, commander's intent, map and references, develop a route clearance patrol order to conduct route sweep operations to ensure sufficient mobility to support the concept of operations and commander's intent in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021g)

- 8 . Given the requirement, a route/area clearance scenario, concept of operations, commander's intent, map and references, brief the route/area clearance to be conducted to locate, mark or reduce all hazards within the route/area per the leader's decision considerations, commander's intent, and the concept of operations in accordance with MCIP 3-17.01 Combine Arms Improvised Explosive Device Defeat Operations and MCRP 3-17.2D Explosive Hazard Operations. (1371-MOBL-2021h)

NOTE(S):

This exam consists of a performance based checklist for students to utilize knowledge acquired to detect, mark, and reduce explosive/non-explosive hazards on a designated route/area. Students will properly plan personnel and



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C03X

HOURS: 5.00

TYPE: Exam

CATEGORY: Training

TITLE: ROUTE AND AREA CLEARANCE (RAAC) EXAM

PHASE:

GROUP

equipment as a team utilizing a scenario driven operations order. Students will also be tested on the conduct of mounted and dismounted clearing per the operations order and commander's intent. A knowledge based exam will also be utilized to test individuals on techniques, tactics, and procedures.

ORM Statement: Initial RAC=3, Residual RAC=4.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Appropriate Equipment Manual		
Combined Arms Improvised Explosive Device Defeat Operations	MCIP 3-17.01	
Combined Arms Mobility Operations	MCWP 3-17.8	
Engineer Field Data	MCRP 3-17A	
Engineer Forms and Reports	MCRP 3-17B	
Engineer Operations	MCWP 3-17	
Explosive Hazard Operations	MCRP 3-17.2D	
Explosives and Demolitions	MCRP 3-17.7L	
MAGTF Breaching Operations	MCWP 3-17.3	
Supported Battalion SOP		



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C04

HOURS: 52.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: IDENTIFICATION OF EXPLOSIVE HAZARDS

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
D	3.00	20 : 2
IL	26.00	20 : 1
PA	23.00	20 : 2

MEDIA: AIO, CPU, DB, EC, HO, MU, PPT, SB, SO, TF

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given an operating environment, suspected explosive hazards, combat engineer equipment, field protective equipment and publications/ORDATA II, identify Explosive Hazards (EH) by category, country of origin, type of function, safeties and conditions. (1371-MOBL-2022)
- 2 . Given an operating environment, suspected explosive hazards, a combat engineer robot, personal protective equipment and references, operate a robot to perform remote operations without injury to personnel or damage to equipment, per the operator's manual. (1371-MOBL-2035)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given the requirement and references, define the terminology/symbols of explosive hazards in accordance with applicable references. (1371-MOBL-2022a)
- 2 . Given the requirement and references, identify markers and indicators of explosive hazards in accordance with applicable references. (1371-MOBL-2022b)
- 3 . Given the requirement and references, identify the characteristics of IEDs in accordance with MCWP



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C04

HOURS: 52.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: IDENTIFICATION OF EXPLOSIVE HAZARDS

PHASE:

GROUP

- 3-17.2 MAGTF Explosive Ordnance Disposal and other applicable references. (1371-MOBL-2022c)
- 4 . With aid of references, shown types of boobytraps, identify the characteristics and components of boobytraps in accordance with applicable references. (1371-MOBL-2022d)
 - 5 . With aid of references, shown types of thrown munitions, identify the characteristics and components of thrown munitions in accordance with applicable references. (1371-MOBL-2022e)
 - 6 . With aid of references, shown types of projected munitions, identify the characteristics and components of projected munitions in accordance with applicable references. (1371-MOBL-2022f)
 - 7 . With aid of references, shown types of dropped munitions, identify the characteristics and components of dropped munitions in accordance with applicable references. (1371-MOBL-2022g)
 - 8 . With aid of references, shown types of placed munitions, identify the characteristics and components of placed munitions in accordance with applicable references. (1371-MOBL-2022h)
 - 9 . With aid of references, shown types of chemicals used in home made explosives (HME), identify chemicals and components of HME in accordance with applicable references. (1371-MOBL-2022i)
 - 10 . Given the requirement and a route and area clearance robot, state in writing the characteristics of the robot in accordance with applicable technical manuals. (1371-MOBL-2035a)
 - 11 . Given a robot, a pre-operation checklist and references, conduct pre-operational checks and procedures in accordance with applicable technical manuals. (1371-MOBL-2035b)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C04

HOURS: 52.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: IDENTIFICATION OF EXPLOSIVE HAZARDS

PHASE:

GROUP

- 12 . Given a robot, an operating environment consisting of different types of terrain and obstacles, and references, determine a robot's best avenue of approach to a hazard in accordance with applicable technical manuals. (1371-MOBL-2035c)

- 13 . Given a tactical scenario, robot, an operating environment consisting of different types of terrain and obstacles, and references, operate a robot in different environments and conditions in accordance with applicable technical manuals. (1371-MOBL-2035d)

- 14 . Given a tactical scenario, robot, an operating environment consisting of different types of terrain and obstacles, and references, perform immediate/remedial actions in order to restore robot to operable conditions in accordance with applicable technical manuals. (1371-MOBL-2035e)

- 15 . Given a tactical scenario, robot, an operating environment consisting of different types of terrain and obstacles, and references, conduct robotic reconnaissance on suspected objects in accordance with applicable technical manuals. (1371-MOBL-2035f)

- 16 . Given a tactical scenario, robot, an operating environment consisting of different types of terrain and obstacles, and references, conduct the recovery of a robot to a safe area in accordance with applicable technical manuals. (1371-MOBL-2035g)

- 17 . Given a robot, cleaning material, post-operation checklist, and references, conduct post-operational checks and procedures in accordance with applicable technical manuals. (1371-MOBL-2035h)

NOTE(S):

This class will cover proper methods in identifying explosive hazards commonly used by foreign countries as explosive devices to impede mobility of the Operating Forces. Refresher training will be conducted on remote (robotic)



COMBAT ENGINEER PLATOON SERGEANT**Concept Card Report****ANNEX C - MOBILITY****LESSON ID:** C-03C04

HOURS: 52.00

TYPE: Task Oriented**CATEGORY:** Training**TITLE:** IDENTIFICATION OF EXPLOSIVE HAZARDS**PHASE:****GROUP**

equipment operation(s). Students will also learn how to utilize publications and software to identify all types of ordnance, their functions, safeties, and other pertinent data needed for positive identification. Robot refresher training will be conducted in this class. 2 hours of practical application will be conducted utilizing robots for remote identification of explosive hazards.

ORM Statement: Initial RAC=4, Residual RAC=5.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Appropriate Manufacturer's Assembly Manual/Instructions		
Appropriate Reference Materials		
Appropriate Technical Manuals		
Combined Arms Improvised Explosive Device Defeat Operations	MCIP 3-17.01	
Combined Arms Mobility Operations	MCWP 3-17.8	
Country Handbooks	CHB	
Demolition Materials	SWO 60-AA-MMA-010	
Engineer Field Data	MCRP 3-17A	
Engineer Reconnaissance	MCWP 3-17.4	
Explosive Hazard Operations	MCRP 3-17.2D	
Explosives and Demolitions	MCRP 3-17.7L	
MAGTF Explosive Ordnance Disposal	MCWP 3-17.2	
ORDATA II (Software)	ORD	



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C04X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: IDENTIFICATION OF EXPLOSIVE HAZARDS EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(P)	1.00	20 : 1
X(W)	1.00	20 : 1

MEDIA: AIO, HO, MU, PECL, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given an operating environment, suspected explosive hazards, a combat engineer robot, personal protective equipment and references, operate a robot to perform remote operations without injury to personnel or damage to equipment, per the operator's manual. (1371-MOBL-2035)
- 2 . Given an operating environment, suspected explosive hazards, combat engineer equipment, field protective equipment and publications/ORDATA II, identify Explosive Hazards (EH) by category, country of origin, type of function, safeties and conditions. (1371-MOBL-2022)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given the requirement and references, define the terminology/symbols of explosive hazards in accordance with applicable references. (1371-MOBL-2022a)
- 2 . Given the requirement and references, identify markers and indicators of explosive hazards in accordance with applicable references. (1371-MOBL-2022b)
- 3 . Given the requirement and references, identify the characteristics of IEDs in accordance with MCWP 3-17.2 MAGTF Explosive Ordnance Disposal and other applicable references. (1371-MOBL-2022c)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C04X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: IDENTIFICATION OF EXPLOSIVE HAZARDS EXAM

PHASE:

GROUP

- 4 . With aid of references, shown types of boobytraps, identify the characteristics and components of boobytraps in accordance with applicable references. (1371-MOBL-2022d)
- 5 . With aid of references, shown types of thrown munitions, identify the characteristics and components of thrown munitions in accordance with applicable references. (1371-MOBL-2022e)
- 6 . With aid of references, shown types of projected munitions, identify the characteristics and components of projected munitions in accordance with applicable references. (1371-MOBL-2022f)
- 7 . With aid of references, shown types of dropped munitions, identify the characteristics and components of dropped munitions in accordance with applicable references. (1371-MOBL-2022g)
- 8 . With aid of references, shown types of placed munitions, identify the characteristics and components of placed munitions in accordance with applicable references. (1371-MOBL-2022h)
- 9 . With aid of references, shown types of chemicals used in home made explosives (HME), identify chemicals and components of HME in accordance with applicable references. (1371-MOBL-2022i)
- 10 . Given the requirement and a route and area clearance robot, state in writing the characteristics of the robot in accordance with applicable technical manuals. (1371-MOBL-2035a)

NOTE(S):

Students will be tested to standards on identifying ordnance items, descriptive information, and stating origin of ordnance through a written exam and performance exam (ordnance identification). HME components and initiating mechanisms will also be tested.



