

## **CHAPTER 10**

### **FORMAT: ENGINEER SUPPORT PLAN**

#### **SECTION 14**

#### **ENGINEER ANNEX OF THE BRIGADE OPERATIONAL ORDER**

Engineer Support Plan/Engineer Annex by XYZ Field Company For XYZ Infantry Brigade

1. **General.** XYZ Field Company Engineers is affiliated to XYZ Infantry Brigade for providing Engineer support in its defence.

2. **Provision of Engineer Support.** XYZ Field Company Engineers will provide combat engineer support in the following scheme of task parameters:

a. **Mobility.** Will include the following:

- (1) Road improvement
- (2) Construction/repair of bridge
- (3) Assist in River crossing operations

b. **Counter mobility.** Following support have been planned:

- (1) Minefield laying
- (2) Denial of bridge (by demolition and non demolition means)
- (3) Road craters
- (4) Water mines
- (5) Steepening of river banks to increase its obstacle value
- (6) Road blocks

c. **Survivability.** Will include:

- (1) Construction of water points
- (2) Dug in command post

d. **General.** General support will be comprised of detaching small engineer elements to UCW forces who will provide explosive support and training for volunteers.

(\*For impact on engineer support please see examples on Chapter on Engineer Estimate)

3. **Guiding Parameter.**

Following are the guiding parameters for provisioning of engineer support:

- a. Major portion of counter mobility task would be along enemy's main axis of advance.
- b. Emphasis to be given to enhance the obstacle potential of existing natural obstacle (River A and B).
- c. Small engineer parties equipped with explosive to be grouped with UCW forces.
- d. Demolition of bridge on national highway/over 200 feet requires prior permission.
- e. No national/strategic installations to be damaged. However vital spares may be removed to make the same non-functional with prior permission of the strategic commander.

4. **Phases of Work.** In accordance with the lines of defence planned by the Brigade HQ, the engineer support will unfold in following phases :

- a. Phase 1. Covers area between IB to 1<sup>st</sup> line of defence.
- b. Phase 2. Covers area between 1<sup>st</sup> to 2<sup>nd</sup> line of defence.
- c. Phase 3. Covers area between 2<sup>nd</sup> to 3<sup>rd</sup> line of defence.
- d. Phase 4. Covers area between 3<sup>rd</sup> to River A/B.

5. **Available Resources.** The XYZ Field Company is equipped with the following resources:

- a. Manpower. 209 (including 4 Officers, and 4 JCOs).
- b. Vehicle. 2 x Jeep, 3 x P/Up, 3 x 3 ton, 1 x Ambulances.
- c. Plant. 1 X Dumper, 1 X Dozer.
- d. Water Purification Sets. 02.
- e. Explosives/Mines etc. 250 x Bangalore Torpedo, 5,400 x Atk mines, 16,200 Apers mines, 5,600 kg of PE. Note that the explosive authis for the whole Divisional Engineer Battalion and will be replenished from Army reserve as and when required.

(Note: The following tasks have been grouped phase and then task wise. You can also group the same Task Force wise. Use the discretion of the Commander. The data here is fictitious for learning purposes only. You will get this data from your Engineer Project).

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6. **Phase 1.**
7. **Phase 2.**
8. **Phase 3.**
9. **Phase 4.**

TF	Type of wk/obs	Loc/Sq	Size (yards/ ft)	Store required					Remarks/ time in plhr
				Mine (no)	Expl (kg)	Concrete block (no)	Veh (no)	Other	
A	4 x minefield	Batekshar	2000	2000			5		20
		Mynamati	2000	2000			5		20
		Durgapur	2000	2000			5		20
		Rampur	2000	2000			5		20
B	2 x minefield	Ashrafpur	2000	2000			5		20
		Belghar	2000	666			3		6
A	2 x road block	Shaitpur	1000			15	1	20*	10*
		Ghilatala	1000			15	1	20	Hayrick 10
B	1 x road block	Shasongasa	1000			15	1	20	10
B	2 x road crater	Mostafapur	2000		100		1	20*	5*
		Haratole	2000		100		1	20	Hayrick 5
C	2 x road crater	Gazigram	2000		100		1	20	5
		Ishtagram	2000		100		1	20	5
B	1 x bridge demolition	Aryannapur	150 feet		100		1	10*	5* Hayrick
C	1 x bridge demolition	Shantipar	150 feet		100		1	10	5
A	Roadimpv- maint	Upon reqr							

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10. **Summary.** (You will get this data from your Engineer Project).

Task force	Phase	Time (Platoon hour)	Mine (number)/available	Explosive (kg)/available	Hayrick (no)/available	Concrete blocks (number)/available	Vehicle (3 ton)/available	Remarks/ time frame
All	Phase 1	192	15,000	600	160	50	54	5 days (15-19)
All	Phase 2	219	12,000	1,250	330	50	80	6 days (20-25)
All	Phase 3	145	8,000	1,000	210	15	49	4 days (26-29)
All	Phase 4	150	2,000	2,000	110	15	86	5 days (30-04)
	UCW			1,000				
	Total	706*	37,000/5,400	5,850/5,600	810/200	130/0	269/3	* 235 coy hr = 20 days

11. **Deductions/Decisions.**

- a. Excess explosives/mine/hayrick will be demanded through Engineer Battalion Representatives at Divisional Headquarter. (You have the list of shortfall of stores, explosive equipment in the above table.)
- b. 10 x 3-ton required for round trip to allow above stores and manpower to mobilize.
- c. 1 x Excavator will be demanded through Engineer Battalion Representatives at Divisional Headquarter.
- d. Concrete blocks will be prepared and placed in situ.
- e. 05 xORs led by a Corporal from each platoon (total 15) will be provided with required explosive (each 330 kg) to UCW forces.
- f. Improvement of road, requirement of CP/OHP/OHC to be demanded by the Infantry Battalions through Brigade Headquarter.
- g. After completion of the task the company will be located with Brigade reserve.

