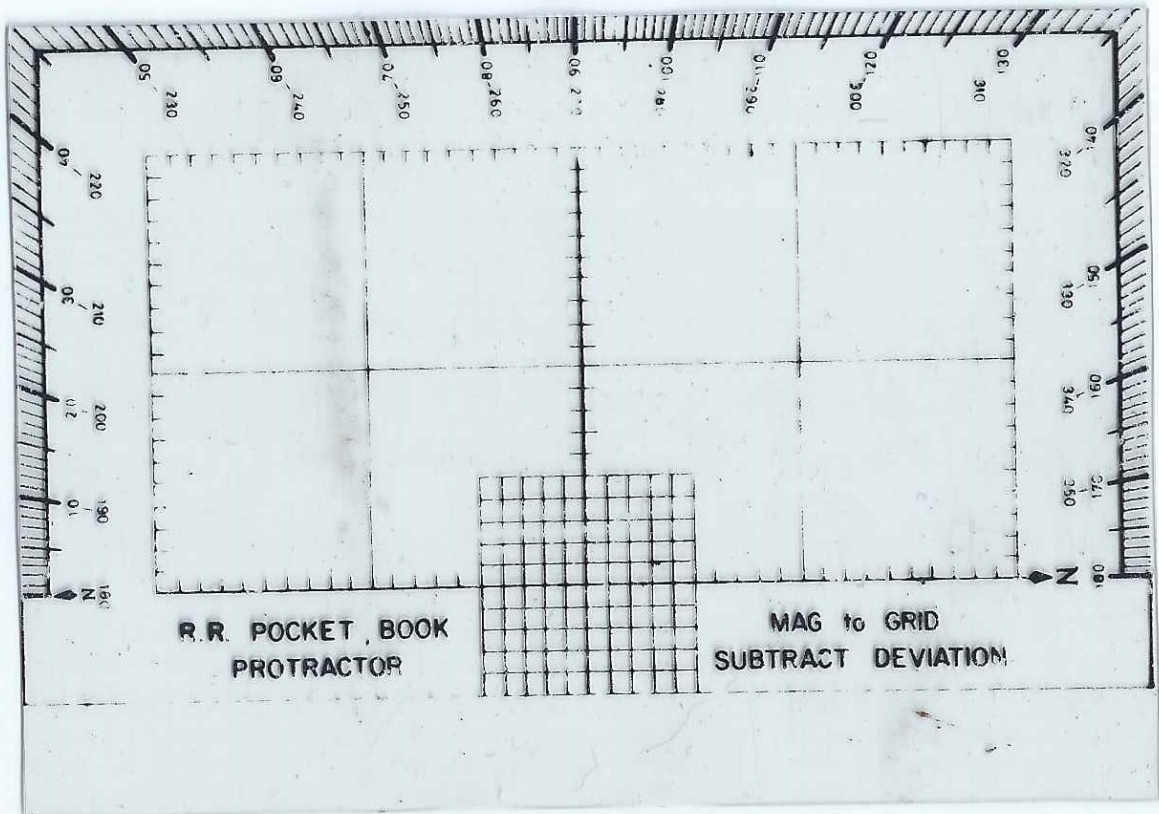




RESTRICTED



RHODESIA REGIMENT POCKET BOOK

INTRODUCTION

1. This pocket Book has been designed as an in-field quick reference aide-memoire for Section Leaders. It has been co-sponsored jointly by the 1st and 5th Battalions, the Rhodesia Regiment.

ACKNOWLEDGEMENTS

2. The sponsors wish to thank:
- a Messrs City Printers and Stationers (Pvt.) Ltd.,
 - b Messrs PPI Spicers (Pvt.) Ltd.,
 - c Air Survey Company of Rhodesia (1961) Pvt. Ltd.,
 - d Topographical office, Conex, for the help and advice they have given.

SOURCES OF INFORMATION

3. Information was obtained from: Army H.Q./The School of Infantry/5RR Training Team/The Rhodesia Air Force/The B.S.A.P.
4. Pamphlets referred to are too numerous to name individually but included:
The M.C.P./Aide-Memoire for Platoon and Section Commanders Orders/Counter Insurgency Aide-memoire/Operations Aide-memoire/B.S.A.P. pocket-book/Homestead Helicopter Landing Zones (Rh.A.F.)/Sundry training pamphlets and handouts.

COPIES

5. Further copies can be printed by the Unit on request. A charge will be levied. [P.T.O.]

REVISED MATERIAL

6. From time to time material will have to be updated. Notification of each revision will be sent to addressees. A small printing and paper charge may be levied.

DIRECTIONS FOR USING THE POCKET BOOK

7. Sections have been devised and ordered according to subject matter and importance:

White: Radio messages, e.g. Sitreps/Contact Reports, etc.

Blue: Rh. A.F.— Close Air Support, etc.

Pink: Immediate First Aid.

Yellow: Orders.

Green: General — rules of thumb/basic procedures, etc.

8. Each section is numbered consecutively according to the colour of the paper, e.g. White pages are numbered W1, W2, etc. Green pages G1, G2, etc. Messages referring to any particular section can thus be initiated, e.g. Pocket book. Page: Bravo 3—Runways, etc.

9. Dating. Each page is dated. This is to facilitate revision when necessary. The current print is dated 8/77. Certain pages have been revised. These are dated 11/77 and 12/77.

(P. M. Welland)

Sgt 5RR Training Team.

December 1977.

SITREP

- a Last 24 hours work, given by event (e.g. sighting/murder/contact). Each event to be numbered consecutively (e.g. a1, a2, etc). Record the following under each:
 - Date/time
 - Locstat of incident
 - *In which general area (T.T.L., I.C.A. etc)
 - *Unit(s) involved
 - Circumstances
 - Result
 - Post event activities
- *At section level these items will not apply usually
- b Intelligence gathered: To be referred back to individual events in para (a)
- c Future intentions
- d Requests — Interservice (e.g. Air Support, G.C. etc)
- e Requests — Single service (e.g. Q requests)
- f Psyac — (e.g. local reaction, morale, etc)
- g Locstat(s)

CONTACT/INCIDENT REPORT

- a Accurate grid reference
- b Date/Time of action
- c Situation
- d CT strength
- e CT casualties
- f Details of SF/strength/call-signs/radios
- g Own casualties
- h Follow-up action
- j Other/Casevac/Prisoners/Re-supply

MINE INCIDENT REPORT

- a Exact locstat
- b Vehicle registration
- c Type, weight + if mine protected
- d Direction + destination of vehicle
- e Which wheel detonated mine, extent of damage, type of recovery required (Suspended/Towed)
- f Number of personnel in cab/back at time of blast
- g Casualties + casevac details
- h Call-signs (call-signs mined/call-signs at scene)
- j Spoor + follow up details

OP AIDE MEMOIRE/FIREFORCE CALLOUT

- 1
 - a Grid reference, channel and call sign of the OP
 - b Method of identifying OP to Fire Force
 - c Number of CTs if known and their dress/weapons
 - d CT position/activity/direction (magnetic)
 - e Possible escape routes
 - f Dress and size of feeding parties (if applicable)
 - g Areas of population
 - h Nature of surrounding country/possible LZ's (helicopter) and DZ's (paratroops)
 - j Suggested direction of approach
 - k How Fire Force will be directed to target
 - m Location of neighbouring OPs and/or troops
- 2 Ask Control for channel and c/s of Fire Force — especially K Car
- 3 Stand by to talk in Fire Force. Pass on any changes in the situation to Control as they occur
- 4 ON ARRIVAL
 - a Establish communication with K Car at earliest opportunity

- b Latest situation
- c Talk K Car over CTs position. K Car will invariably pull up before flying over target area. It will therefore be the aircraft flying highest. If not sure request identification
- d Indicate target by using marker or ground features

SPOOR LOCATION

- a Grid reference of Spoor
- b Number
- c Direction
- d Age
- e Type of Spoor
- f Any further information, e.g. blood, etc
- g Follow-up action

CASEVAC/MEDICAS

- Number of Casualties
First Casualty No./Rank/Name
- a Symptoms
 - b Treatment given/Times (Morphine/Tourniquet/etc)
 - d Temp/Pulse/Respiration
 - e LZ or RV + time ready
 - f Re-supply of medicines, etc (and other requirements)