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C04X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: IDENTIFICATION OF EXPLOSIVE HAZARDS EXAM

PHASE:

GROUP

ORM Statement: There are no hazards associated with this exam.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Appropriate Manufacturer's Assembly Manual/Instructions		
Appropriate Reference Materials		
Appropriate Technical Manuals		
Combined Arms Improvised Explosive Device Defeat Operations	MCIP 3-17.01	
Combined Arms Mobility Operations	MCWP 3-17.8	
Country Handbooks	CHB	
Demolition Materials	SWO 60-AA-MMA-010	
Engineer Field Data	MCRP 3-17A	
Engineer Reconnaissance	MCWP 3-17.4	
Explosive Hazard Operations	MCRP 3-17.2D	
Explosives and Demolitions	MCRP 3-17.7L	
MAGTF Explosive Ordnance Disposal	MCWP 3-17.2	
ORDATA II (Software)	ORD	



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C05

HOURS: 28.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
D	4.00	20 : 2
IL	8.00	20 : 1
PA	16.00	20 : 5

MEDIA: AIO, CPU, DB, MU, PPT, SMB, SO, TF

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given an operating environment, a positively identified explosive hazard, combat engineer equipment, Class V, personal protective equipment, commander's decision and references, reduce Explosive Hazards (EH) by calculating, placing and detonating an explosive charge that will result in the reduction of the explosive hazard and allow for assured mobility in accordance with MCIP 3-17.1 Improvised Explosive Device (IED) Defeat. (1371-MOBL-2023)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given the requirement, define the Leader's Decision Considerations matrix in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023a)
- 2 . Provided an Improvised Explosive Device trail, suspected explosive hazards (EH) and without references, execute the 5 C's once contact is made with an explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023b)
- 3 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials and without references, employ protective measures for suspected EH in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations.



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C05

HOURS: 28.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS

PHASE:

GROUP

(1371-MOBL-2023c)

- 4 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials and without references, employ mitigation measures for suspected EH in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023d)
- 5 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials and references, positively identify a suspected explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations, Country Handbook and ORDATA II publication/software. (1371-MOBL-2023e)
- 6 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, and references, determine the required equipment for reduction of explosive hazards in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023f)
- 7 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, and references, determine what Class V is needed for reduction of an explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023g)
- 8 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, prepare a firing system for reduction charge in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023h)
- 9 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, construct a charge in order to reduce an explosive hazard in



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C05

HOURS: 28.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS

PHASE:

GROUP

accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023i)

- 10 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, follow the steps of preparing for detonation to reduce explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023j)
- 11 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, place a charge that will result in reducing the explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023k)
- 12 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, detonate the charge to achieve high order detonation to reduce explosive obstacle in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023l)
- 13 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, perform immediate action for misfires of explosive charges to reduce explosive obstacle in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023m)
- 14 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, and references, confirm the results of the reduction of the explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023n)
- 15 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and



**COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report**

ANNEX C - MOBILITY

LESSON ID: C-03C05 **HOURS:** 28.00
TYPE: Task Oriented
CATEGORY: Training
TITLE: REDUCE EXPLOSIVE HAZARDS
PHASE:
GROUP:

materials, and references, retrieve remnants and components of destroyed munitions for intelligence gathering in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023o)

- 16 . Given the requirement, references and recorded data, report the required data of the explosive hazard (reduced or bypassed) in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023p)

SUMMARY OF AMMUNITION REQUIREMENT(S):

DODIC	NOMENCLATURE	LO	EXPENDED		UNIT
			UNITS PER STUDENT	UNITS FOR SUPPORT	OF ISSUE
M023	Chg, Demo Block M112 1-1/4 pound C-4	1371-MOBL-2023	1.000	2.000	EACH
		DODIC TOTALS:	1.000	2.000	
M130	Cap, Blasting Electric M6	1371-MOBL-2023	1.000	0.000	EACH
		DODIC TOTALS:	1.000	0.000	
M131	Cap, Blasting Non-Electric M7	1371-MOBL-2023	1.000	0.000	EACH
		DODIC TOTALS:	1.000	0.000	



**COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report**

ANNEX C - MOBILITY

LESSON ID: C-03C05 **HOURS:** 28.00
TYPE: Task Oriented
CATEGORY: Training
TITLE: REDUCE EXPLOSIVE HAZARDS
PHASE:
GROUP:

M456	Cord, Detonating PETN Type I Class E	1371-MOBL-2023	10.000	0.000	EACH
		DODIC TOTALS:	10.000	0.000	
M670	Fuse, Blasting Time M700	1371-MOBL-2023	15.000	0.000	EACH
		DODIC TOTALS:	15.000	0.000	
M757	Chg, Assembly Demo M183 Comp C-4	1371-MOBL-2023	0.200	0.000	EACH
		DODIC TOTALS:	0.200	0.000	
MN08	Ign, Time Fuse with Shock Tube Capability M81	1371-MOBL-2023	2.000	5.000	EACH
		DODIC TOTALS:	2.000	5.000	
MN88	Cap, Blasting, 500 ft mini-tube M21	1371-MOBL-2023	0.000	1.000	EACH
		DODIC TOTALS:	0.000	1.000	
MN90	Cap, Blasting, 1000 ft mini-tube M23	1371-MOBL-2023	1.000	2.000	EACH
		DODIC TOTALS:	1.000	2.000	



COMBAT ENGINEER PLATOON SERGEANT**Concept Card Report****ANNEX C - MOBILITY****LESSON ID:** C-03C05

HOURS: 28.00

TYPE: Task Oriented**CATEGORY:** Training**TITLE:** REDUCE EXPLOSIVE HAZARDS**PHASE:****GROUP**NOTE(S):

This class covers proper tactics, techniques and procedures to reduce positively identified explosive hazards and caches (single and multiple item) for assured mobility of the Operating Force. Students will learn proper calculations, placement, and safety considerations (stand-off) needed to reduce explosive hazards within the engineer capabilities. Robots will also be utilized for remote placement of charges. Students will perform a live fire exercise during the practical application of this class. Simulated ordnance (cast replicas) will be utilized for training.

ORM Statement: Initial RAC=1, Residual RAC=3.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Appropriate Technical Manuals		
Breaching Operations	MCWP 3-17.3	
Combined Arms Improvised Explosive Device Defeat Operations	MCIP 3-17.01	
Combined Arms Mobility Operations	MCWP 3-17.8	
Demolition Card	GTA 5-10-33	
Engineer Field Data	MCRP 3-17A	
Engineer Operations	MCWP 3-17	
Engineer Reconnaissance	GTA 5-2-5	
Engineer Reconnaissance	MCWP 3-17.4	
Explosive Hazard Operations	MCRP 3-17.2D	
Explosives and Demolitions	MCRP 3-17.7L	
Ground Combat Operations	MCWP 3-1	
MAGTF Breaching Operations	MCWP 3-17.3	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C05

HOURS: 28.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS

PHASE:

GROUP

MAGTF Explosive Ordnance Disposal

MCWP 3-17.2

Military Operations on Urbanized Terrain
(MOUT)

MCWP 3-35.3

Supported Battalion SOP



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C05X

HOURS: 8.00

TYPE: Exam

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(P)	6.00	20 : 2
X(W)	2.00	20 : 1

MEDIA: AIO, HO, MU, PECL, SCN, SO, TF

TERMINAL LEARNING OBJECTIVE(S)

1. Given an operating environment, suspected explosive hazards, a combat engineer robot, personal protective equipment and references, operate a robot to perform remote operations without injury to personnel or damage to equipment, per the operator's manual. (1371-MOBL-2035)
2. Given an operating environment, a positively identified explosive hazard, combat engineer equipment, Class V, personal protective equipment, commander's decision and references, reduce Explosive Hazards (EH) by calculating, placing and detonating an explosive charge that will result in the reduction of the explosive hazard and allow for assured mobility in accordance with MCIP 3-17.1 Improvised Explosive Device (IED) Defeat. (1371-MOBL-2023)

ENABLING LEARNING OBJECTIVE(S)

1. Given the requirement, define the Leader's Decision Considerations matrix in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023a)
2. Provided an Improvised Explosive Device trail, suspected explosive hazards (EH) and without references, execute the 5 C's once contact is made with an explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023b)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C05X

HOURS: 8.00

TYPE: Exam

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS EXAM

PHASE:

