

**ENGINEER EQUIPMENT OPERATOR NCO**  
**Concept Card Report**

**ANNEX C - PROJECT MANAGEMENT**

**LESSON ID:** NCOO - A03

**HOURS:** 61.50

**TYPE:** Task Oriented

**CATEGORY:** Training

**TITLE:** Estimating for Mission Requirements

<b>METHOD</b>	<b>HOURS</b>	<b>S:I RATIO</b>
D	8.00	25 : 2
L	19.50	25 : 1
PA	34.00	25 : 2

**MEDIA:** AIO, DB, HO, PPT, TM

**TERMINAL LEARNING OBJECTIVE(S)**

- 1 . Provided a horizontal construction mission, resources, and references, prepare estimations for project production and logistical requirements, to support mission requirements. (1345-HORZ-2001)

**ENABLING LEARNING OBJECTIVE(S)**

- 1 . Given mathematical problems, a calculator, and without the aid of references, solve each problem per the MCI 13341. (1345-HORZ-2001a)
- 2 . Given basic order of operation equations, a calculator, and without the aid of references, solve each problem per the MCI 13341. (1345-HORZ-2001b)
- 3 . Given area and volume equations, a calculator, and without the aid of references, solve each problem per the MCI 1327. (1345-HORZ-2001c)
- 4 . Given a horizontal construction directive, soil type, classification, state and moisture content, with the aid of references, identify weight of a specified volume per the FM 5-434. (1345-HORZ-2001d)
- 5 . Given a horizontal construction directive, engineer equipment quantities and types, soil weight, with the aid of references, calculate maximum load (volume and weight), per the FM 5-434. (1345-HORZ-2001e)



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- 6 . Given a horizontal construction directive, engineer equipment quantities and types, specified material and weight, and with the aid of references, calculate production rates per the reference FM 5-434. (1345-HORZ-2001f)
  
- 7 . Given a horizontal construction directive, production rates, with the aid of references, calculate the time requirement for mission completion per the FM 5-434. (1345-HORZ-2001g)
  
- 8 . Given a horizontal construction directive, with the aid of references, identify the responsibilities of the NCO for logistical requirements to support a mission per the FM 5-35. (1345-HORZ-2001h)

**NOTE(S):**

<b><u>REFERENCE - TITLE</u></b>	<b><u>PUBLICATION ID</u></b>	<b><u>CHAPTER/PAGE</u></b>
CSS Field Reference Guide	MCRP 4-11A, Vol 1	
Earthmoving Operations	FM 5-434	
Engineer Estimations	MCI 1327	
Engineer Operations	FMFM 4-4	
Engineering Field Data	FM 5-34	
Marine Corps Field Feeding Program	MCRP 4-11.8A	
Math for Marines	MCI 13341	
Planning and Design of roads, airfields, and heliports in the theater of operations- Road Design	FM 5-430-00-1	
Staff Officer's Field Manual	FM 101-10-1	