NOTE

Use "Medicas/Medicas" if the casualty does not need immediate evacuation

CLOSE AIR SUPPORT

1. Homing of aircraft/standard procedure

- a Establish communications with aircraft
- b Give accurate grid reference of own position/enemy positions
- c Describe own position in relation to prominent features
- d Give pilot verbal picture of situation
- e Describe aides available for indicating
 - i FLOT (ALSO bearing and length of FLOT)
 - ii Enemy positions
- f Report "visual" immediately the aircraft appears and guide aircraft to position if necessary
- g Await pilot's clearance to indicate FLOT
- h Indicate FLOT
- j Pilot will acknowledge "VISUAL FLOT" if seen ("NEG FLOT" if not seen)
- k Await clearance from pilot before indicating Target ("FIREBALL")
- m Indicate target, and if applicable make verbal corrections relative to own position and marker

n Pilot will acknowledge VISUAL TARGET, and will advise direction of attack

p On attack dive, attack, and leaving immediate area of target, maximum ground fire to be directed at target area

q If aircraft is seen to be attacking the wrong target, call off attack by words STOP, STOP, STOP

r After each strike, pilot may be re-directed to target if necessary. Directional indication is now taken with respect to the pilot's line of attack and the last strike, e.g. last strike 100 m short and 50 m left of target"

2 Jet GAC

Normally a minimum of 2 Jets attack

a Paras 1a—e apply

b Suggest to pilot possible attack line e.g. "suggest attack bearing NW to SE"

c Await further instructions from pilot. Pilot may require FLOT and TARGET to be indicated simultaneously

- d When the pilot has reached his "Perch Point" (i.e. he is ready to commence his attack), he will ask for FLOT and/or TARGET indication
- e Throw/launch markers
- f Notify pilot immediately of any correction to be made relative to target marker and target. The section leader should mentally place himself in the pilot's seat and give corrections as applicable from this viewpoint; e.g. The W.P. marker has landed 200 m short of the target as seen from the ground

- g Pilot will acknowledge and correct attack line
- h Maximum ground fire is to be directed into the target area
- j If the aircraft is seen to be attacking the wrong target call off by STOP, STOP, STOP
- k As the second aircraft's strike comes in make the necessary corrections to the pilot as per the first strike, remembering paragraph 2 f

CODE WORDS: AIRCRAFT/STAFF

AIRCRAFT

Hunter.....
 Vampire
 Dakota/Cessna 185/Islander.....
 Lynx/Provost/Trojan.....
 Canberra.....
 Training Squadron.....
 Helicopter.....
 Police Reserve Aircraft.....

CODEWORD

Panzer.....
 Venom.....
 Viking.....
 Hornet.....
 Eagle.....
 Tiger.....
 Spider.....
 Copper.....
 Dolphin.....
 Goblin.....
 Nimrod.....

SQUADRON

One
 Two
 Three
 Four
 Five
 Six
 Seven
 P R A W
 Air HQ (staff)
 Thornhill (staff)
 New Sarum (staff)

SAFETY DISTANCES FOR AIR WEAPONS

Provided air strike attack directions are parallel to FLOT

7,62 mm + ,303 in.	100 m
20 mm + 30 mm	150 m
37 mm RP*	100 m
68 mm RP*	200 m
60 lb RP*	300 m
18 lb RP*	250 m

20 lb Fragmentation Bomb	300 m
250 lb Bomb	500 m
500 lb Bomb	1 000 m
1 000 lb Bomb	2 000 m
400 kg Bomb	2 000 m
16 gal Frantan	100 m
50 gal Frantan	200 m

*RP — Rocket propelled

RUNWAYS/LZ's/DZ's

1 LAYING THE RUNWAY

- a The direction of landing should be selected so that the aircraft lands into the wind
- b If there is no wind or very light wind, choose the landing direction to give the best clearance from obstacles in the aircraft's approach
- c In cases where no runway markers are provided see diagram 1 for basic dimensions with regard to safety
- d See "General Notes"— para 10.

2 LAYING THE FLAREPATH — SAFETY FIRST

- a Place flares on the existing white runway markers (these should be approx 100 m apart; if they are not then place flares at 100 m)
- b **DO NOT PLACE FLARES OUTSIDE THE THRESHOLD MARKERS—THAT IS IN THE UNDERSHOOT OR THE OVERSHOOT** (See diagram 2)

DIAGRAM 1: SAFETY ASPECTS OF RUNWAY LAYOUT

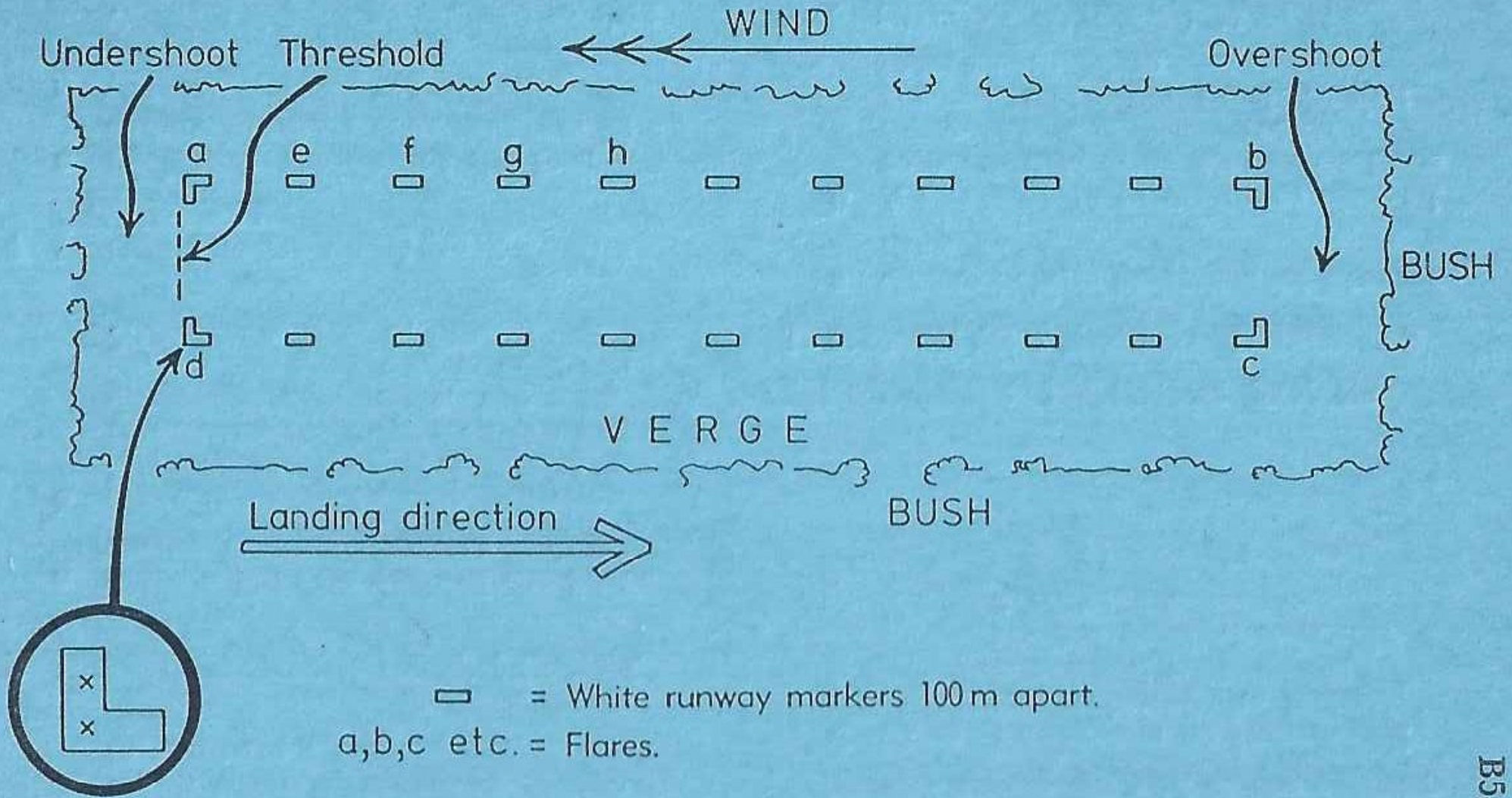


a = Runway minimum lengths (m):-

	Night	Day
For Dakota:	1100	900
Islander:	800	700
Lynx:	800	700
Cessna:	800	700



DIAGRAM 2: FLARE PATH



- c If the wind direction is known two additional flares can be placed at either corner on the down wind threshold as shown in diagram 2 inset

3 WHEN INSUFFICIENT FLARES ARE AVAILABLE

- a Place a flare on each of the four corner runway markers
- b Place the remainder along the left side markers (i.e. left as related to the aircraft's landing direction; remember, the pilot sits on the left) e.g. in diagram 2, points e, f, g, h, etc.

