TEACHER ONLY

ENGINEERS

TEACHER'S GUIDE

OVERVIEW OF THE UNIT

This unit deals with the role, tasks, vehicles and equipment of the Engineers. It also looks at the various specialist branches of military engineering. The military terminology generated by the subject will be very useful to students of military English not only when dealing with texts on Combat Operations but also on Military Aid to the Civil Community and Peace Keeping themes in which military engineers are involved.
It is suggested that 5 to 6 X 45 minute periods of instruction will be needed in order to deal with the subject properly.

COMPONENTS

Teacher's Guide.

Warm-up	- Small Group Speculation/Discussion - Pictures of Engineer Activitie - Answers (for Teacher)
Exercise 1	- Listening -Briefing- Combat Engineers - Pre-recorded Tape - Students' Worksheet - Completed Worksheet (for Teacher) - Tapescript (for Teacher)
Exercise 2	- Speaking – Small Group Role Play - Set of 4 Mini-Biographies for students
Exercise 3	- Reading – Engineer Equipment - Reading Text, Pictures and Exercises - Completed Exercises (for Teacher)
Annex A.	- Military Vocabulary & Abbreviations List

SUGGESTED APPROACH

WARM-UP (Time: Open-ended)

To stimulate interest in the subject, the student worksheet shows seven pictures of some military engineering activities. Students should be split into small groups and given a suitable amount of time to speculate on what those activities are and to discuss them in English with their colleagues. The groups should write suitable brief titles and/or captions for each picture. During the discussion phase walk round and monitor the groups ensuring that students speak in English and only assisting when absolutely necessary. At the end of this time, get groups to report back to the class as a whole. An answer sheet is provided for the teacher, but it will be obvious that students will be unable to deduce from the pictures the finer points of detail given.

WORK-OUT

Exercise 1. (Time: 2 X 45 mins)

This is an in£ormative listening exercise on the major roles 0£ Combat Engineers. Although the worksheet contains only ten questions, students should £ind these fairly searching. As with the listening exercises in the other units, useful reading/listening/ pronunciation £ollow-up work can be done with the tapescript and the tape itself after students' answers have been corrected. Likely problem words which are either explained in the text or which the teacher should be prepared to explain are:

phoney (false, not genuine) booby trap (an explosive device disguised as an innocent object meant to maim or kill an unsuspecting enemy -Note: 'booby' = a foolish person) abatis (an obstacle made by blowing down or felling trees, for example across a narrow road) wire entanglement (an obstacle constructed from a complicated mass of barbed wire -root word 'tangle') trace = map trace (information copied from one map which may be distributed and transferred to other maps. Cf: to trace, tracing paper).

Exercise 2. (Time: 45 mins)

Divide the class into small groups of four. Their are four different mini-biographies on military engineer occupations to be issued, one of each to each group. Students study their individual mini-biographies and then tell the other students in their group about themselves. This is to be done in English and, as far as possible, from memory without referring to notes. The listeners should be encouraged to ask questions in order to write brief notes. The usual monitoring/surnmarising procedures should be adopted by the teacher. Students could be asked to describe the other members of their group from their notes.

Some useful questions to revise before you hand out the mini-biographies:

What do you do in the Engineers?
Which branch of the Engineers do you work for?
What's your trade?
What professional experience have you had?
What did you do before?
What qualifications have you got?
Where did you study?

Compare: "Have you done…?" with "Did you do…?"

Exercise 3. (Time: 45 mins)

This reading exercise provides information and pictures of military engineer equipment. A number of new military abbreviations are introduced in the text. Likely problem areas with general vocabulary are the words:

Robust (strong, herdwearing) stubborn (used of things =
Not easily moved – used of people = strong-willed, unreasonably determined)
Plant (here = machinery used in construction work)

Exercise 4. (Time: 45 mins)

A writing exercise requiring students to write a piece of connected prose from brief notes on Specialist Engineers. The notes are deliberately written with a number of military abbreviations most of which should be known – however students might find difficulty with the following:

AB = airborne para = parachute cdo = commando

abseiling = method of quick descent on ropes from e.g. a cliff

amph = amphibious

EXTENSION

Writing / Speaking

Students research various pieces of military engineer equipment of their own army and give short briefings to the class followed by teacher critique.