GROUP

- 3 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials and without references, employ protective measures for suspected EH in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023c)
- 4 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials and without references, employ mitigation measures for suspected EH in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023d)
- 5 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials and references, positively identify a suspected explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations, Country Handbook and ORDATA II publication/software. (1371-MOBL-2023e)
- 6 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, and references, determine the required equipment for reduction of explosive hazards in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023f)
- 7 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, and references, determine what Class V is needed for reduction of an explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023g)
- 8 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, prepare a firing system for reduction charge in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C05X

HOURS: 8.00

TYPE: Exam

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS EXAM

PHASE:

GROUP

references. (1371-MOBL-2023h)

- 9 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, construct a charge in order to reduce an explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023i)

- 10 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, follow the steps of preparing for detonation to reduce explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023j)

- 11 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, place a charge that will result in reducing the explosive hazard in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023k)

- 12 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, detonate the charge to achieve high order detonation to reduce explosive obstacle in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023l)

- 13 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, Class V, and references, perform immediate action for misfires of explosive charges to reduce explosive obstacle in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023m)

- 14 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, and references, confirm the results of the reduction of the explosive hazard in accordance with



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C05X

HOURS: 8.00

TYPE: Exam

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS EXAM

PHASE:

GROUP

MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023n)

- 15 . Provided an Improvised Explosive Device trail, explosive hazards (EH), engineer equipment and materials, and references, retrieve remnants and components of destroyed munitions for intelligence gathering in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations and applicable references. (1371-MOBL-2023o)
- 16 . Given the requirement, references and recorded data, report the required data of the explosive hazard (reduced or bypassed) in accordance with MCIP 3-17.01 Combined Arms Improvised Explosive Device (IED) Defeat Operations. (1371-MOBL-2023p)
- 17 . Given a robot, a pre-operation checklist and references, conduct pre-operational checks and procedures in accordance with applicable technical manuals. (1371-MOBL-2035b)
- 18 . Given a robot, an operating environment consisting of different types of terrain and obstacles, and references, determine a robot's best avenue of approach to a hazard in accordance with applicable technical manuals. (1371-MOBL-2035c)
- 19 . Given a tactical scenario, robot, an operating environment consisting of different types of terrain and obstacles, and references, operate a robot in different environments and conditions in accordance with applicable technical manuals. (1371-MOBL-2035d)
- 20 . Given a tactical scenario, robot, an operating environment consisting of different types of terrain and obstacles, and references, perform immediate/remedial actions in order to restore robot to operable conditions in accordance with applicable technical manuals. (1371-MOBL-2035e)
- 21 . Given a tactical scenario, robot, an operating environment consisting of different types of terrain and



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX C - MOBILITY

LESSON ID: C-03C05X

HOURS: 8.00

TYPE: Exam

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS EXAM

PHASE:

GROUP

obstacles, and references, conduct robotic reconnaissance on suspected objects in accordance with applicable technical manuals. (1371-MOBL-2035f)

22 . Given a tactical scenario, robot, an operating environment consisting of different types of terrain and obstacles, and references, conduct the recovery of a robot to a safe area in accordance with applicable technical manuals. (1371-MOBL-2035g)

23 . Given a robot, cleaning material, post-operation checklist, and references, conduct post-operational checks and procedures in accordance with applicable technical manuals. (1371-MOBL-2035h)

SUMMARY OF AMMUNITION REQUIREMENT(S):

DODIC	NOMENCLATURE	LO	EXPENDED		UNIT
			UNITS PER STUDENT	UNITS FOR SUPPORT	OF ISSUE
M468	CORD, DET TYPE-1 (INERT) 2 ROLLS	1371-MOBL-2023	0.000	0.000	EACH
DODIC TOTALS:			0.000	0.000	

NOTE(S):

This exam (scenario based) includes T&R tasks 1371-MOBL-2035 "Operate a Robot", 1371-MOBL-2022 "Identification of Explosive Hazards", and 1371-MOBL-2023 "Reduce Explosive Hazards". Students will be evaluated utilizing a performance checklist and inert Class V material for mastery. Also, students will conduct a written test for knowledge attained on the subject.



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ANNEX C - MOBILITY

LESSON ID: C-03C05X

HOURS: 8.00

TYPE: Exam

CATEGORY: Training

TITLE: REDUCE EXPLOSIVE HAZARDS EXAM

PHASE:

GROUP

ORM Statement: Intial RAC 4, Residual RAC 5

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Appropriate Manufacturer's Assembly Manual/Instructions		
Appropriate Technical Manuals		
Breaching Operations	MCWP 3-17.3	
Combined Arms Improvised Explosive Device Defeat Operations	MCIP 3-17.01	
Combined Arms Mobility Operations	MCWP 3-17.8	
Demolition Card	GTA 5-10-33	
Engineer Field Data	MCRP 3-17A	
Engineer Operations	MCWP 3-17	
Engineer Reconnaissance	GTA 5-2-5	
Engineer Reconnaissance	MCWP 3-17.4	
Explosive Hazard Operations	MCRP 3-17.2D	
Explosives and Demolitions	MCRP 3-17.7L	
Ground Combat Operations	MCWP 3-1	
MAGTF Breaching Operations	MCWP 3-17.3	
MAGTF Explosive Ordnance Disposal	MCWP 3-17.2	
Military Operations on Urbanized Terrain (MOUT)	MCWP 3-35.3	
Supported Battalion SOP		



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT
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ANNEX D - COUNTERMOBILITY

LESSON ID: C-03D01

HOURS: 13.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: OBSTACLE PLANNING

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
IL	5.00	20 : 1
PA	8.00	20 : 2

MEDIA: C, CALC, CPU, DB, PPT, SMB, SO, STBL

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, intelligence reports, map, operations order, and references, prepare an obstacle plan to recommend obstacle types, placement, and resources required to fix, turn, block and disrupt enemy movement in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a map, a mission statement, commander's intent and references, conduct intelligence preparation of the battlefield in accordance with MCRP 2-3A Intelligence Preparation of the Battlefield/Battlespace and MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002a)
- 2 . Given a tactical situation, a map, a mission statement, commander's intent and references, identify requests for information (RFIs) for obstacle planning in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002b)
- 3 . Given a tactical situation, a map, a mission statement, commander's intent and references, determine the intent of reinforcing obstacles in support of the commander's intent in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002c)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX D - COUNTERMOBILITY

LESSON ID: C-03D01

HOURS: 13.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: OBSTACLE PLANNING

PHASE:

GROUP

- 4. Given a tactical situation, a map, a mission statement, commander's intent and references, determine the types of obstacles required to support of the commander's intent in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002d)
- 5. Given a tactical situation, a map, a mission statement, commander's intent and references, determine the placement of reinforcing obstacles required to support of the commander's intent in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002e)
- 6. Given a tactical situation, a map, a mission statement, commander's intent and references, identify logistics requirements required to support the obstacle plan in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration and other applicable references. (1371-CMOB-2002f)
- 7. Given a tactical situation, a map, a mission statement, commander's intent and references, complete a Modified Combined Obstacle Overlay (MCOO) depicting the obstacle plan in accordance with MCRP 2-3A Intelligence of the Battlefield/Battlespace and MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002g)

NOTE(S):

This class will teach the student proper planning for countermobility operations in support of the MAGTF. Students prepare obstacle plans based off scenarios in various situations using the countermobility matrix for planning.

ORM Statement: There are no hazards associated with this lesson.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Combined Arms Obstacle Integration	MCWP 3-17.5	
Engineer Reconnaissance	MCWP 3-17.4	



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COMBAT ENGINEER PLATOON SERGEANT
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ANNEX D - COUNTERMOBILITY

LESSON ID: C-03D01

HOURS: 13.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: OBSTACLE PLANNING

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Explosive Hazard Operations	MCRP 3-17.2D
Intelligence Preparation of the Battlefield/Battlespace	MCRP 2-3A
Joint Entry Control Point & Escalation of Force Procedures	GTA 90-01-018
Joint Forward Operations Base (JFOB) Protection Handbook	GTA 90-01-011



COMBAT ENGINEER PLATOON SERGEANT
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ANNEX D - COUNTERMOBILITY

LESSON ID: C-03D01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: OBSTACLE PLANNING EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(P)	4.00	20 : 2

MEDIA: CALC, HO, M, PECL, SO, STBL

TERMINAL LEARNING OBJECTIVE(S)

- 1 . As a member of an operations planning team in a operating environment, given a higher headquarter's order, commander's guidance, and the reference, participate in the Marine Corps Planning Process (MCP) to produce plans and orders products which support the accomplishments of the mission and commander's intent in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001)
- 2 . Provided a mission, commander's intent and resources, arrange external support for engineer projects/operations to provide all required support for a project or operation to meet the desired endstate. (1371-EOPS-2012)
- 3 . Provided a mission, construction drawings/blueprints, specifications, a calculator, writing materials, activity estimate sheets, and the reference, establish project/operation schedules to detail all personnel, equipment, and materials necessary to accomplish the mission while establishing a defined duration for each subtask and the overall project/operation and graphically depict the schedule in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011)
- 4 . Given a tactical situation, intelligence reports, map, operations order, and references, prepare an obstacle plan to recommend obstacle types, placement, and resources required to fix, turn, block and disrupt enemy movement in accordance with MCWP 3-17.5 Combined Arms Obstacle Integration. (1371-CMOB-2002)