4 WHEN NO FLARES ARE AVAILABLE

- a Park four vehicles at the four corner markers (See diagram 3)
- b Vehicles downwind (at the approach threshold): These vehicles should be parked so that their headlights dipped, will shine at a 45° angle intersecting across the downwind end of the runway

- c **Vehicles upwind**
These vehicles should be parked with their tail lights facing at 45° across the end of the runway

- d **Note** Flares can be improvised from: hurricane lamps/tins filled with petrol soaked sand (preferably 5 litre)/etc

HELICOPTER LANDING ZONES

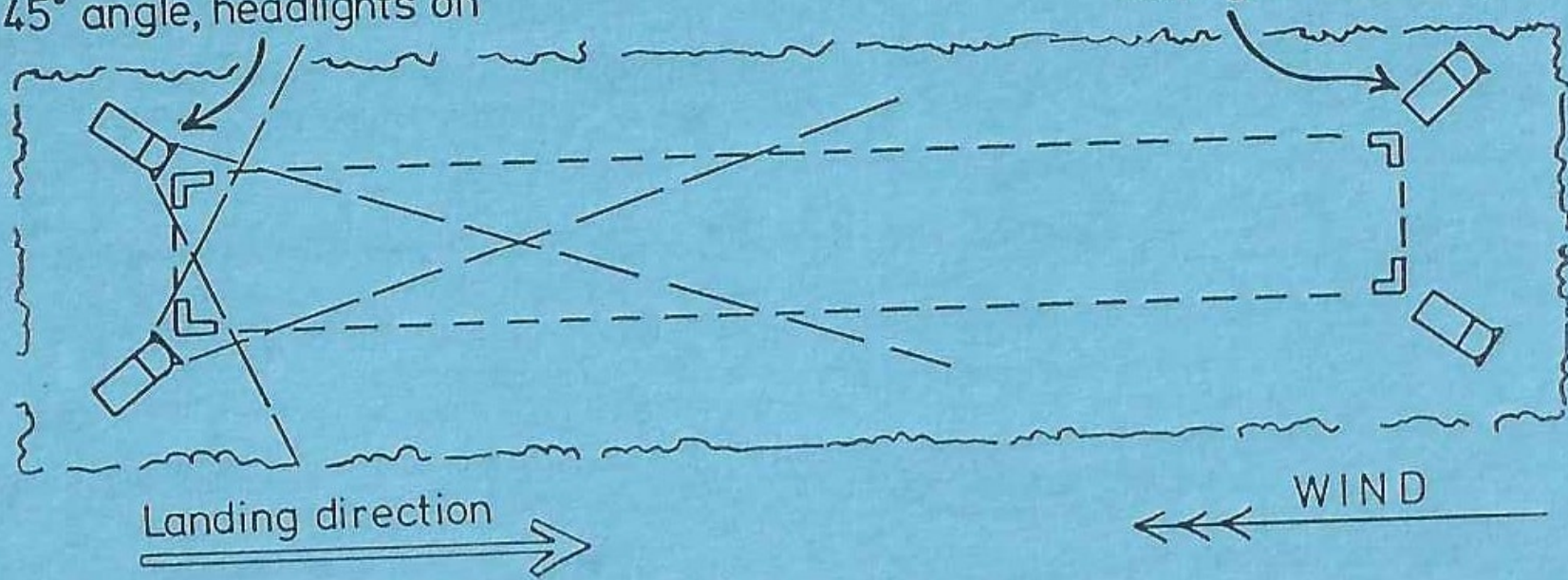
5 GENERAL LZ REQUIREMENTS

- a Ground slope must not be greater than 10°
- b A circle of 15 m diameter cleared to ground level of all obstructions including long grass/rocks/stumps. DO NOT burn. Night: increase to 30 m
- c Clear an additional 35 m (i.e. $15 + 35 = 50$ m total diameter) of all obstacles in excess of 1 m above ground level. Night: increase to 100 m total

DIAGRAM 3: USE OF VEHICLES WHEN NO FLARE PATH AVAILABLE

Vehicles parked at corner markers, 45° angle, headlights on

Vehicles pointing away, tail lights showing



L = Corner markers

d An approach path into the wind of 50 m width and angle of 30° elevation must be provided. The angle is measured from the edge of the inner circle (para a) and taken at eye level. Night: Angle at 10° . Beware telegraph poles and overhead wires

e See "General Notes" para 10

6 FLARES (See diagram 4)

a General:

i Flarepath comprises five lights arranged in the form of a "T". Lights 10 paces apart

ii It should be laid into the wind if the wind is strong, otherwise align on the best approach path

iii Wind blows down "T" from cross piece down leg

b Offset "T" slightly to right of centre of the LZ. The aircraft will land in the left half of the "T", i.e. in the centre of the LZ (N.B. Remember pilot sits on right of aircraft)

7 TORCHES

Where flares are not available use torches as above (paragraph 6). Angle torches at $30-40^\circ$ up approach path (buried in ground)

8 OTHER LIGHTS

If no flares or torches are available use may be made of: hurricane lamps/pressure lamps/5 litre tins filled with petrol soaked sand. Lay out as in paragraph 6, make sure bases are buried to avoid being blown over

9 VEHICLES (See diagram 5) Where no other lighting is available

a Park two vehicles on the edge of the cleared areas 20-25 m apart and angled inwards at 45° to each other. Rear of vehicles facing aircraft approach

b Switch lights on to intersect at centre of cleared area

c The aircraft will approach from behind and between vehicles

d Remove any mounted aerials etc

DIAGRAM 4: USING FLARES TO MARK L.Z.

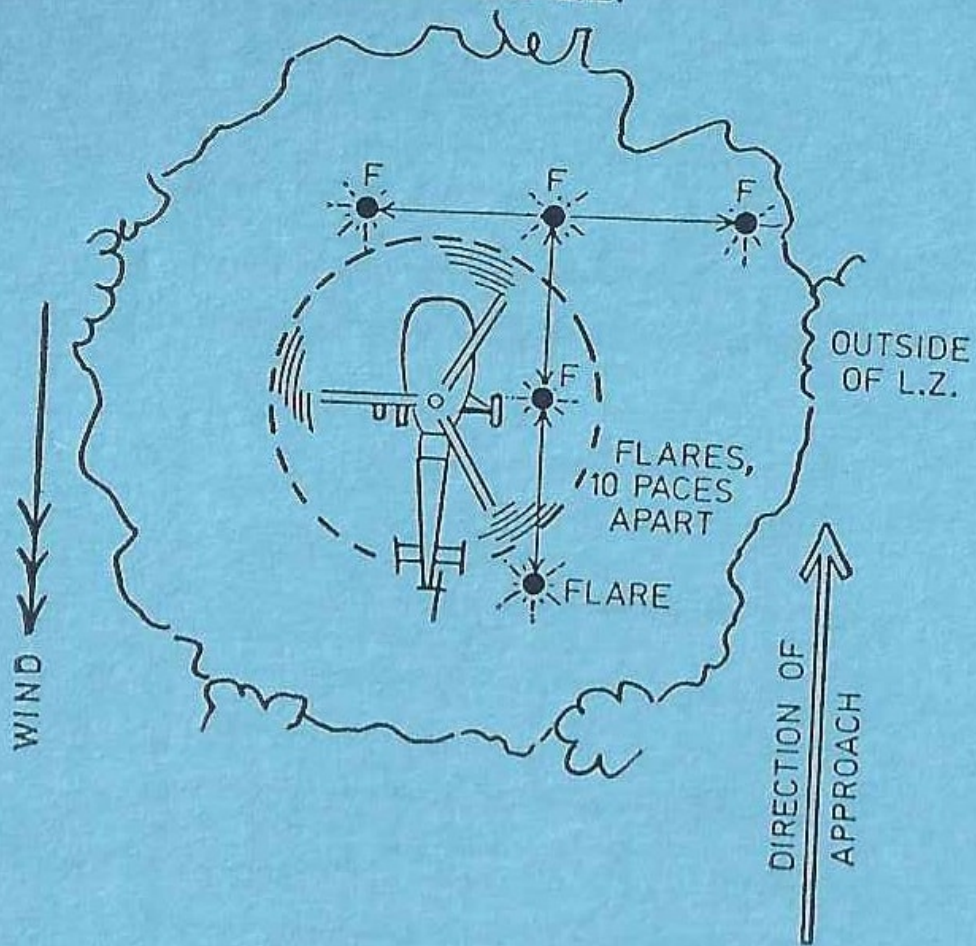
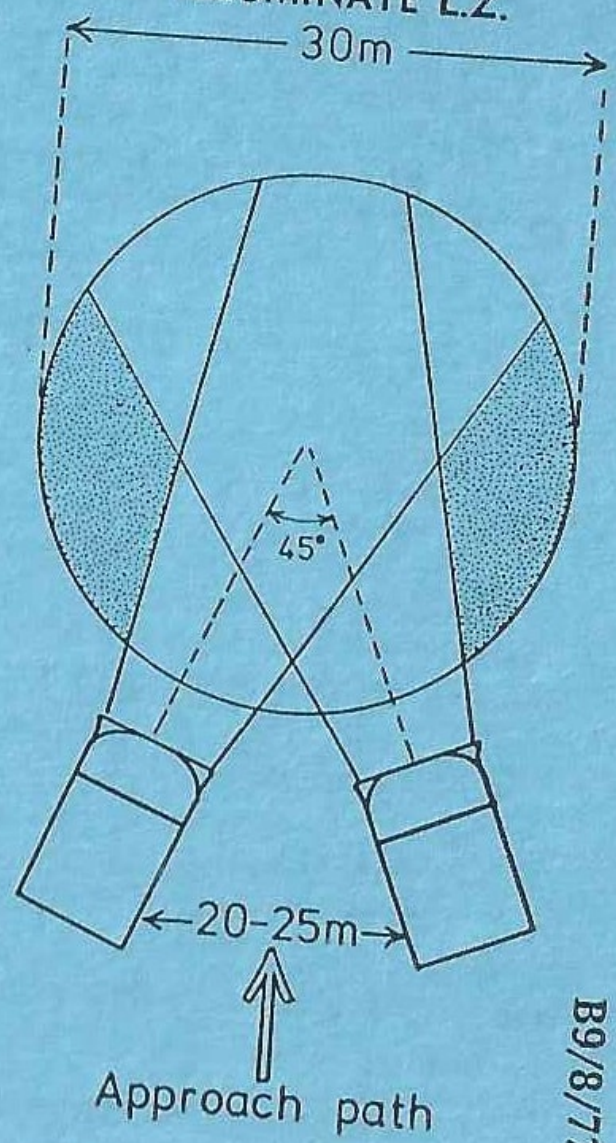