Dictation

The teacher can select short passages from the various texts for dictation.

Gap-fill Exercises

So-called Cloze Exercises can be made up from various parts of the texts by deleting structure or content words which the students have to complete.

Vocabulary

Vocabulary retention can be improved by formal vocabulary tests or by dividing students into teams where they provide their own questions for quizzes – results scored by the teacher.

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TEACHER ONLY

ENGINEERS

WARM-UP

Note: It is not expected that students will be able to provide the detailed information given in the answers below as some of this is not obtainable from the pictures.

Answers to the activities of military engineers shown in the pictures:

1. BRIDGING
   Challenger MBTs crossing a General Support Bridge laid across a gap.

2. SURVEY
   Engineer survey team collecting data for map making.

3. CONSTRUCTION
   Skilled construction engineers renovating buildings.

4. DIVING
   Engineer diving team carrying out underwater recce

5. BOMB DISPOSAL
   Bomb Disposal Officer (BDO) making safe an unexploded 500 kg World War 2 bomb.

6. MINE LAYING & CLEARING
   Engineers clearing a lane in a minefield. (An anti- personnel mine is shown in the smaller picture.)

7. DEMOLITION
   Engineers on a training exercise preparing a bridge for demolition.

ENGINEERS

EXERCISE 1- LISTENING -BRIEFING -COMBAT ENGINEERS

STUDENT'S WORKSHEET

Listen to the tape right through once without stopping. Do not attempt to answer the questions at this stage. When you have done this, rewind and listen again stopping as necssary to complete your worksheet.

1. What are army engineers called?

2. What three words sum up the three major tasks of Combat Engineers?

3. What verbs are used to describe the following actions ?

a. to build a bridge ……..

b. to find a booby trap ……..

c. to make a path through a minefield ……..

d. to make a minefield ……..

4. Of the four types of minefield given in the briefing which one is not really a minefield?
……

5. Which words are used to describe the following?

a. Destruction by using explosives. ……..

b. A large hole in the ground made by explosives. ……..

c. An obstacle made from a pile of tree trunks. ……

d. An obstacle built across a street or road. ……

6. How might the Combat Engineers assist troops in defence to shoot at an attacking enemy?

7. Where will most of General Engineering Support take place?

……

8. what do the following abbreviations stand for?

EOD ……

UXO ……

BAC ……

VTOL ……

ADR ……

MSR ……

9. What would engineer divers be used for?

……

10. What is TACIPRINT?

……

ENGINEERS

EXERCISE 1- LISTENING -BRIEFING -COMBAT ENGINEERS

STUDENT'S WORKSHEET

Listen to the tape right through once without stopping. Do not attempt to answer the questions at this stage. When you have done this, rewind and listen again stopping as necssary to complete your worksheet.

1. What are army engineers called? *SAPPERS*

2 . What three words sum up the three major tasks of Combat Engineers?

MOBILITY *COUNTER-MOBILITY* *SURVIVABILITY*

3. What verbs are used to describe the following actions?

a. to build the bridge *LAY*
b. to find a booby trap *DETECT*
c. to make a path through a minefield *BREACH*
D. to make a minefield *LAY*

4. Of the four types of minefield given in the briefing which one is not really a minefield?
PHONEY

5. Which words are used to describe the following?

a. Destruction by using explosives *DEMOLITION*
b. A large hole in the ground made by explosives *CRAYER*
c. An obstacle made from a pile 0£ tree trunks. *ABATIS*
d. An obstacle built across a street or road. *BARRICADE*