COMBAT ENGINEER PLATOON SERGEANT

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ANNEX D - COUNTERMOBILITY

LESSON ID: C-03D01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: OBSTACLE PLANNING EXAM

PHASE:

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5. Given a mission, commander's intent, and references, deliver a military brief to provide an oral description of the current engineer situation, proposed execution, and logistical support capabilities and limitations. (1371-ADMN-2002)

ENABLING LEARNING OBJECTIVE(S)

1. Given a mission, commander's intent, and reference, select the type of brief to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002a)
2. Given a mission, commander's intent, and references, design the brief (research) to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002b)
3. Given a mission, commander's intent, and references, develop the brief to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002c)
4. Given a mission, commander's intent, and references, prepare supporting documents for the brief to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002d)
5. Given a mission, commander's intent, and references, advise the commander of the engineer situation/mission by employing effective briefing techniques to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002e)
6. Given a tactical situation, a map, a mission statement, commander's intent and references, conduct



COMBAT ENGINEER PLATOON SERGEANT

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ANNEX D - COUNTERMOBILITY

LESSON ID: C-03D01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

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PHASE:

GROUP

intelligence preparation of the battlefield in accordance with MCRP 2-3A Intelligence Preparation of the Battlefield/Battlespace and MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002a)

7. Given a tactical situation, a map, a mission statement, commander's intent and references, identify requests for information (RFIs) for obstacle planning in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002b)
8. Given a tactical situation, a map, a mission statement, commander's intent and references, determine the intent of reinforcing obstacles in support of the commander's intent in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002c)
9. Given a tactical situation, a map, a mission statement, commander's intent and references, determine the types of obstacles required to support of the commander's intent in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002d)
10. Given a tactical situation, a map, a mission statement, commander's intent and references, determine the placement of reinforcing obstacles required to support of the commander's intent in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002e)
11. Given a tactical situation, a map, a mission statement, commander's intent and references, identify logistics requirements required to support the obstacle plan in accordance with MCWP 3-17.5 Combined Arms Obstacle Intergration and other applicable references. (1371-CMOB-2002f)
12. Given a tactical situation, a map, a mission statement, commander's intent and references, complete a Modified Combined Obstacle Overlay (MCOO) depicting the obstacle plan in accordance with MCRP 2-3A Intelligence of the Battlefield/Battlespace and MCWP 3-17.5 Combined Arms Obstacle Intergration. (1371-CMOB-2002g)



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ANNEX D - COUNTERMOBILITY

LESSON ID: C-03D01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: OBSTACLE PLANNING EXAM

PHASE:

GROUP

- 13 . Given a construction directive, project specifications, and the references, create an activities list to support the project/operation in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011a)

- 14 . Given a construction directive, a complete activity list, and references, create an activity estimate sheet for each activity in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011b)

- 15 . Given a completed project schedule, notional TO/TE constraints, and references, perform resource leveling in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011c)

- 16 . Provided an operations order, identify engineer units to provide all required support for a project or operation per the concept of operations, commander's intent and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012a)

- 17 . Provided an operations order, identify capabilities of engineer units to provide all required support for a project or operation per the concept of operations, commander's intent and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012b)

- 18 . Provided an operations order, identify missions of engineer units to provide all required support for a project or operation per the concept of operations, commander's intent and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012c)

- 19 . Provided an operations order, identify procedures required to coordinate with engineer units to provide all required support for a project or operation per the concept of operations and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012d)



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LESSON ID: C-03D01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: OBSTACLE PLANNING EXAM

PHASE:

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- 20 . Given an operating environment, higher headquarters order, commander's guidance and the reference, while implementing the orders process, conduct problem framing to identify all engineer requirements while participating in the Marine Corps Planning Process (MCP) and in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001a)

- 21 . Given an operating environment, higher headquarters order, commander's guidance and the reference, while implementing the orders process, assist in the development of courses of action (COA) while participating in the Marine Corps Planning Process (MCP) and in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001b)

- 22 . Given an operating environment, higher headquarters order, commander's guidance and the reference, assist in course of action comparison while participating in the Marine Corps Planning Process (MCP) and in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001c)

- 23 . Given an operating environment, higher headquarters order, commander's guidance and the reference, develop required products while participating in the Marine Corps Planning Process (MCP) in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001d)

- 24 . Given an operating environment, higher headquarters order, commander's guidance and the reference, while implementing the orders process, assist in transitioning while participating in the Marine Corps Planning Process (MCP) in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001e)

NOTE(S):

This exam consists of the students briefing their respective countermobility plan, based on a scenario, to the instructor staff. A performance checklist will be utilized to ensure the students cover the required format, planning, and logistical requirements.



COMBAT ENGINEER PLATOON SERGEANT**Concept Card Report****ANNEX D - COUNTERMOBILITY****LESSON ID:** C-03D01X

HOURS: 4.00

TYPE: Exam**CATEGORY:** Training**TITLE:** OBSTACLE PLANNING EXAM**PHASE:****GROUP**

ORM Statement: There are no hazards associated with this test.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Aviation Ground Support	MCWP 3-21.1	
Combined Arms Obstacle Integration	MCWP 3-17.5	
Construction Estimating	MCRP 3-17.7M	
Construction Project Management	MCRP 3-17.7F	
Engineer Reconnaissance	MCWP 3-17.4	
Engineering Operations	MCWP 3-17	
Explosive Hazard Operations	MCRP 3-17.2D	
Intelligence Preparation of the Battlefield/Battlespace	MCRP 2-3A	
Joint Engineer Operations	JP 3-34	
Joint Entry Control Point & Escalation of Force Procedures	GTA 90-01-018	
Joint Forward Operations Base (JFOB) Protection Handbook	GTA 90-01-011	
Logistics Operations	MCWP 4-1	
MAGTF Command and Control	MCWP 3-40.1	
MAGTF Planner's Reference Manual	MSTP PAM 5-0.3	
Operational Planning Team Guide	MSTP PAM 5-0.2	
Project Management	FM 5-412	
SeaBee Operations in the MAGTF	MCWP 4-11.5	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

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ANNEX D - COUNTERMOBILITY

LESSON ID: C-03D01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: OBSTACLE PLANNING EXAM

PHASE:

GROUP



**COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report**

ANNEX E - SURVIVABILITY

LESSON ID: C-03E01 **HOURS:** 12.00
TYPE: Task Oriented
CATEGORY: Training
TITLE: SURVIVABILITY PLANNING
PHASE:
GROUP:

METHOD	HOURS	S:I RATIO
IL	4.00	20 : 1
PA	8.00	20 : 2

MEDIA: C, CALC, CPU, DB, M, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a map, an operations order, the supported unit's T/O and T/E, and references, prepare a survivability plan that details the scope of engineer effort required to provide a level of force protection commensurate with enemy threat capabilities and the commander's intent and MCWP 3-17 Engineer Operations. (1371-SURV-2002)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a tactical scenario, mission statement, commander's intent, a map and references, analyze METT-T from a survivability standpoint consistent with the commander's intent per the applicable references. (1371-SURV-2002a)
- 2 . Given a tactical situation, a map, an operations order, the supported unit's T/O and T/E, and references, prepare a survivability plan that details the scope of engineer effort required to provide a level of force protection commensurate with enemy threat capabilities and the commander's intent per applicable references. (1371-SURV-2002b)
- 3 . Given a tactical scenario, mission statement, commander's intent, a map and references, recommend the location of a survivability site to maximize the protective effects of terrain, consistent with the commander's intent per applicable references. (1371-SURV-2002c)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX E - SURVIVABILITY

LESSON ID: C-03E01

HOURS: 12.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: SURVIVABILITY PLANNING

PHASE:

GROUP

- 4 . Given a tactical scenario, mission statement, commander's intent, a map and references, develop a concept of survivability operations consistent with the commander's intent per applicable references. (1371-SURV-2002d)
- 5 . Given a tactical scenario, mission statement, commander's intent, a map and references, determine logistical requirements to support the survivability concept of operations per applicable references. (1371-SURV-2002e)
- 6 . Given a tactical scenario, mission statement, commander's intent, a map and references, prepare a survivability appendix to the operation order consistent with the commander's intent per applicable references. (1371-SURV-2002f)

NOTE(S):

This class will teach the student how to plan for survivability positions, blast mitigation, entry/vehicle control points, and other factors involved in force protection.