DIAGRAM 5: USING VEHICLES TO ILLUMINATE L.Z.



B9/8/77

10 GENERAL NOTES

a Pre-landing verbal aides

- i Accurate grid reference
- ii Obvious nearby features/
other visual aides available
- iii Features/obstacles to look out
for: e.g. high tension wires/
tall trees/neaby kopjies/etc
- iv Wind direction
- v Indication of length of runway
(i.e. from corner marker to
corner marker) and spacing
of flares/markers
- vi If applicable 'General situation.
See: Fireforce Deployment/
OP aide-memoire

b Pre-landing visual aides—Night

- i Flare-path available: Light
flares half an hour before
aircraft is due to land. The
pilot is able to pick up the
characteristic runway pattern
a long way off.
- ii No flare-path available: Fire
signal flares (Icarus); flash
vehicle and/or other lights

c Checks and responsibilities

- i The person who talks in the
aircraft must be at the landing
site
- ii Do a final clearance of the
strip before landing and
take off (check for:
wildlife/livestock/vehicles/
rocks/etc)
- iii A rule of thumb test for
landing surface suitability can
be made by seeing whether a
vehicle can be driven
comfortably at 80 k.p.h. down
the length of the runway

DROPPING ZONES

11 PARA-DROPPING

- a General: Dakota carries up to 24
paratroopers. They are
dropped from 500 feet plus.
K car and two or more G
cars are often deployed with
the Dakota

- b DZ: Ground** The DZ must be:
- i** Clear of: high tension cables/rocks and boulders/and preferably of tall trees
 - ii** Not on steep or broken ground
 - iii** An area approximately 500 x 400 m, and if possible sited longside into the wind
- c Pilots' requirements**
- i** See Fireforce deployment proforma
 - ii** Give wind direction and any other aspects of ground conditions which may be important
- d Marking** The DZ can be marked as follows:
- i** By day: Use smoke
 - ii** By night: Torches/fires/ground flares/etc

- iii** No wind: Place markers at either end of DZ on imaginary centre line
- iv** Wind blowing: Offset markers upwind from imaginary DZ centre line allowing 150 m for every 10 km/hour wind force

12 RE-SUPPLY

- a Free drops:** The drop is made at about 300 feet
Requirements are:
- i** An area about the size of a football field
 - ii** No high obstructions/features, in the approaches
- b Supply parachute drop:** The drop is made at 300-500 feet
Requirements are:
- i** As for paragraph a
 - ii** Lay smoke at either end of centre line of DZ as an aid to indicating wind direction

ALOUETTE III TROOPING DRILLS

1 GET READY

- a Clear weapons
- b Head dress off
- c Stow aerials/radio switched OFF
- d Form up in one o'clock position
 - No. 1 Rifleman
 - No. 2 MAG
 - No. 3 Rifleman
 - No. 4 Stick commander + radio

2 HELICOPTER LANDS

Await pilot's signal

3 APPROACH AND EMPLANING

- a Weapons reversed and horizontal
- b No's 1 and 2 weapons in right hand, go right (i.e. to aircraft's left)
- c No's 3 and 4 weapons in left hand, go left
- d Drop packs, pass weapons to man behind
- e First man enters, second man hands in weapons
- f Weapons on first man's lap — first man's pack handed in

- g Second man in with own pack — packs on top of weapons

- h Stick leader taps pilot on shoulder with thumbs up when all are seated

4 DEPLANING

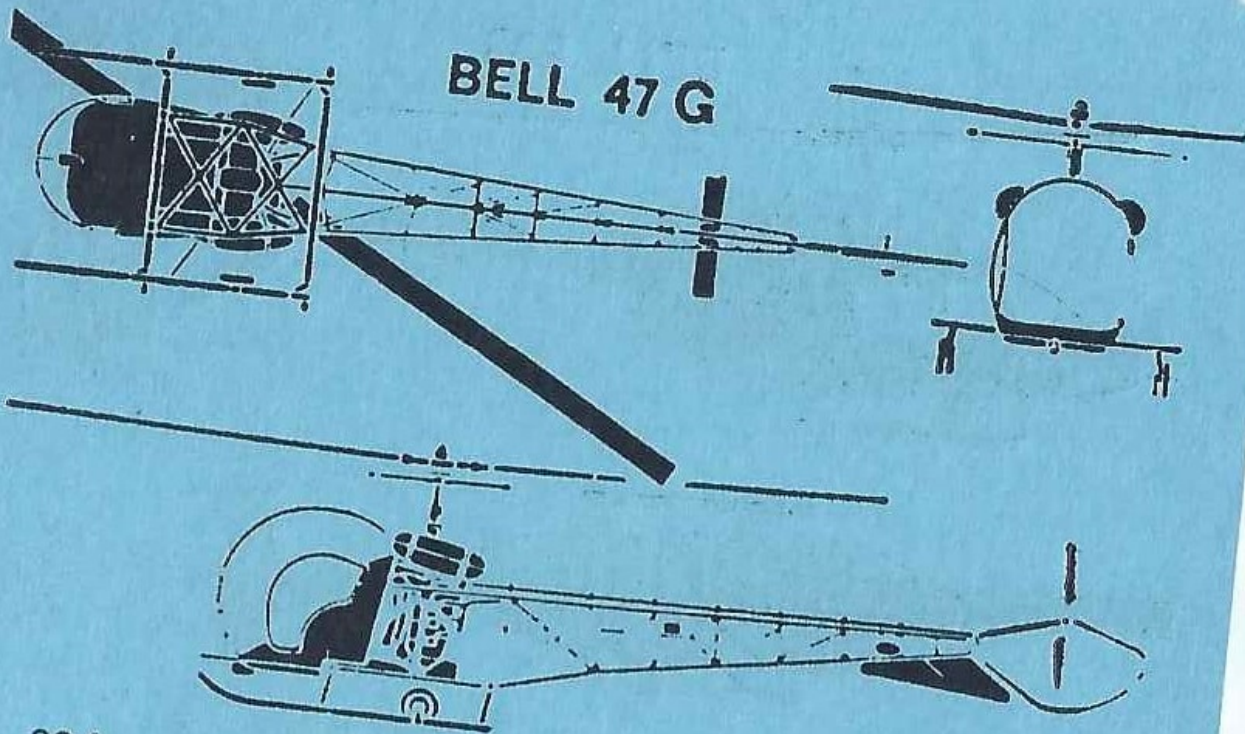
- a Pilot indicates LZ
- b When craft is settled, pilot nods his head
- c Stick leader signals "deplane" by dropping hand
- d Packs dropped on ground
- e Men out, into all round defense (stick leader to one o'clock position)
- f When all men clear, stick leader gives pilot "thumbs up".