6. How might the Combat Engineers assist troops in defence to shoot at an attacking enemy?

BY CLEARING THE FIELDS OF FIRE

7. Where will most of General Engineering Support take place?

IN THE REAR AREAS

8. What do the following abbreviations stand for?

EOD *EXPLOSIVE ORDNANCE DISPOSAL*

UXO *UNEXPLODED ORDNANCE*

BAC *BATTLEFIELD AREA CLEARANCE*

VTOL *VERTICAL TAKE OFF AND LANDING*

ADR *AIRFIELD DAMAGE REPAIR*

MSR *MAIN SUPPLY ROUTE*

9. What would engineer divers be used for?

UNDERWATER RECCE, DEMOLITION AND CONSTRUCTION

10. What is TACIPRINT?

A AFCILITY IN BRITISH ARMY FORMATIONS FOR MAKING MAP TRACES AND OVERPRINTED MAPS AND PROVIDING INFO ON TERRAIN.

TEACHER ONLY

ENGINEERS

EXERCISE 1 -LISTENING -BRIEFING- COMBAT ENGINEERS

TAPESCRIPT

Listen to the tape right through once without stopping. Do not attempt to answer the questions at this stage. When you have done this, rewind the tape and listen again stopping as necessary to complete your worksheet.

COMBAT ENGINEERS

The Engineers, in the British Army the Royal Engineers (RE), are known as the 'Sappers' .They provide the combat engineering support for our troops in the forward areas and their job is to keep our forces moving, to prevent the enemy from moving and to help our forces survive -in other words: mobility, counter- mobility and survivability. Let's look at these three major tasks in more detail.

Mobility tasks consist of the following:

Gap: Crossing - for example, the laying of bridges across water obstacles.

Counter-mine Operations -this includes the detection of mines and booby traps and recce, breaching and clearance of mined areas.

Counter-obstacle Operations -destroying, breaking through or reducing the effect of obstacles set up by the enemy.

Developing and Improving Routes -to the tactical advantage of our forces.

Supporting Forward Aviation -by the construction, repair and maintenance of forward airstrips and landing places for helicopters and fixed wing aircraft.

Counter-mobility tasks consist of the following:

Minefields -the laying of various types of minefield (categorised as: protective, tactical, phoney and nuisance) and the setting of booby traps.

Demolitions -such as bridge demolition, making craters and blowing up abatis (obstacle consisting of a number of tree trunks laid one over the other.)

Constructed Obstacles -examples of these are anti-tank ditches, barricades, wire entanglements,
abatis and creating water obstacles by flooding.

Survivability tasks consist of the following:

Strengthening Existing Defences.

Assistance with Camouflage. Concealment and Deception.

Clearing Fields of Fire.

Selecting Buildings for Defence and Protection.

In addition to the three major tasks of mobility, counter- mobility and survivability, we have what is known as General Engineer Support. This involves providing all the engineer advice, technical expertise, materials, equipment and skilled engineering work other than close support in combat. Although much of the General Engineer Support will take place in the rear areas, it is available anywhere on the battlefield as required. The main tasks of General Engineer Support are:

Explosive Ordnance Disposal (EOD) which covers every aspect 0£ dealing with unexploded ordnance (UXO) such as:

Clearing bombs dropped from enemy aircraft, mines and booby traps.
Locating, identifying and providing access to UXO

Searching for radio controlled devices.

Battlefield Area Clearance (BAC) of all types of UXO, for example from Second World War defences and training areas.

Air Force Support which includes providing facilities for Vertical Take Off and Landing (VTOL) aircraft such as Harrier, and Airfield Damage Repair (ADR) to keep airfields operational.

Search to discover people, documents, equipment, weapons, ammunition, bombs and booby traps concealed by terrorists and enemy special forces.

Infrastructure Support such as providing emergency supplies of water, electricity and fuel, maintaining Main Supply Routes (MSRs), constructing temporary buildings, airfields, helicopter landing sites, etc.