ORM Statement: There are no hazards associated with this lesson

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Engineer Field Data	MCRP 3-17A	
Engineer Operations	MCWP 3-17	
Ground Combat Operations	MCWP 3-1	
Joint Entry Control Point & Escalation of Force Procedures	GTA 90-01-018	
Joint Forward Operations Base (JFOB) Protection Handbook	GTA 90-01-011	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

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ANNEX E - SURVIVABILITY

LESSON ID: C-03E01

HOURS: 12.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: SURVIVABILITY PLANNING

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Survivability Operations

MCWP 3-17.6



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ANNEX E - SURVIVABILITY

LESSON ID: C-03E01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: SURVIVABILITY PLANNING EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(P)	4.00	20 : 2

MEDIA: CALC, HO, PECL, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a map, an operations order, the supported unit's T/O and T/E, and references, prepare a survivability plan that details the scope of engineer effort required to provide a level of force protection commensurate with enemy threat capabilities and the commander's intent and MCWP 3-17 Engineer Operations. (1371-SURV-2002)
- 2 . As a member of an operations planning team in a operating environment, given a higher headquarter's order, commander's guidance, and the reference, participate in the Marine Corps Planning Process (MCP) to produce plans and orders products which support the accomplishments of the mission and commander's intent in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001)
- 3 . Provided a mission, commander's intent and resources, arrange external support for engineer projects/operations to provide all required support for a project or operation to meet the desired endstate. (1371-EOPS-2012)
- 4 . Provided a mission, construction drawings/blueprints, specifications, a calculator, writing materials, activity estimate sheets, and the reference, establish project/operation schedules to detail all personnel, equipment, and materials necessary to accomplish the mission while establishing a defined duration for each subtask and the overall project/operation and graphically depict the schedule in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011)



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ANNEX E - SURVIVABILITY

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HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: SURVIVABILITY PLANNING EXAM

PHASE:

GROUP

5. Given a mission, commander's intent, and references, deliver a military brief to provide an oral description of the current engineer situation, proposed execution, and logistical support capabilities and limitations. (1371-ADMN-2002)

ENABLING LEARNING OBJECTIVE(S)

1. Given a mission, commander's intent, and reference, select the type of brief to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002a)
2. Given a mission, commander's intent, and references, design the brief (research) to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002b)
3. Given a mission, commander's intent, and references, develop the brief to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002c)
4. Given a mission, commander's intent, and references, prepare supporting documents for the brief to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002d)
5. Given a mission, commander's intent, and references, advise the commander of the engineer situation/mission by employing effective briefing techniques to pass the required information in accordance with the mission, commander's intent and MCWP 3-40.1 MAGTF Command and Control. (1371-ADMN-2002e)
6. Given a construction directive, project specifications, and the references, create an activities list to



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Concept Card Report

ANNEX E - SURVIVABILITY

LESSON ID: C-03E01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: SURVIVABILITY PLANNING EXAM

PHASE:

GROUP

support the project/operaton in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011a)

7. Given a construction directive, a complete activity list, and references, create an activity estimate sheet for each activity in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011b)
8. Given a completed project schedule, notional TO/TE constraints, and references, perform resource leveling in accordance with MCRP 3-17.7F Construction Project Management. (1371-EOPS-2011c)
9. Provided an operations order, identify engineer units to provide all required support for a project or operation per the concept of operations, commander's intent and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012a)
10. Provided an operations order, identify capabilities of engineer units to provide all required support for a project or operation per the concept of operations, commander's intent and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012b)
11. Provided an operations order, identify missions of engineer units to provide all required support for a project or operation per the concept of operations, commander's intent and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012c)
12. Provided an operations order, identify procedures required to coordinate with engineer units to provide all required support for a project or operation per the concept of operations and in accordance with MCWP 3-17 Engineering Operations and JP 3-34 Joint Engineer Operations. (1371-EOPS-2012d)
13. Given an operating environment, higher headquarters order, commander's guidance and the reference, while implementing the orders process, conduct problem framing to identify all engineer requirements



COMBAT ENGINEER PLATOON SERGEANT

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ANNEX E - SURVIVABILITY

LESSON ID: C-03E01X

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TYPE: Exam

CATEGORY: Training

TITLE: SURVIVABILITY PLANNING EXAM

PHASE:

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while participating in the Marine Corps Planning Process (MCP) and in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001a)

- 14 . Given an operating environment, higher headquarters order, commander's guidance and the reference, while implementing the orders process, assist in the development of courses of action (COA) while participating in the Marine Corps Planning Process (MCP) and in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001b)

- 15 . Given an operating environment, higher headquarters order, commander's guidance and the reference, assist in course of action comparison while participating in the Marine Corps Planning Process (MCP) and in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001c)

- 16 . Given an operating environment, higher headquarters order, commander's guidance and the reference, develop required products while participating in the Marine Corps Planning Process (MCP) in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001d)

- 17 . Given an operating environment, higher headquarters order, commander's guidance and the reference, while implementing the orders process, assist in transitioning while participating in the Marine Corps Planning Process (MCP) in accordance with MCWP 5-1 Marine Corps Planning Process. (1371-PLAN-2001e)

- 18 . Given a tactical scenario, mission statement, commander's intent, a map and references, analyze METT-T from a survivability standpoint consistent with the commander's intent per the applicable references. (1371-SURV-2002a)

- 19 . Given a tactical situation, a map, an operations order, the supported unit's T/O and T/E, and references, prepare a survivability plan that details the scope of engineer effort required to provide a level of force protection commensurate with enemy threat capabilities and the commander's intent per applicable references. (1371-SURV-2002b)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX E - SURVIVABILITY

LESSON ID: C-03E01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: SURVIVABILITY PLANNING EXAM

PHASE:

GROUP

- 20 . Given a tactical scenario, mission statement, commander's intent, a map and references, recommend the location of a survivability site to maximize the protective effects of terrain, consistent with the commander's intent per applicable references. (1371-SURV-2002c)
- 21 . Given a tactical scenario, mission statement, commander's intent, a map and references, develop a concept of survivability operations consistent with the commander's intent per applicable references. (1371-SURV-2002d)
- 22 . Given a tactical scenario, mission statement, commander's intent, a map and references, determine logistical requirements to support the survivability concept of operations per applicable references. (1371-SURV-2002e)
- 23 . Given a tactical scenario, mission statement, commander's intent, a map and references, prepare a survivability appendix to the operation order consistent with the commander's intent per applicable references. (1371-SURV-2002f)

NOTE(S):

This exam consists of the students briefing their respective survivability plan, based on a scenario, to the instructor staff. A performance checklist will be utilized to ensure the students cover the required format, planning, and logistical requirements.

ORM Statement: There are no hazards associated with this test.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Aviation Ground Support	MCWP 3-21.1	
Construction Estimating	MCRP 3-17.7M	
Construction Project Management	MCRP 3-17.7F	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX E - SURVIVABILITY

LESSON ID: C-03E01X

HOURS: 4.00

TYPE: Exam

CATEGORY: Training

TITLE: SURVIVABILITY PLANNING EXAM

PHASE:

GROUP

Engineer Field Data	MCRP 3-17A
Engineer Operations	MCWP 3-17
Engineering Operations	MCWP 3-17
Ground Combat Operations	MCWP 3-1
Joint Engineer Operations	JP 3-34
Joint Entry Control Point & Escalation of Force Procedures	GTA 90-01-018
Joint Forward Operations Base (JFOB) Protection Handbook	GTA 90-01-011
Logistics Operations	MCWP 4-1
MAGTF Command and Control	MCWP 3-40.1
MAGTF Planner's Reference Manual	MSTP PAM 5-0.3
Operational Planning Team Guide	MSTP PAM 5-0.2
Project Management	FM 5-412
SeaBee Operations in the MAGTF	MCWP 4-11.5
Survivability Operations	MCWP 3-17.6



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX F - UNIT TRAINING

LESSON ID: C-03F01

HOURS: 15.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: MANAGE UNIT TRAINING

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
D	1.00	20 : 1
IL	7.00	20 : 1
PA	7.00	20 : 1

MEDIA: CPU, DB, EC, HO, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given the requirement to conduct live fire training, approved range, valid RSO card, Class V, target material, personal protective equipment (PPE), communications equipment, and references, conduct range operations to complete required training without injury to personnel and equipment in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013)
- 2 . Given an engineer unit, training requirements and references, manage unit training to meet training requirements sustaining engineer operations in accordance with NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a unit training plan, time restraints, commander's intent, a list of personnel and equipment, analyze the T&R manual to collect the required information to develop training schedules to meet the requirements of the training plan, the commander's intent, and NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001a)
- 2 . Given a unit training plan, time restraints, and commander's intent, identify the various types of training or programs that can be used to meet the requirements of the training plan per the commander's intent



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX F - UNIT TRAINING

LESSON ID: C-03F01

HOURS: 15.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: MANAGE UNIT TRAINING

PHASE:

GROUP

and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001b)

- 3 . Given a unit training plan, time restraints, commander's intent, and a list of personnel and equipment, design training to meet the requirements of the training plan per the commander's intent and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001c)
- 4 . Given a unit training plan, time restraints, commander's intent, and a list of personnel and equipment, conduct Operational Risk Assessment (ORA) to identify possible hazards and how to mitigate hazards for specified training in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and MCO 3500.27 Operational Risk Management (ORM). (1371-ADMN-2001d)
- 5 . Given a unit training plan, time restraints, commander's intent, develop training to meet the requirements of the training plan per the commander's intent and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001e)
- 6 . Given a unit training plan, time restraints, commander's intent, a list of personnel and equipment, describe the implementation of training developed to the meet requirements of the training plan per the commander's intent and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and applicable range SOPs. (1371-ADMN-2001f)
- 7 . Given a unit training plan, time restraints, and commander's intent, describe the procedures to evaluate training conducted to identify possible shortfalls or if the training met the requirements of the training plan and the commander's intent and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook. (1371-ADMN-2001g)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX F - UNIT TRAINING

LESSON ID: C-03F01

HOURS: 15.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: MANAGE UNIT TRAINING

PHASE:

GROUP

- 8 . Given an area to conduct a proposed live fire range, materials and references, establish a range to conduct operations to complete required live fire training per applicable references and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013a)
- 9 . Given a requirement to conduct a live fire range, a list of Class V material, target material, and references, develop a live fire/shot plan to complete required training per applicable references and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013b)
- 10 . Given a requirement to conduct a live fire range, Class V material, target material, and references, identify the required support to conduct range operations to complete required training per applicable references and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013c)
- 11 . Given a notional live fire range, RSO card, Class V, target material, personal protective equipment (PPE) and references, conduct range operations on an established range (notional) to complete required training per applicable references, NAVMC 3500.12_ Engineer and Utilities Training & Readiness (T&R) Manual, and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013d)
- 12 . Given the requirement and references, identify post operation requirements when range operations are completed per applicable references, range regulations, and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013e)

NOTE(S):

This class will instruct the students on training requirements (engineer specific) and Marine Corps Common Skill (MCCS) tasks for conduct of individual and unit training. Also covered is other training venues (simulations, training centers, established training equipment, etc.).