5 REACTION TO GROUND FIRE

Should the aircraft come under attack whilst airborne. The stick leader (only) may return fire provided:

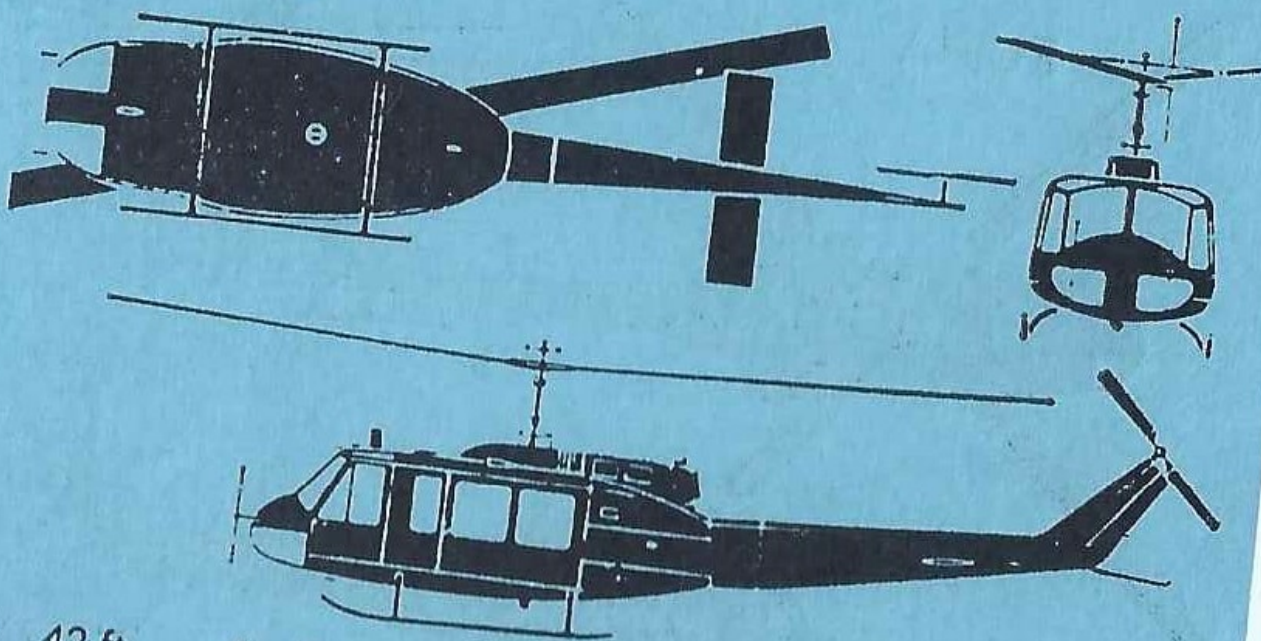
- a The pilot gives permission
- b The weapon is held with the ejector opening facing down

BELL 47 G



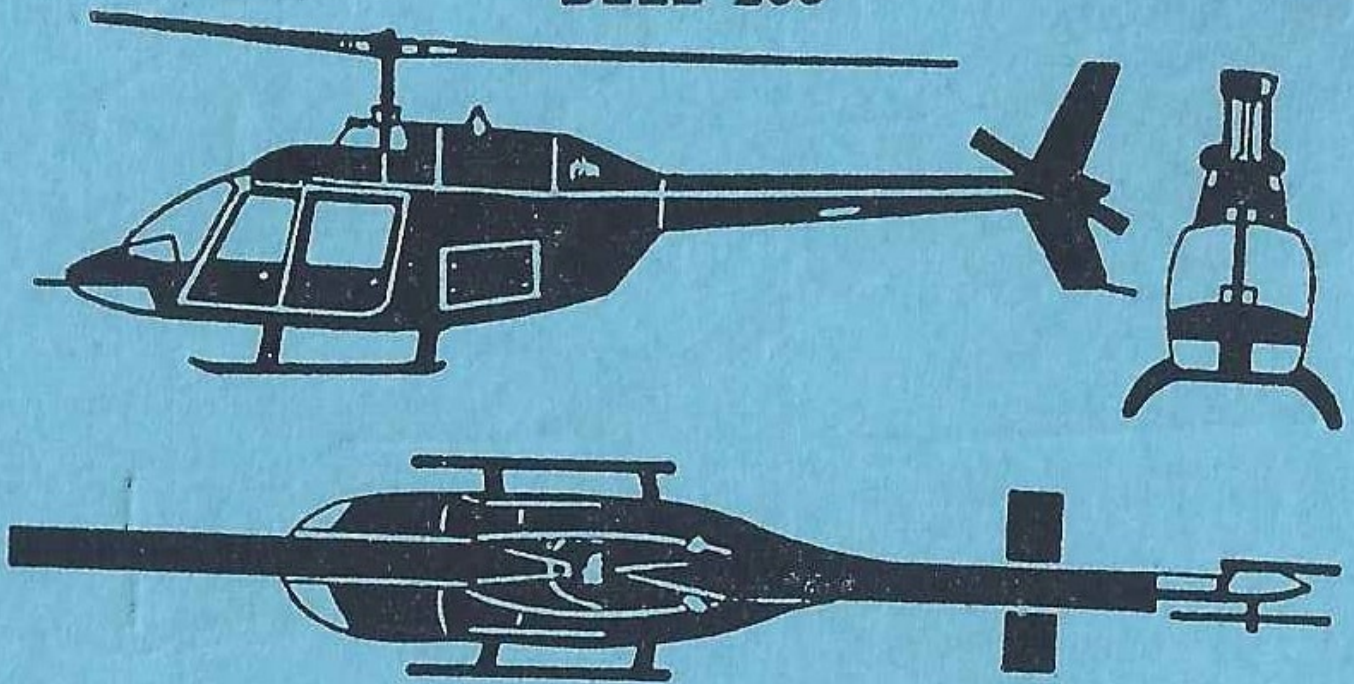
- 1 32 ft. 2 Skeletal frame. 3 Transparent cabin.

BELL 205



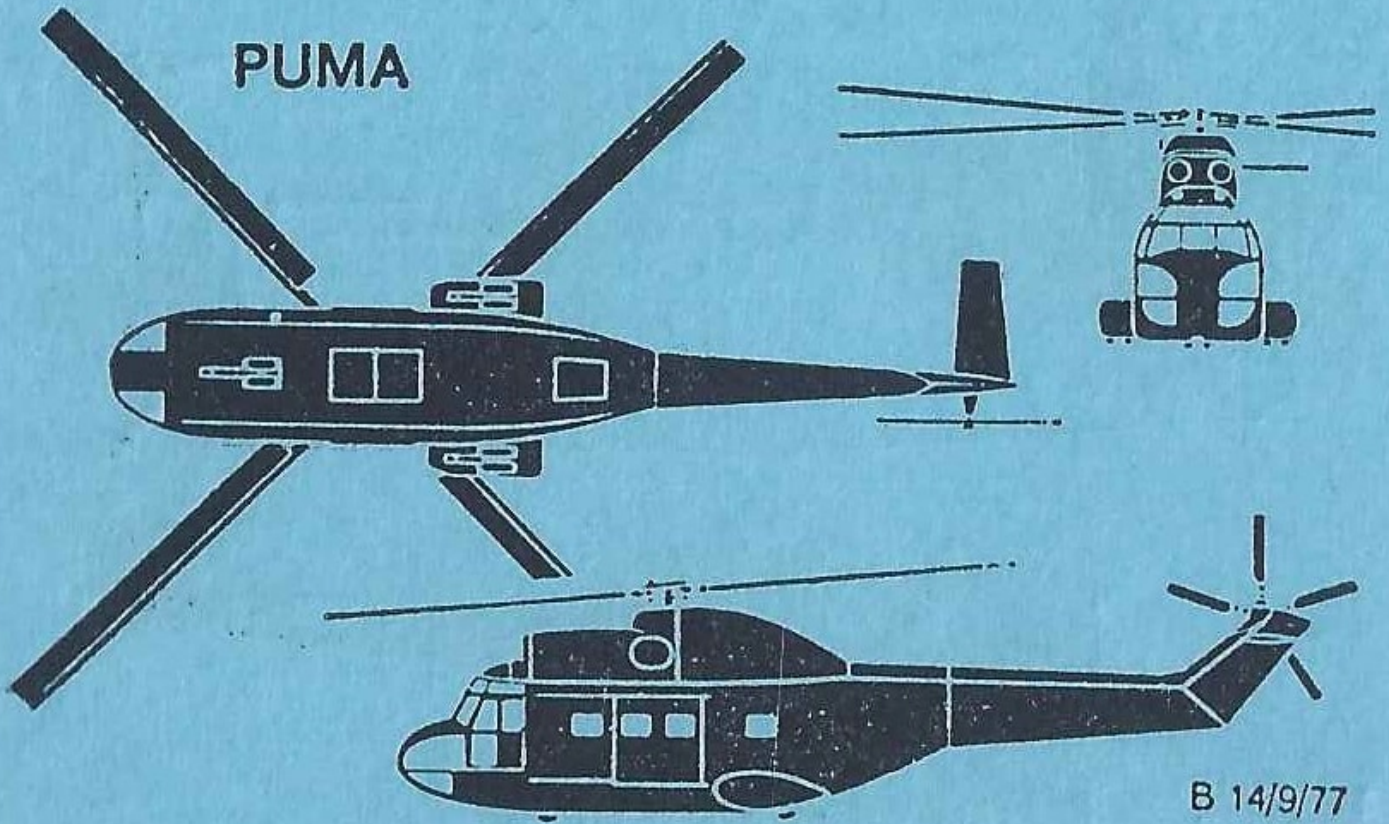
- 1 42 ft. 2 Tail-rotor on top of fin
3 3 x rectangular cabin windows.