Diving when recce, demolition and construction have to be carried out underwater.

Survey for providing military maps and charts of all kinds Formations of the British Army have a facility called TACIPRINT which can produce information on the terrain, traces and overprinted maps.

That is the end of this briefing on Combat Engineers, you can now rewind and listen again.

ENGINEERS

EXERCISE 2- SPEAKING -MINI-BIOGRAPHIES

For this speaking exercise you will be working in a small group. Look at the mini-biography below. Study it carefully for about 15 minutes. After this time you will be asked to tell the other members of your group about yourself. You should do this from memory without referring to the brief below. The other students should make notes and they may ask you questions, but only on the information that is in your brief. You should obtain similar information from the other members of your group.

CONSTRUCTION ENGINEER

After graduating from Redbrick University, you were commissioned as a sapper officer. A little while later , you were selected to attend a 2-year Professional Engineer Training Course in Civil Engineering. During your course you were attached for 18 months to civilian construction firms. Part of this time was spent getting practical experience on construction sites and part on the management side in a consultant engineer's office. You are now capable of design, planning and supervision of construction work and you have headed teams of sappers who have specialist construction skills such as bricklaying, carpentry, plumbing, and electrical installation. You have been lucky enough to have worked overseas on special construction projects in Belize and Rwanda. Later , you hope to go to Staff College and get a staff appointment.

ENGINEERS

EXERCISE 2- SPEAKING -MINI-BIOGRAPHIES

For this speaking exercise you will be working in a small group. Look at the mini-biography below. Study it carefully for about 15 minutes. After this time you will be asked to tell the other members of your group about yourself. You should do this from memory without referring to the brief below. The other students should make notes and they may ask you questions, but only on the information that is in your brief. You should obtain similar information from the other members of your group.

BOMB DISPOSAL OFFICER

As a sapper officer you obtained a specialist qualification as a Bomb Disposal Officer (BDO) by attending a course at the Defence EOD School. N aturally , standards of training are very high at the School because of the very dangerous nature of the work. Later on you attended the High Risk Search course. As a BDO you are mainly responsible for all EOD disposal on the battlefield and for routine BAC in peacetime. As well as doing this work in the Falklands you have served overseas on a number of occasions with EOD teams deployed on UN operations. You have also been involved in bomb disposal in the United Kingdom. There are many unexploded bombs still around which were dropped during the air raids of the Second World War. Recently you had to deal with a 500 kg World War 2 bomb buried for more than 50 years.

ENGINEERS

EXERCISE 2- SPEAKING -MINI-BIOGRAPHIES

For this speaking exercise you will be working in a small group. Look at the mini-biography below. Study it carefully for about 15 minutes. After this time you will be asked to tell the other members of your group about yourself. You should do this from memory without referring to the brief below. The other students should make notes and they may ask you questions, but only on the information that is in your brief. You should obtain similar information from the other members of your group.

SURVEY OFFICER

After you graduated from Ox bridge U niversity , you joined the Army and were commissioned as a sapper officer. Later you attended the long post-graduate Army Survey Course of 60 weeks. At the end of the course you were awarded an MSc in Defence Geographic Information. You have a number of sap per Geographic Technicians of varying ranks in your unit carrying out survey work and producing maps, charts and other geographic materials required by the Army, Navy and Air Force. You have had some operational survey experience in Bosnia and Zimbabwe.

ENGINEERS

EXERCISE 2- SPEAKING -MINI-BIOGRAPHIES

For this speaking exercise you will be working in a small group. Look at the mini-biography below. Study it carefully for about 15 minutes. After this time you will be asked to tell the other members of your group about yourself. You should do this from memory without referring to the brief below. The other students should make notes and they may ask you questions, but only on the information that is in your brief. You should obtain similar information from the other members of your group.