T&R tasks identified in this concept card include 1371 and MCCS tasks which LOs may be replicated in wording and



COMBAT ENGINEER PLATOON SERGEANT**Concept Card Report****ANNEX F - UNIT TRAINING****LESSON ID:** C-03F01

HOURS: 15.00

TYPE: Task Oriented**CATEGORY:** Training**TITLE:** MANAGE UNIT TRAINING**PHASE:****GROUP**

context. Class outline will only list the 1371 learning objectives for ease of the reader. All tasks annotated on this concept card will be evaluated by homework assignments and by instructor evaluations during practical application exercise for mastery/non-mastery of tasks.

ORM Statement: There are no hazards associated with this lesson.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Explosives and Demolitions	MCRP 3-17.7L	
How to Conduct Training	MCRP 3-0B	
Marine Corps Combat Readiness Evaluation (MCCRE)	MCO 3501.1_	
Marine Corps Combat Readiness Evaluation System (MCCRES); Volume VI, Combat Service Support Units	MCO 3501.7_	
Marine Corps Combat Readiness and Evaluation System (MCCRES) (Mar 93)	MCO 3501.1C	
Marine Corps Engineer and Utilities Training and Readiness Manual	NAVMC 3500.12_	
Operational Risk Management (ORM)	MCO 3500.27_	
Range Safety	AR 385-63/ DA PAM 385-63 / MCO 3570.1B	
Range Safety	MCO 3570.1_	
Systems Approach to Training (SAT) Users Guide	NAVMC 1553.1_	
Unit Training Management Guide	MCRP 3-0A	



COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report

ANNEX F - UNIT TRAINING

LESSON ID: C-03F01X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: MANAGE UNIT TRAINING EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(P)	2.00	20 : 1

MEDIA: HO, PECL, SCN, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given the requirement to conduct live fire training, approved range, valid RSO card, Class V, target material, personal protective equipment (PPE), communications equipment, and references, conduct range operations to complete required training without injury to personnel and equipment in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013)
- 2 . Given an engineer unit, training requirements and references, manage unit training to meet training requirements sustaining engineer operations in accordance with NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a unit training plan, time restraints, commander's intent, a list of personnel and equipment, analyze the T&R manual to collect the required information to develop training schedules to meet the requirements of the training plan, the commander's intent, and NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001a)
- 2 . Given a unit training plan, time restraints, and commander's intent, identify the various types of training or programs that can be used to meet the requirements of the training plan per the commander's intent and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001b)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX F - UNIT TRAINING

LESSON ID: C-03F01X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: MANAGE UNIT TRAINING EXAM

PHASE:

GROUP

- 3 . Given a unit training plan, time restraints, commander's intent, and a list of personnel and equipment, design training to meet the requirements of the training plan per the commander's intent and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001c)
- 4 . Given a unit training plan, time restraints, commander's intent, and a list of personnel and equipment, conduct Operational Risk Assessment (ORA) to identify possible hazards and how to mitigate hazards for specified training in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and MCO 3500.27 Operational Risk Management (ORM). (1371-ADMN-2001d)
- 5 . Given a unit training plan, time restraints, commander's intent, develop training to meet the requirements of the training plan per the commander's intent and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and NAVMC 3500.12_ Marine Corps Engineer and Utilities Training and Readiness Manual. (1371-ADMN-2001e)
- 6 . Given a unit training plan, time restraints, commander's intent, a list of personnel and equipment, describe the implementation of training developed to the meet requirements of the training plan per the commander's intent and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook and applicable range SOPs. (1371-ADMN-2001f)
- 7 . Given a unit training plan, time restraints, and commander's intent, describe the procedures to evaluate training conducted to identify possible shortfalls or if the training met the requirements of the training plan and the commander's intent and in accordance with NAVMC 1553.1 Systems Approach to Training (SAT) User's Guidebook. (1371-ADMN-2001g)
- 8 . Given an area to conduct a proposed live fire range, materials and references, establish a range to conduct operations to complete required live fire training per applicable references and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013a)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX F - UNIT TRAINING

LESSON ID: C-03F01X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: MANAGE UNIT TRAINING EXAM

PHASE:

GROUP

- 9 . Given a requirement to conduct a live fire range, a list of Class V material, target material, and references, develop a live fire/shot plan to complete required training per applicable references and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013b)
- 10 . Given a requirement to conduct a live fire range, Class V material, target material, and references, identify the required support to conduct range operations to complete required training per applicable references and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013c)
- 11 . Given a notional live fire range, RSO card, Class V, target material, personal protective equipment (PPE) and references, conduct range operations on an established range (notional) to complete required training per applicable references, NAVMC 3500.12_ Engineer and Utilities Training & Readiness (T&R) Manual, and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013d)
- 12 . Given the requirement and references, identify post operation requirements when range operations are completed per applicable references, range regulations, and in accordance with AR 385-63 Range Safety Operations. (1371-EOPS-2013e)

NOTE(S):

Examinations will be conducted during non-academic time as homework assignments to evaluate the students per standards set in T&R tasks. Time allotted on this concept card is for reviewing and grading purposes with the students.

ORM Statement: There are no hazards associated with this exam.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Explosives and Demolitions	MCRP 3-17.7L	
How to Conduct Training	MCRP 3-0B	
Marine Corps Combat Readiness Evaluation	MCO 3501.1_	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX F - UNIT TRAINING

LESSON ID: C-03F01X

HOURS: 2.00

TYPE: Exam

CATEGORY: Training

TITLE: MANAGE UNIT TRAINING EXAM

PHASE:

GROUP

(MCCRE)

Marine Corps Combat Readiness Evaluation System (MCCRES); Volume VI, Combat Service Support Units MCO 3501.7_

Marine Corps Combat Readiness and Evaluation System (MCCRES) (Mar 93) MCO 3501.1C

Marine Corps Engineer and Utilities Training and Readiness Manual NAVMC 3500.12_

Operational Risk Management (ORM) MCO 3500.27_

Range Safety AR 385-63/ DA PAM 385-63 / MCO 3570.1B

Range Safety MCO 3570.1_

Systems Approach to Training (SAT) Users Guide NAVMC 1553.1_

Unit Training Management Guide MCRP 3-0A



**COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report**

ANNEX G - MAINTENANCE

LESSON ID: C-03G01 **HOURS:** 14.00
TYPE: Task Oriented
CATEGORY: Training
TITLE: MAINTENANCE MANAGEMENT/GCSS-MC
PHASE:
GROUP

METHOD	HOURS	S:I RATIO
CBT	5.00	20 : 1
IL	2.00	20 : 1
PA	7.00	20 : 1

MEDIA: CPU, DB, EC, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

1. With access to Global Combat Support System-Marine Corps (GCSSMC), combat engineer equipment, chests, sets and kits, equipment records, maintenance forms and references, maintain the unit's engineer equipment, chests, sets and kits maintenance programs to ensure maintenance management functions, maintenance resources, production, and information conform to unit MMSOP requirements per the references. (1371-MANT-2001)
2. With access to Global Combat Support System-Marine Corps (GCSS-MC), maintenance management reports, supporting documentation, combat engineer equipment, chests, sets and kits and references, monitor the maintenance management of the unit's combat engineer equipment, chests, sets and kits so accuracy of the combat engineer equipment, chests, sets and kits maintenance is validated and unit's readiness and equipment serviceability are enhanced. (1371-MANT-2002)

ENABLING LEARNING OBJECTIVE(S)

1. Given the requirement, state the requirements of maintenance/maintenance management in accordance with Marine Corps orders, directives and other applicable references. (1371-MANT-2001a)
2. Given the requirement and references, identify the procedures to maintain engineer equipment



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX G - MAINTENANCE

LESSON ID: C-03G01

HOURS: 14.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: MAINTENANCE MANAGEMENT/GCSS-MC

PHASE:

GROUP

publications in accordance with applicable references. (1371-MANT-2001b)