BELL 206



1 30 ft. 2 Tail-fin above and below boom. 3 Tail-rotor on end of boom. 4 2 x rectangular cabin-windows.

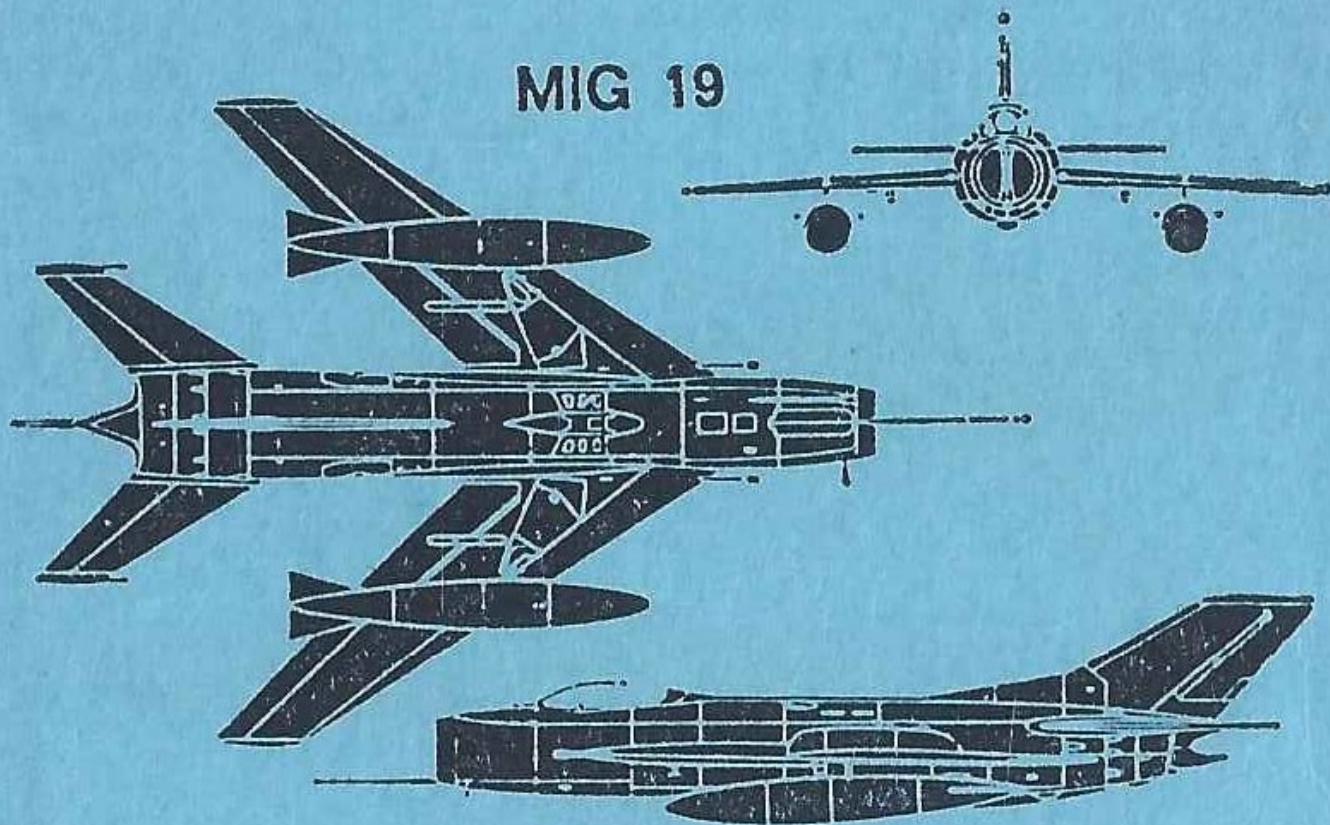
PUMA



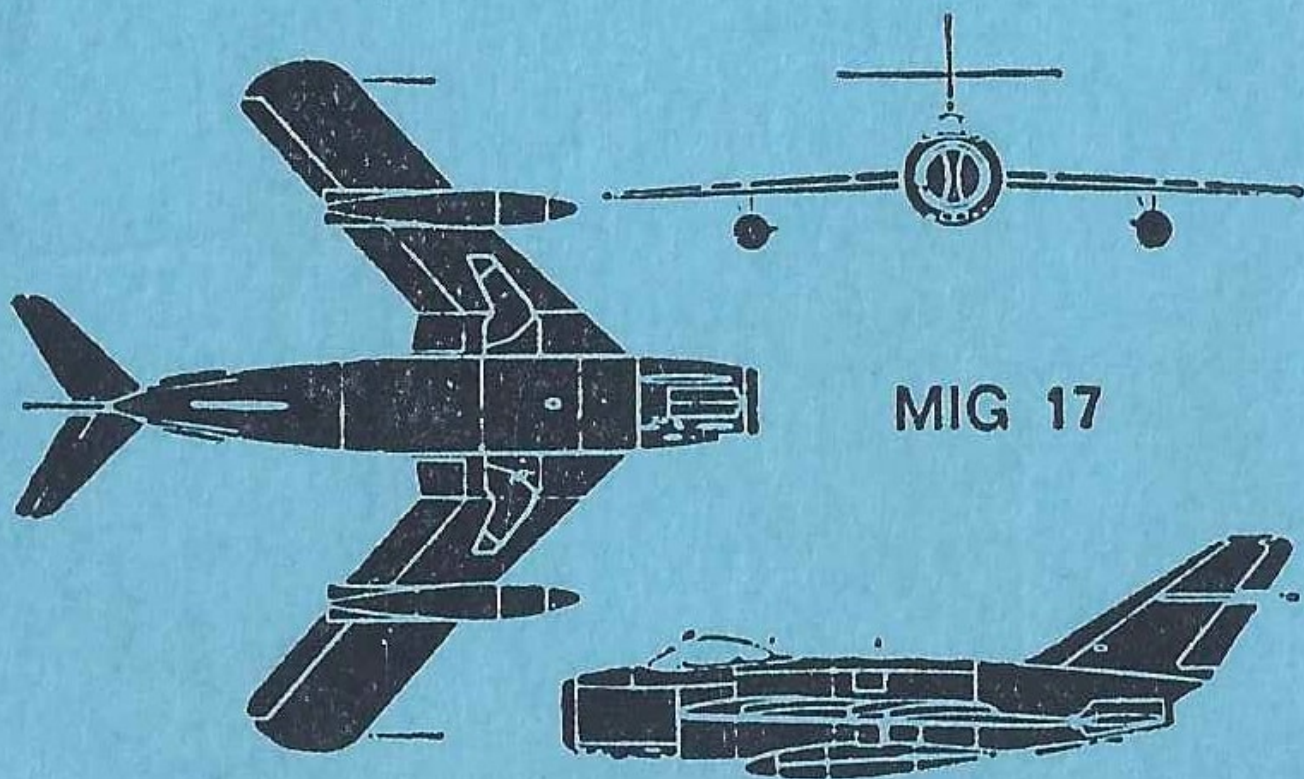
1 45 ft. 2 4 blades. 3 4 x rectangular cabin-windows

B 14/9/77

MIG 19



1 42 ft. long. 2 angular wing-tips. 3 probe on nose.

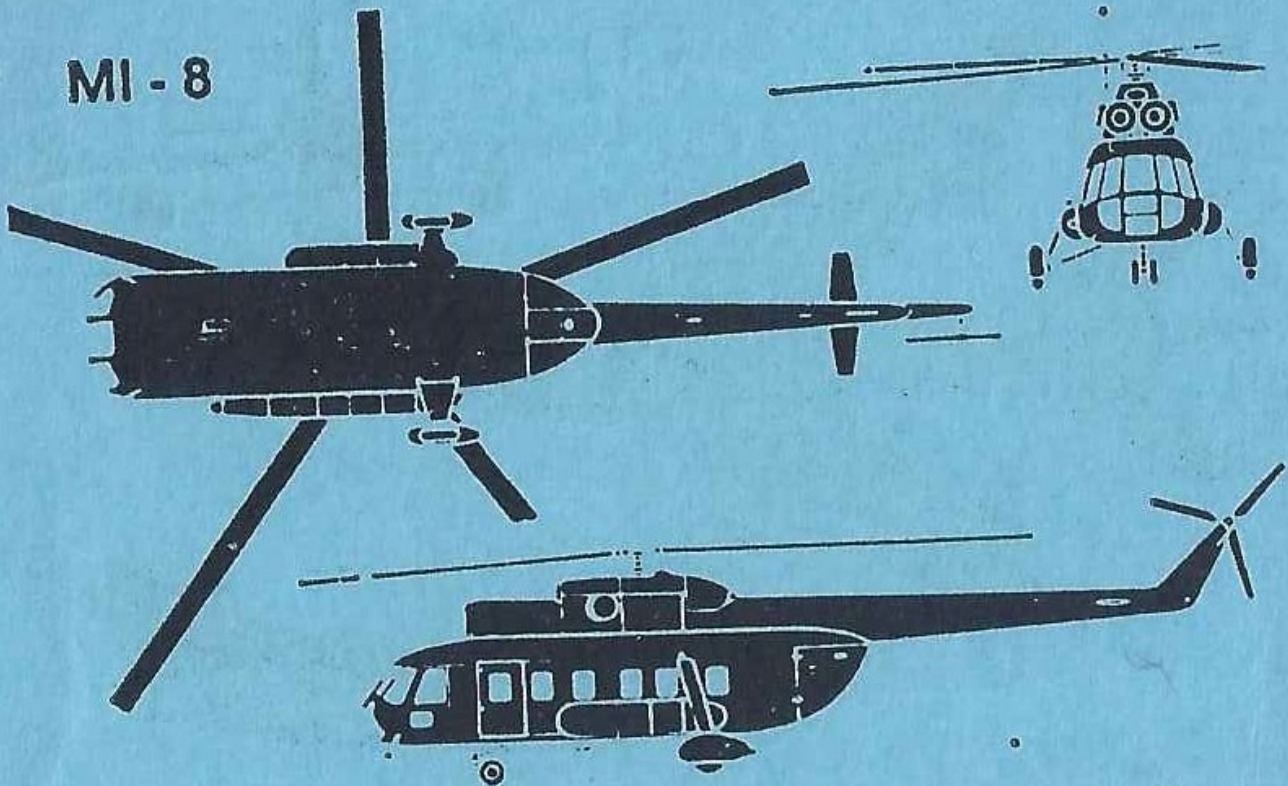


MIG 17

1 36 ft. long. 2 rounded wing-tips.
3 fuselage tapers aft.

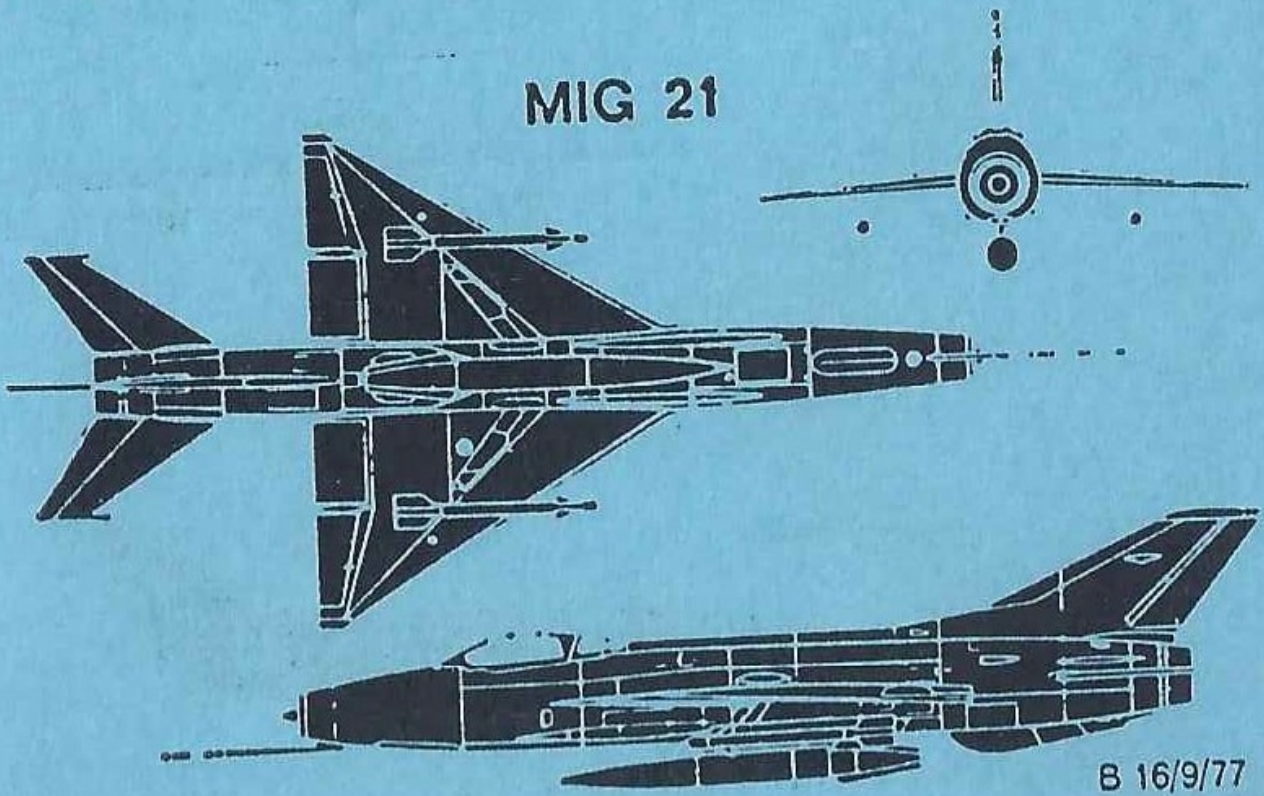
B 15/9/77

MI - 8



- 1 50 ft. 2 5 blades. 3 Horizontal fins on tail boom.
4 6 x rectangular cabin-windows.

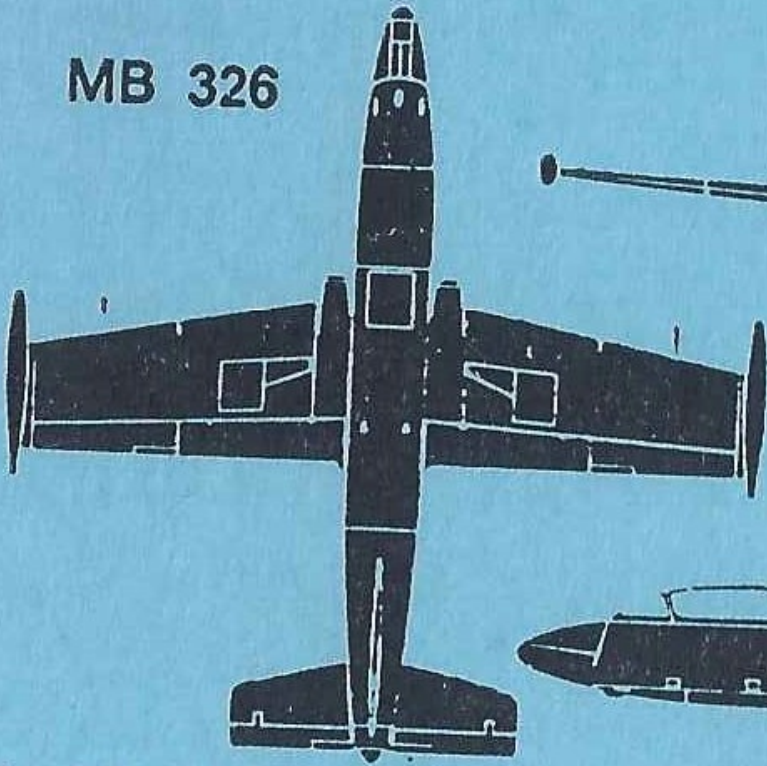
MIG 21



- 1 47 ft. long. 2 delta-winged. 3 skid under tail.