DIVER

You are a trained diver in the Engineers and part of a diving team. You applied to become a diver two years ago because you were interested in the work and you wanted a specialist qualification and the extra pay that goes with it. Your training was done along with naval divers at the Defence Diving School on the south coast of England. That course gave you a basic diving q ualification, but since then you have taken another course to bring you up to advanced diver standard. Later you hope to gain enough experience to become a supervisor diver. The tasks you are trained in are underwater recce, construction and demolition, underwater mine and obstacle laying and clearance, and underwater search.

ENGINEERS

EXERCISE 3 -READING -ENGINEER EQUIPMENT

Read the text through once without attempting to understand everything. Look at the pictures of engineer equipment. Next, read the text through again carefully and do the exercises. You should use your dictionary to help you where necessary, though you may not find some of the military vocabulary.

ENGINEER EQUIPMENT

To carry out their major tasks of mobility, counter-mobility and survivability, the Combat Engineers require specialist vehicles and equipment. Some of this equipment is described here.

For gap crossing, many forms of specially designed bridges are used which not only have to be robust enough to carry heavy weights of armour, but also need to be easily transported, quick to construct and take the minimum of manpower. These engineer bridges can be categorized as follows:

Armoured Vehicle Launched Bridge (AVLB).

Amphibious bridges (M2 and M3 Rigs).

Equipment bridges (Medium Girder Bridge -MGB)

Vehicle Launched Bridge (BR90 General Support Bridge)

Other bridge systems for specific tasks.

The Combat Engineer Tractor (CET), used in sapper field squadrons, is a versatile vehicle capable of performing a wide variety of tasks. It is fitted with a rocket-propelled anchor and a powerful winch and it can use these to overcome the most stubborn of obstacles.

The Armoured Vehicle Royal Engineers (AVRE) is basically a tank hull which has been adapted for a variety of specialist tasks. Fitted with a dozer blade, it is used in route clearance, and fitted with a plough, it is used for minefield clearance. All AVREs can carry and lay fascines, which are lightweight plastic pipes lashed together in big rolls. These fascines can be dropped into trenches, craters or ditches up to 9 metres wide allowing the vehicle to cross. This small gap crossing

technique was developed in the First World War when bundles of wood were dropped into trenches and shell holes by the early tanks so the pace of the advance could be sustained.

Giant Viper (GV) is a rapid mine clearance device. It consists of a hose filled with explosives towed on a trailer. The hose is launched by rocket motors across a minefield. It is then detonated and the explosion blasts a lane 180 metres long by 8 metres wide through the obstacle.

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TEACHER ONLY

A. COMPREHENSION

1. In addition to being very strong, what other qualities does engineer bridging equipment need?
   EASILY TRANSPORTED / QUICK TO CONSTRUCT / TAKES MINIMUM OF MANPOWER

2. How does a Combat Engineer Tractor maintain its hold on the ground when using its winch?

   BY USING ITS ANCHOR

3. What does an Armoured Vehicle Royal Engineers use for the following tasks?

   Pushing obstacles off roads *DOZER BLADE*
   Breaching a minefield *PLOUGH*

4. What are fascines and how are they used?

   BUNDLES OF LIGHTWEIGHT PLASTIC PIPES LASHED TOGETHER.

   DROPPED INTO GAPS UP TO 9 METRES TO ALLOW VEHICLES TO CROSS

5. Which piece of equipment looks like a fireman's hose?

   GIANT VIPER (GV)

6. Which pieces of engineer plant equipment would be used for the following tasks?

   Boring for water *DRILLING RIG*

   Carrying large amounts of earth *DUMP TRUCK*

Lifting girders up to a roof *CRANE*

Scraping surfaces flat	*DOZER*
Digging a deep trench	*EXCAVATOR*
Ploughing and pulling	*TRACTOR*