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**WORK PROGRAM**

**ENGINEER SUPPORT PLAN/ENGINEER ANNEX**

**XYZ FIELD COMPANY ENGINEERS**

(Fill the following in graph paper. Include your work progress and enemy advance time as well so that the Commander gets a clear picture if you are exceeding his time limits or are within his planning schedule. You may also use your Engineer Project Work program here. The former is better because the Commander can see your progress vis-à-vis enemy progress as well. In any case though, the Engineer Project Work Program has to be prepared and attached at the end of Engineer Project.)

Date :

Company Commander

Ser	Phase	Force	Timeline (January - February 2019)					Remarks
			15 19	20 24	25 29	30 04	05 09	
1.	Phase 1 (IB to 1 <sup>st</sup> def line)	Own						
		Enemy						
2.	Phase 2 (1 <sup>st</sup> to 2 <sup>nd</sup> def line)	Own						
		Enemy						
3.	Phase 3 (2 <sup>nd</sup> to 3 <sup>rd</sup> def line)	Own						
		Enemy						
4.	Phase 4 (3 <sup>rd</sup> to beyond)	Own						
		Enemy						

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**FORMAT: ENGR APRC TO SP XXX INF BDE IN DEF**

G/Operations/Identifying Reference

Copy Number\_\_ of \_\_\_\_  
Total Pages

**AN ENGR APRC TO SP XXX INF BDE IN ITS OCCUPATION**

**OF DEF IN GEN AREA.....**

For :  
By :  
At : (Time)

Formation/ Unit:  
On: (Day. MonthYr)

References:

- A. ....
- B. ....
- C. Any other.

Time Zone Used Throughout the Appreciation: FOXTROT.

**REVIEW OF THE SIT**

- 1. Enemy (Threat pattern, likely courses of operation)
- 2. Own (Concept of battle, outline tactical plan)
- 3. Support available (both enemy and own)
- 4. Impact of Air.

**AIM**

- 5. To .....

**FACTORS**

**Grd and Likely Courses of En Op**

6. **General Description.**7. **Defence Areas.**8. **Wx/Met Condition.**9. **Apps.**

## 10. Likely En and Own Courses of Op.

- a. Course A. (Describe en's likely course)
- b. Comments. (State likeliness of the en course with logic and own engineer tasks to encounter those).
- c. Course B.
- d. Comments.
- e. Course C.
- f. Comments.

11. **Deductions.**

- a. Priority of App.
- b. Probable En Courses in Order of Priority.
- c. Obstacles Plan (Approach Wise).
  - (1) App-1.
    - (a) Mob Task.
    - (b) C-Mob Task.
    - (c) Admin Task.
    - (d) Cnz Task.
    - (e) Cam and Concealment Task.
    - (f) Probable Location of Store Dump.
    - (g) Survivability Task.
    - (h) etc.....
- d. Few more (as the staff feels nec).

13. **En and Own Resources and Cap.**

Ser	Item	En	Own	Ratio	Remark
1.					

14. **Deductions.**

15. **Assessment of Task, Resources and Time.**

Ser	Task	Time and Troops Reqr (plhr)	Resources	Remarks

**Engineer Resources and Time Available.**16. **Working Troops Available.**17. **Total WorkHours Available.**18. **Deductions (Including Re-adjusted Task List).****Tentative Plan for Execution of Engineer Tasks**19. **Composition of TFs and Their Tasks.**a. **Composition of Task Forces.**b. **Tasks of TFs with Priority.**(1) **Task Force A.**

(a)

(b)

(2) **Task Force B.** (similarly write the tasks of all Task Forces).c. **Alt of Stores to Task Forces.**(1) **Task Force-A**

Ser	Tasks	Stores	Remarks
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(2) **Task Force-B.**(3) **Task Force-C**(4) **Task Force-D**(5) **Task Force-E**d. **Transport Requirement and Available.**

Ser	Task Force	Stores	Reqrof Transport	Transport Available	Addl Demand	Remarks



## **ENGINEER SUPPORT PLAN**

1. **SITUATION.**
2. **MISSION.**
3. **EXECUTION.**
  - a. Gen Outline.
  - b. Task Force –A.
    - (1) Commander.
    - (2) Group.
    - (3) Tasks.
  - c. Task Force –B.
  - d. Task Force –C.
  - e. Coordinator Instruction.
    - (1) Timing.
    - (2) Location of Dumps.
    - (3) Transports.
    - (4) Special Equipment.
4. **SERVICE SUPPORT.**
  - a. AdminOrder.
  - b. Medical.
  - c. Food and Personal Admin.
5. **COMMAND AND SIGNAL.**
  - a. Location.
  - b. Communication Net Diagrams.
  - c. Electronic Silence.
  - d. Code Words.
  - e. Nick Names.

XXXXXXXXXXXXX  
Maj  
OC xxxxxxxx

Annex:

A. Obstacles Plan.

Distribution: