

APPENDIX C

Engineer Mobility Estimate

MISSION AND SITUATIONS

The mission is stated by the commander. References include maps, charts, or other documents.

Intelligence situation. This is based on information obtained from the intelligence officer and other sources. It is in the following three areas:

- Characteristics of the area of operations. This includes data on the weather and terrain information such as cross-country trafficability, infrastructure (routes and bridges), obstacles (existing and reinforcing), and choke points.
- Enemy strength and disposition. This includes data on the strength of enemy forces.
- Enemy capabilities. This includes data on enemy capabilities affecting the mission and affecting engineer activities.

Tactical situation. This is based on information obtained from the commander's planning guidance and from the operations order. It includes the—

- Present dispositions of major tactical elements.
- Possible courses of action to accomplish the mission. (These courses of action are carried throughout the remainder of the estimate.)

- Current operations.
- Projected operations.

Logistic situation. This is based on information obtained from the logistics officer. It includes the present disposition of logistic units supporting engineer operations, facilities (ammunition supply point, ammunition transfer point, and forward supply point), and engineer and obstacle materials (especially class five). It also includes projected developments within logistics likely to influence engineer operations.

Civil-military operations situation. This is based on information gathered from the civil-military officer and host nation support (HNS) engineer liaison personnel. It includes the present disposition of civil-military elements within engineer operations, as well as projected developments likely to influence engineer operations.

Engineer situation. This is based on information obtained from various engineer elements in the following four categories:

- Present disposition of personnel, equipment, and material. The commander should establish levels of effectiveness, identify problem areas (petroleum, oils, and lubricants; class five; personnel), and establish command and support relationships.
- Current engineer operations. The staff

engineer should list current employment for divisional units and nondivisional units, especially atomic demolition munitions and topographic.

- Projected engineer operations. The staff engineer should list projected employment for divisional and nondivisional units.
- Status of current engineer operations. The engineer should determine and list the

present status of mobility-counter mobility-survivability and general engineering tasks and the estimated time(s) to completion.

Assumptions. The engineer should list any assumptions required for initiating, planning, or preparing the estimate. Assumptions are modified to factual data once planning guidance is available.

ANALYSIS

The engineer should analyze all factors for each course of action and indicate problems and deficiencies. Resource requirements for each course of action should be identified and their impact on current and projected operations determined.

Sufficiency of area. The engineer should determine if the plan of maneuver minimizes engineer support requirements, thereby affording greater agility.

Sufficiency of resources. The available

engineer personnel, equipment and material, and time should be considered, as well as the effectiveness of engineer units in current operations. The engineer should list deficiencies.

Impact on current operations. The engineer should determine how this mission will affect current operations.

Impact on projected operations. The engineer should determine how this mission will affect projected operations.

COMPARISON

The engineer should evaluate the situation and list the advantages and disadvantages with respect to accomplishing the mission. Advantages and disadvantages of each course of action should be discussed so that

the cost (in terms of units, time, materials, and effect on current and projected operations) is known to the commander. Include methods of overcoming deficiencies or modifications required in each course of action.

CONCLUSION

In reaching a conclusion, the engineer should indicate whether the mission can be supported and which course(s) of action can best be supported, as well as list major deficiencies from the engineer perspective that must be

brought to the commander's attention. These should include specific recommendations concerning methods for eliminating or reducing the effect of the deficiencies.