B. VOCABULARY

1. Try to write the following abbreviations in full without referring to the text:

AVLB	*ARMOURED VEHICLE LAUNCHED BRIDGE*
GV	*GAINT VIPER*
CET	*COMBAT ENGINEER TRACTOR*
MGB	*MEDIUM GIRDER BRIDGE*
AVRE	*ARMOURED VEHICLE ROYAL ENGINEERS*
VLSMS	*VEHICLE LAUNCHED SCATTERABLE MINE SYSTEM*

2. Find words in the text which mean the same as:

Explode	*DETONATE / BLAST*
Body of an armoured vehicle	*HULL*
Roll of plastic pipes for fillling gaps	*FASCINE*
Device to hold a vehicle or ship in place	*ANCHOR*
Capable of performing many functions	*VERSATILE*
Very strong	*ROBUST*
Very difficult to remove	*STUBBORN*
Strongly tied together with rope	*LASHED (TOGETHER)*
Pulled behind a vehicle	*TOWED*

Engineered equipment for construction *PLANT*

Able to thrown over a wide area *SCATTERABLE*

A wheeled container pulled behind a vehicle *TRAILER*

A machine for pulling in a cable or chain *WINCH*

C.TRUE OR FALSE

Mark the following statements as true (T) or false (F) according to the text:

1. Fascines are used for crossing water obstacles. *F*
2. The General Support Bridge is classed as an AVLB. *F*
3. The CET's anchor is operated by rockets. *T*
4. The VLSMS is a rapid mine clearance device *F*
5. The MGB is classed as an Equipment Bridge *T*

A. COMPREHENSION

1. In addition to being very strong, what other qualities does engineer bridging equipment need?
   ……
2. How does a Combat Engineer Tractor maintain its hold on the ground when using its winch?

   ……..

3. What does an Armoured Vehicle Royal Engineers use for the following tasks?

Pushing obstacles off roads ……
Breaching a minefield ……

4. What are fascines and how are they used?

……

……

5. Which piece of equipment looks like a fireman's hose?

……

6. Which pieces of engineer plant equipment would be used for the following tasks?

Boring for water ……

Carrying large amounts of earth ……

Lifting girders up to a roof ……

Scraping surfaces flat ……

Digging a deep trench ……

Ploughing and pulling ……

B. VOCABULARY

3. Try to write the following abbreviations in full without referring to the text:

AVLB ……

GV ……

CET ……

MGB ……

AVRE ……

VLSMS ……..

4. Find words in the text which mean the same as:

Explode ……

Body of an armoured vehicle ……

Roll of plastic pipes for fillling gaps ……

Device to hold a vehicle or ship in place ……

Capable of performing many functions ……

Very strong ……

Very difficult to remove ……

Strongly tied together with rope ……

Pulled behind a vehicle ……

Engineered equipment for construction ……

Able to thrown over a wide area ……..

A wheeled container pulled behind a vehicle ……

A machine for pulling in a cable or chain ……

C.TRUE OR FALSE

Mark the following statements as true (T) or false (F) according to the text:

1. Fascines are used for crossing water obstacles. ……

2. The General Support Bridge is classed as an AVLB. ……

3. The CET's anchor is operated by rockets. ……

4. The VLSMS is a rapid mine clearance device ……

5. The MGB is classed as an Equipment Bridge ……

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ENGINEERS

EXERCISE 4 -WRITING -NOTES TO FULL TEXT

You have been tasked by your commander to write a short briefing for him in English on Specialist Engineers. You have managed to obtain some short notes from a Royal Engineers Warrant Officer and you intend to write your briefing from these. There are a lot of military abbreviations in the notes, but you think you can cope with them. From the notes produce a continuous text in good English- do not use abbreviations.

SPECIALIST ENGINEERS

ARMD ENGRS

Role- sp fast moving armd fmns.

Arrnd Engr Sqns eqpt -tks and other arrnd vehs, AVLBs, fascines, dozer blades (obs clearance), mine ploughs.

AMPH ENGRS

Role -Xing wide rivers.

trackway

Eqpt: Self-propelled M2 or M3 Rigs -drive on rd then into water -link up as br or ferry.

PARA ENGRS

Role- rapid deployment worldwide -usual combat engr sp.

Eqpt is light scale for AB ops.

Sprs attend para trg course

CDO ENGRS

Cdo Sqn trained for amph ops.

Equipped for rapid deployment worldwide.

All cdo sprs attend cdo trg course -special boat, climbing and abseiling skills.

****

TEACHER ONLY

ENGINEERS

EXERCISE 4 – WRITING – NOTES TO FULL TEXT

MODEL ANSWER

SPECIALIST ENGINEERS

Specialist engineers fall into four categories as follows:

ARMOURED ENGINEERS

The role of Armoured Engineers is to support fast moving armoured formations. Armoured Engineer Squadrons have tanks and other armoured vehicles. Their equipment includes Armoured Vehicle

Launched Bridges, trackway, fascines, dozer blades for obstacle clearance and in mine ploughs.

AMPHIBIOUS ENGINEERS

Amphibious Engineers have the role of crossing wide rivers. Their equipment is the M2 or M3 Rigs which drive on the road and then into the water to link up as a bridge or a ferry.

PARACHUTE ENGINEERS

The role of the Parachute Engineers is rapid deployment worldwide of the usual combat engineer support. They use light scale equipment for airborne operations. The Sappers attend the parachute training course.

COMMANDO ENGINEERS

The Commando Engineer Squadron is trained for amphibious operations and is equipped for rapid deployment worlwide. All commando sappers attend the commando training course and have special boat, climbing and abseiling skills.

****

PHONETIC ALPHABET PRACTICE

Use the phonetic alphabet below for this warm-up exercise. Your teacher will tell you what to do.

LETTER	PHONETIC	SPOKEN AS
A	ALFA	AL-FAH
B	BRAVO	BRAH-VO
C	CHARLIE	CHAR-LEE
D	DELTA	DELL-TAH
E	ECHO	ECK-OH
F	FOXTROT	FOKS-TROT
G	GOLF	GOLF
H	HOTEL	HOH-TELL
I	INDIA	IN-DEE-AH
J	JULIETT	JOO-LEE-ET
K	KILO	KEE-LOH
L	LIMA	LEE-MAH
M	MIKE	MIKE

N	NOVEMBER	NO-VEM-BER
O	OSCAR	OSS-CAH
P	PAPA	PAH-PAH
Q	QUEBEC	KWI-BEK
R	ROMEO	ROH-ME-OH
S	SIERRA	SEE-AIR-RAH
T	TANGO	TANG-GO
U	UNIFORM	YOO-NI-FORM
V	VICTOR	VIK-TAH
W	WHISKEY	WISS-KEE
X	X-RAY	EKS-RAY
Z	ZULU	ZOO-LOO

ENGINEERS

ANNEX A.

LIST OF MILITARY VOCABULARY AND ABBREVIATIONS

abatis
abseil
abseiling
airborne -AB
airfield
Airfield Damage Repair -ADR
airstrip
amphibious -amph
Amphibious Bridge -Amph Br
Amphibious Engineers -Amph Engrs
anchor
anti-tank ditch -Atk ditch
Armoured Vehicle Launched Bridge –AVLB
Armoured Engineers -Armd Engrs
Armoured Vehicle Royal Engineers -AVRE
barricade
Battlefield Area Clearance -BAC
blast
Bomb Disposal Officer -BDO
booby trap
breach
breaching

bricklaying

carpentry
chart
clear
clearance
Combat Engineer Tractor -CET
commando- cdo
Commando Engineers -Cdo Engrs
construction- const
Construction Engineer -Const Engr
counter-mine operations -C mine ops
counter-mobility -C mobility
counter-obstacle operations -C obs ops
crane
crater
deception
demolition- dml
detection
detonate
device
ditch
diver
diving
document- doc
dozer
dozer blade
drilling rig
dump truck
electrical installation -elect instl
engineer plant -engr plant