3. Given the requirement and references, state the requirements to inventory equipment, chests, sets and kits in accordance with applicable references. (1371-MANT-2001c)
4. Given the requirement, a notional Table of Equipment (T/E), a Consolidate Memorandum Receipt (CMR), and references, report discrepancies to Mechanized Allowance List (MAL) and CMR in accordance with applicable references. (1371-MANT-2001d)
5. Given the requirement, state the capabilities of Global Combat Support System-Marine Corps (GCSS-MC) in accordance with applicable references. (1371-MANT-2001e)
6. Given the requirement, a notional Table of Equipment (T/E), applicable forms or reports, and references, state the procedures to maintain equipment folders/forms/GCSS-MC in accordance with applicable references. (1371-MANT-2001f)
7. Given the requirement, identify the different service requests in GCSS-MC in accordance with applicable references. (1371-MANT-2001g)
8. Given the requirement, identify the types of GCSS-MC generated reports necessary for users in accordance with applicable references. (1371-MANT-2001h)
9. Given the requirement and references, generate an Maintenance Process Report (MPR) using GCSS-MC on unit/platoon equipment in accordance with applicable references. (1371-MANT-2002a)
10. Given the requirement and references, generate an Equipment Status Request(ESR)report using GCSS-MC on unit/platoon in accordance with applicable references. (1371-MANT-2002b)



COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report

ANNEX G - MAINTENANCE

LESSON ID: C-03G01 HOURS: 14.00
TYPE: Task Oriented
CATEGORY: Training
TITLE: MAINTENANCE MANAGEMENT/GCSS-MC
PHASE:
GROUP

11 . Given the requirement and references, state requirements to reconcile with maintenance/supply using GCSS-MC reports in accordance with applicable references. (1371-MANT-2002c)

NOTE(S):

Students will be instructed to enroll in GCSS-MC online modules (<https://gcssmc.csd.disa.mil>) during this course and complete prescribe training during computer based training (CBT) and practical application (PA) time. Emerging topics such as new GCSS-MC requirements on Publications, CMR, Calibration, Equipment Record Procedures, and how to employ these tools will be covered.

Students will be required to complete the following GCSS-MC modules during this class:

- "Getting Started in GCSS-MC" (module: CS 101)
- "iSupport Requestors" (module: CS 102)
- "Requestors (Field Service Request)" (module: CS 103)
- "Reports Users (Discoverer & Standard)" (module: RPTS 101)
- "Daily Business Intelligence" (module: RPTS 102)
- "Accountable Officers" (module: AO 101)
- "Responsible Officers" (module: RO 101)

ORM Statement: There are no safety concerns associated with this lesson.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Applicable GCSS-MC Procedural Notices (GPN)	GPN	
Appropriate Technical Manuals		
Consumer Level Supply Policy Manual	MCO P4400.150_	
GCSS-MC Aid Global Combat Support System-Marine Corps Job Aid		



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX G - MAINTENANCE

LESSON ID: C-03G01

HOURS: 14.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: MAINTENANCE MANAGEMENT/GCSS-MC

PHASE:

GROUP

GCSS-MC Guide Global Combat Support
System-Marine Corps Guide

Ground Equipment Condition and Supply Materiel MCO 3000.11_
Readiness Reporting (MRR) Policy

Ground Equipment Record Procedures TM 4700-15/1_

How to Conduct Training MCRP 3-0B

MCBUL 3000 Marine Corps Automated
Readiness Evaluation System (MARES)

MIMMS-AIS Field Maintenance Procedures UM 4790-5

UNIT SOP Unit's Standing Operating Procedures

Uniform Material Movement and Issue Priority MCO 4400.16_
System (UMMIPS)

Users Manual MIMMS UM 4790-5



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX G - MAINTENANCE

LESSON ID: C-03G01X

HOURS: 1.00

TYPE: Exam

CATEGORY: Training

TITLE: MAINTENANCE MANAGEMENT/GCSS-MC EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(W)	1.00	20 : 1

MEDIA: HO, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . With access to Global Combat Support System-Marine Corps (GCSSMC), combat engineer equipment, chests, sets and kits, equipment records, maintenance forms and references, maintain the unit's engineer equipment, chests, sets and kits maintenance programs to ensure maintenance management functions, maintenance resources, production, and information conform to unit MMSOP requirements per the references. (1371-MANT-2001)
- 2 . With access to Global Combat Support System-Marine Corps (GCSS-MC), maintenance management reports, supporting documentation, combat engineer equipment, chests, sets and kits and references, monitor the maintenance management of the unit's combat engineer equipment, chests, sets and kits so accuracy of the combat engineer equipment, chests, sets and kits maintenance is validated and unit's readiness and equipment serviceability are enhanced. (1371-MANT-2002)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given the requirement, state the requirements of maintenance/maintenance management in accordance with Marine Corps orders, directives and other applicable references. (1371-MANT-2001a)
- 2 . Given the requirement and references, identify the procedures to maintain engineer equipment publications in accordance with applicable references. (1371-MANT-2001b)



COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX G - MAINTENANCE

LESSON ID: C-03G01X

HOURS: 1.00

TYPE: Exam

CATEGORY: Training

TITLE: MAINTENANCE MANAGEMENT/GCSS-MC EXAM

PHASE:

GROUP

3. Given the requirement and references, state the requirements to inventory equipment, chests, sets and kits in accordance with applicable references. (1371-MANT-2001c)
4. Given the requirement, a notional Table of Equipment (T/E), a Consolidate Memorandum Receipt (CMR), and references, report discrepancies to Mechanized Allowance List (MAL) and CMR in accordance with applicable references. (1371-MANT-2001d)
5. Given the requirement, state the capabilities of Global Combat Support System-Marine Corps (GCSS-MC) in accordance with applicable references. (1371-MANT-2001e)
6. Given the requirement, a notional Table of Equipment (T/E), applicable forms or reports, and references, state the procedures to maintain equipment folders/forms/GCSS-MC in accordance with applicable references. (1371-MANT-2001f)
7. Given the requirement, identify the different service requests in GCSS-MC in accordance with applicable references. (1371-MANT-2001g)
8. Given the requirement, identify the types of GCSS-MC generated reports necessary for users in accordance with applicable references. (1371-MANT-2001h)
9. Given the requirement and references, generate an Maintenance Process Report (MPR) using GCSS-MC on unit/platoon equipment in accordance with applicable references. (1371-MANT-2002a)
10. Given the requirement and references, generate an Equipment Status Request(ESR)report using GCSS-MC on unit/platoon in accordance with applicable references. (1371-MANT-2002b)



**COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report**

ANNEX G - MAINTENANCE

LESSON ID: C-03G01X

HOURS: 1.00

TYPE: Exam

CATEGORY: Training

TITLE: MAINTENANCE MANAGEMENT/GCSS-MC EXAM

PHASE:

GROUP

11 . Given the requirement and references, state requirements to reconcile with maintenance/supply using GCSS-MC reports in accordance with applicable references. (1371-MANT-2002c)

NOTE(S):

Examination will consist of testing information on general maintenance concepts, equipment inventorying and accountability, and GCSS-MC database entries/reports.

ORM Statement: There are no hazards associated with this exam.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Applicable GCSS-MC Procedural Notices (GPN)	GPN	
Appropriate Technical Manuals		
Consumer Level Supply Policy Manual	MCO P4400.150_	
GCSS-MC Aid Global Combat Support System-Marine Corps Job Aid		
GCSS-MC Guide Global Combat Support System-Marine Corps Guide		
Ground Equipment Condition and Supply Materiel Readiness Reporting (MRR) Policy	MCO 3000.11_	
Ground Equipment Record Procedures	TM 4700-15/1_	
How to Conduct Training	MCRP 3-0B	
MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES)		
MIMMS-AIS Field Maintenance Procedures	UM 4790-5	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX G - MAINTENANCE

LESSON ID: C-03G01X

HOURS: 1.00

TYPE: Exam

CATEGORY: Training

TITLE: MAINTENANCE MANAGEMENT/GCSS-MC EXAM

PHASE:

GROUP

UNIT SOP Unit's Standing Operating Procedures

Uniform Material Movement and Issue Priority System (UMMIPS) MCO 4400.16_

Users Manual MIMMS UM 4790-5



COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report

ANNEX H - EXPEDITIONARY OPERATIONS

LESSON ID: C-03H01

HOURS: 11.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: EXPEDITIONARY CAMP PLANNING

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
IL	4.00	20 : 1
PA	7.00	20 : 2

MEDIA: CPU, DB, PPT, SMB, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a map, an operations order, size and type of unit, and references, plan a base camp to meet or exceed the unit requirements and the commander's intent, while accounting for future expansion, in accordance with MCRP 3-17.7N Base Camps. (1371-PLAN-2002)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine force protection requirements for forward operating base (FOB, COP, FARP) per the concept of operations, the commander's intent and in accordance with applicable references. (1371-PLAN-2002a)
- 2 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine survivability requirements for forward operating base (FOB, COP, FARP) per the concept of operations, the commander's intent and in accordance with applicable references. (1371-PLAN-2002b)
- 3 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine bulk liquid (fuel and water) requirements for forward operating base (FOB, COP, FARP) per the concept of operations, the commander's intent and in accordance with



COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report

ANNEX H - EXPEDITIONARY OPERATIONS

LESSON ID: C-03H01

HOURS: 11.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: EXPEDITIONARY CAMP PLANNING

PHASE:

GROUP

applicable references. (1371-PLAN-2002c)

- 4 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine sustainment requirements for forward operating base (FOB, COP, FARP) to support occupying unit per the concept of operations, the commander's intent and in accordance with applicable references. (1371-PLAN-2002d)
- 5 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine resource requirements for forward operating base (FOB, COP, FARP) to support occupying unit per the concept of operations, the commander's intent and in accordance with applicable references. (1371-PLAN-2002e)
- 6 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, design a expeditionary camp layout for forward operating base (FOB, COP, FARP) to support occupying unit per the concept of operations, resources and equipment available, commander's intent, and in accordance with applicable references. (1371-PLAN-2002f)

NOTE(S):

This class covers planning and construction support for forward operating bases (FOBs), combat outposts (COPs), forward arming & refueling points (FARPs) and small base camp construction for forward operating forces.

ORM Statement: There are no hazards associated with this lesson.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Base Camps	MCRP 3-17.7N	
Bulk Liquids Operations	MCWP 4-25.5	
Combined Arms Obstacle Integration	MCWP 3-17.5	
Construction Estimating	MCRP 3-17.7M	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT
Concept Card Report

ANNEX H - EXPEDITIONARY OPERATIONS

LESSON ID: C-03H01

HOURS: 11.00

TYPE: Task Oriented

CATEGORY: Training

TITLE: EXPEDITIONARY CAMP PLANNING

PHASE:

GROUP

Construction Project Management	MCRP 3-17.7F
Earthmoving Operations	MCRP 3-17.7I
Engineer Field Data	MCRP 3-17A
Engineer Operations	MCWP 3-17
Field Hygiene and Sanitation	MCRP 4-11.1D
Joint Entry Control Point & Escalation of Force Procedures	GTA 90-01-018
Joint Forward Operations Base (JFOB) Protection Handbook	GTA 90-01-011
Manual of Naval Preventive Medicine, Chapter 9, Preventive Medicine for Ground Forces	NAVMED P-5010-9
Petroleum and Water Logistics Operations	MCWP 4-11.6
Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Airfield and Heliport Design	MCRP 3-17.7B
Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Road Design	MCRP 3-17.7A
Survivability Operations	MCWP 3-17.6



COMBAT ENGINEER PLATOON SERGEANT
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ANNEX H - EXPEDITIONARY OPERATIONS

LESSON ID: C-03H01X

HOURS: 5.00

TYPE: Exam

CATEGORY: Training

TITLE: EXPEDITIONARY BASE CAMP PLANNING EXAM

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
X(P)	5.00	20 : 2

MEDIA: HO, PECL, SCN, SO

TERMINAL LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a map, an operations order, size and type of unit, and references, plan a base camp to meet or exceed the unit requirements and the commander's intent, while accounting for future expansion, in accordance with MCRP 3-17.7N Base Camps. (1371-PLAN-2002)

ENABLING LEARNING OBJECTIVE(S)

- 1 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine force protection requirements for forward operating base (FOB, COP, FARP) per the concept of operations, the commander's intent and in accordance with applicable references. (1371-PLAN-2002a)
- 2 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine survivability requirements for forward operating base (FOB, COP, FARP) per the concept of operations, the commander's intent and in accordance with applicable references. (1371-PLAN-2002b)
- 3 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine bulk liquid (fuel and water) requirements for forward operating base (FOB, COP, FARP) per the concept of operations, the commander's intent and in accordance with applicable references. (1371-PLAN-2002c)



COMBAT ENGINEER PLATOON SERGEANT
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ANNEX H - EXPEDITIONARY OPERATIONS

LESSON ID: C-03H01X

HOURS: 5.00

TYPE: Exam

CATEGORY: Training

TITLE: EXPEDITIONARY BASE CAMP PLANNING EXAM

PHASE:

GROUP

- 4 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine sustainment requirements for forward operating base (FOB, COP, FARP) to support occupying unit per the concept of operations, the commander's intent and in accordance with applicable references. (1371-PLAN-2002d)
- 5 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, determine resource requirements for forward operating base (FOB, COP, FARP) to support occupying unit per the concept of operations, the commander's intent and in accordance with applicable references. (1371-PLAN-2002e)
- 6 . Given a tactical situation, a map, an operation order, commander's intent, a unit to support, as a member of a team with references, design a expeditionary camp layout for forward operating base (FOB, COP, FARP) to support occupying unit per the concept of operations, resources and equipment available, commander's intent, and in accordance with applicable references. (1371-PLAN-2002f)

NOTE(S):

This exam is based on a scenario to plan and construct a forward base camp (FOB, COP, FARP) for forward operating forces. Students will placed into teams, brief proposed plan(s) and be graded (mastery/non-mastery) per a performance checklist.

ORM Statement: There are no hazards associated with this exam.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Base Camps	MCRP 3-17.7N	
Bulk Liquids Operations	MCWP 4-25.5	
Combined Arms Obstacle Integration	MCWP 3-17.5	
Construction Estimating	MCRP 3-17.7M	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT
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ANNEX H - EXPEDITIONARY OPERATIONS

LESSON ID: C-03H01X

HOURS: 5.00

TYPE: Exam

CATEGORY: Training

TITLE: EXPEDITIONARY BASE CAMP PLANNING EXAM

PHASE:

GROUP

Construction Project Management	MCRP 3-17.7F
Earthmoving Operations	MCRP 3-17.7I
Engineer Field Data	MCRP 3-17A
Engineer Operations	MCWP 3-17
Field Hygiene and Sanitation	MCRP 4-11.1D
Joint Entry Control Point & Escalation of Force Procedures	GTA 90-01-018
Joint Forward Operations Base (JFOB) Protection Handbook	GTA 90-01-011
Manual of Naval Preventive Medicine, Chapter 9, Preventive Medicine for Ground Forces	NAVMED P-5010-9
Petroleum and Water Logistics Operations	MCWP 4-11.6
Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Airfield and Heliport Design	MCRP 3-17.7B
Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Road Design	MCRP 3-17.7A
Survivability Operations	MCWP 3-17.6



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

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ANNEX Z - ADMINISTRATIVE

LESSON ID: Z001

HOURS: 3.00

TYPE: Administrative

CATEGORY: Training

TITLE: ORIENTATION

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
OR	3.00	20 : 2

MEDIA: DB, HO, SO

NOTE(S):

Students will be briefed by staff on all aspects of training. Courseware and additional guidance will be given for the conduct of training and off duty time.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Management of Marine Corps Formal Schools and Training Detachments	MCO 1553.2_	
School Academic SOP	SCOLO 1500.5_	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

Concept Card Report

ANNEX Z - ADMINISTRATIVE

LESSON ID: Z002

HOURS: 4.00

TYPE: Administrative

CATEGORY: Training

TITLE: CHECKOUT

PHASE:

GROUP

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
CKIN/OUT	4.00	20 : 1

MEDIA: HO

NOTE(S):

Time allotted for students to check out with supporting establishments such as Medical, Dental, Admin, etc.. Also time for preparation for Graduation commencements.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Management of Marine Corps Formal Schools and Training Detachments	MCO 1553.2_	
School Academic SOP	SCOLO 1500.5_	



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COMBAT ENGINEER PLATOON SERGEANT

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ANNEX Z - ADMINISTRATIVE

LESSON ID: Z003

HOURS: 1.00

TYPE: Administrative

CATEGORY: Training

TITLE: GRADUATION

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
GRAD	1.00	20 : 2

MEDIA: HO

NOTE(S):

Formal graduation for students to receive certificates of completion from Company Commander of Combat Engineer Instruction Company.

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Management of Marine Corps Formal Schools and Training Detachments	MCO 1553.2_	
School Academic SOP	SCOLO 1500.5_	



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

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ANNEX Z - ADMINISTRATIVE

LESSON ID: Z004

HOURS: 40.00

TYPE: Administrative

CATEGORY: Training

TITLE: PHYSICAL TRAINING/PERSONAL HYGIENE

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
PH	20.00	20 : 1
PT	20.00	20 : 1

MEDIA: N/A

NOTE(S):

Time allotted in concurrence with MCO 6100.13 Physical Fitness Program and MCO 1553.2_ Management of Marine Corps Formal Schools.

REFERENCE - TITLE

PUBLICATION ID

CHAPTER/PAGE

School Academic SOP

SCOLO 1500.5_



Date: 20150604

COMBAT ENGINEER PLATOON SERGEANT

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ANNEX Z - ADMINISTRATIVE

LESSON ID: Z005

HOURS: 1.00

TYPE: Administrative

CATEGORY: Training

TITLE: END OF COURSE CRITIQUE

PHASE:

GROUP

METHOD	HOURS	S:I RATIO
CR	1.00	20 : 1

MEDIA: HO

NOTE(S):

Academics will administer an End of Course Critique (ECC) to be filled out by the students prior to graduation commencement..

<u>REFERENCE - TITLE</u>	<u>PUBLICATION ID</u>	<u>CHAPTER/PAGE</u>
Management of Marine Corps Formal Schools and Training Detachments	MCO 1553.2_	
School Academic SOP	SCOLO 1500.5_	