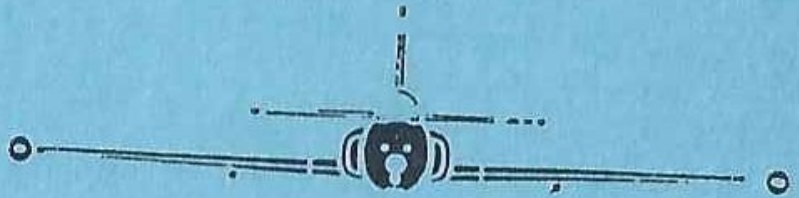
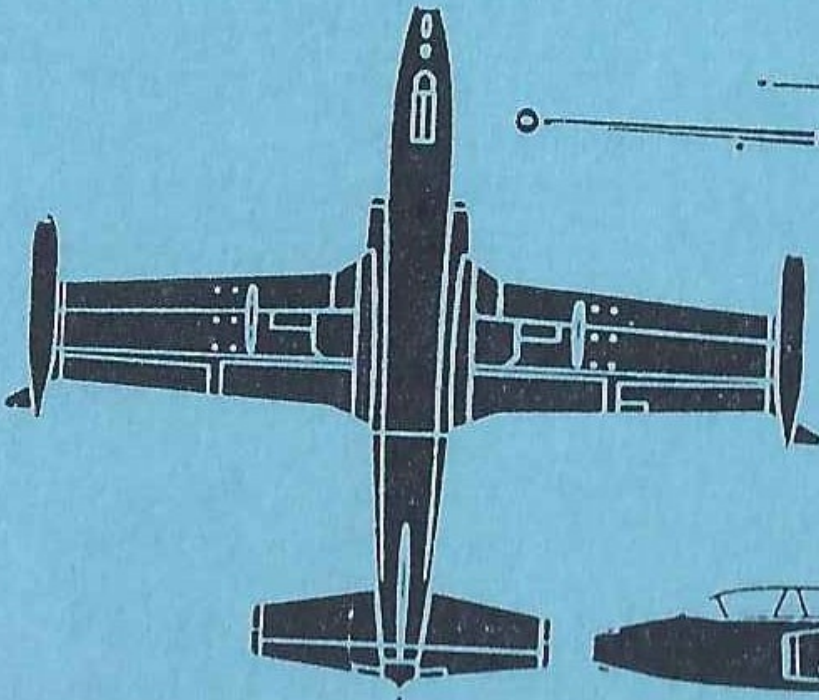
B 16/9/77

MB 326



- 1 35 ft. long. 2 tail-fin set forward of end of body.

GALEB/JASTREB



- 1 35 ft. long. 2 tail-fin on extreme aft end of body.
3 horizontal fin on aft tip of wing-tank.

B 17/9/77

IMMEDIATE FIRST AID

PRIORITY — Check all injured can breathe

- 1 a **AIRWAY.** Clear and maintain open
- b **BLEEDING.** Must be stopped
- c **CHEST WOUNDS.** Make airtight
- d **DRIP/DRUGS/DOCUMENTATION.** Endeavour to radio medic for immediate advice

AIRWAY

- 2 Always check to see that the patient's airway is clear. Blockage of the airway must take priority over all else
- 3 Blockage causes:
 - a Dizziness, breathlessness, weakness
 - b Blue on the cheeks and lips
 - c Swelling of the neck veins
 - d More rapid pulse rate
 - e In the late stage and very serious:
 - i Unconsciousness
 - ii Blue-Grey
- 4 **Treatment:**
 - a Turn immediately on to one side
 - b Wrap handkerchief around finger and clear mouth and throat of any blood, vomit, etc.

- c Pull tongue forward and hold jaw up gently
- d Give artificial respiration
 - i Lie patient on back
 - ii Place your hand under patient's neck to make his head tilt back (i.e. opening the airway)
 - iii With one hand open patient's mouth by holding jawbone up
 - iv Pinch patient's nostrils closed with finger and thumb of other hand
 - v Blow hard into patient's mouth
 - vi Take a fresh breath and repeat until patient can breathe unaided

BLEEDING (HAEMORRHAGE)

- 5 Continuous bleeding leads to shock. It may be:
 - a Visible. (External)
 - b Concealed. (Internal)
- 6 Symptoms of internal bleeding:
 - a Pale, cold, clammy skin
 - b Pulse rate over 100/minute—weak
 - c Breathing becomes rapid and weak
Dizziness/Faintness/Thirst/Nausea
Vomiting/Anxious/Restless/Pain

7 Treatment:

- a If on a limb elevate the part
- b Apply direct pressure on or into the wound using a dressing pad
- c Apply a further pad of cotton wool and a firm bandage
- d If bleeding continues apply digital pressure on the main artery supplying the part, for at least five minutes until a clot has formed.
- e Do NOT apply tourniquets unless all the above have failed
If a tourniquet must be applied:
 - i Note time on patient's forehead
 - ii Release every 15 min for 30 secs
- f Do NOT give anything by mouth if internal injuries are suspected
- g Where there are no internal injuries:
 - i Give warm drinks
 - ii If Sodium Bicarbonate is available add one teaspoonful to each pint of fluid drunk
- h Treat for shock. (See para 16)
- j Severe pain — give morphia/sosogon (see para 20)
- k Casevac as soon as possible

CHEST WOUNDS

8 Symptoms:

- a Difficulty in breathing
- b Blueness of lips, gums and face
- c Increasing chest pain
- d Shock is severe

9 Treatment:

- a Check that the airway is clear
- b Immediately close chest wound with vaseline covered dressing
- c Apply cotton wool pad over dressing
- d Cover with plastic envelope from dressing
- e Strap above in place with non-stretch adhesive to make airtight
- f Treat for shock (see para 16)
- g Give nothing by mouth
- h Give morphia/sosogon by intramuscular injection (see para 20 etc.)
- j Priority evacuation:
 - i The injured man may prefer to sit up or lie on his injured side. This may improve his breathing

ABDOMINAL (STOMACH) WOUNDS

- 10 **No Gut Protruding.** Dress as for ordinary wound. Do NOT give drinks or food
- 11 **Gut Protruding**
- a Do NOT handle gut unnecessarily
 - b Cover with a light dressing (triangular bandage) — this MUST be wet and kept moist. (As a last resort urinate on bandage to keep it wet)
 - c Administer drip (see para 16) and morphia/sosogon (see para 20 etc.)
 - d Do NOT give drinks or food

BURNS

- 12 **Non-phosphoric**
- a Remove from cause
 - b Immerse part in cold water or apply water to part/keep WET
 - c Cut away loose clothing but do NOT remove parts which have stuck to burn
 - d Give drip (see para 16)
 - e Give morphia/sosogon into a muscle (see para 20 etc.)
 - f Give plenty to drink
- 13 **Phosphorus burns**
- a Immerse in water immediately

- b Remove as much phosphorus as possible (under water)
- c Apply WET dressings and keep wet. Paraffin gauze will seal the wound
N.B.—If water is not available, any grease or oil can be used to keep air out
- d Give drip (see para 16)
- e Give morphia/sosogon (see para 20 etc.)

FRACTURES

- 14 **Symptoms:**
- a Pain, swelling and tenderness especially over the site
 - b Inability to use the part
 - c Deformity. Swelling, bruising, bone out of place, shortening of limb
 - d Shock
- 15 **Treatment**
- a Stop any bleeding
 - b Dress any wounds
 - c Support the part and pull gently in the line of the bone
 - d Immobilize the part. (splint)
 - e Treat for shock (see para 16)

- f Give morphia if required (see para 20 etc.)
- g Evacuate
- h Avoid rough handling/particularly neck and spine

SHOCK

16 Treatment (non-serious cases):

- a Lie down, head slightly lower
- b Do not overheat
- c Relieve pain:
Give morphia/sosogon if necessary (see para 20 etc.)
- d Allay anxiety and fear by a few kind words of reassurance
- e Give fluids by mouth unless:
 - i Unconscious
 - ii Wounded in abdomen, between nipple and crotch
 - iii Likely to be in hospital within two hours
- f Do NOT give alcohol

17 Serious cases:

- a As for paragraph 16
- b A man who has been injured and shows the symptoms of shock urgently requires fluids. The fluid

must be replaced intravenously or the patient will die. (See paragraph 18)

- c Check the pulse and respiration at fifteen minute intervals and record until evacuated
- d Avoid unnecessary movement

DRIP

18 Procedure

- a Attach plastic tube to plastic bag containing the fluid. The sharp plastic connector will have to be forced into the outlet (blue) of the bag
- b Remove the protective covering from the needle
- c Open the stop cock, and holding the fluid bag up allow fluid to flow into the buffer chamber (the place with little white float ball) — you may have to squeeze the chamber a few times to bring the fluid down. The float will rise $\pm \frac{2}{3}$ of the way up the chamber
- d Allow fluid to flow down entire length of tube until it flows out freely through the needle. Ensure that there are NO air bubbles in the tube

- e Push needle into as large a vein as can be found e.g. where the forearm joins the upper arm/in the wrist/front of ankle. NOTE: pressure above the site should help to expose the vein
- f If the vein is missed, drip fluid causes the area of injection to swell. Try again
- g NOTE: BE QUICK. Veins collapse shortly after shock sets in
- h In severe cases of shock where acute pain is being experienced. Morphia etc. may be injected with the drip. Method: Just above the drip needle there is a soft brownish rubber connection. Inject morphia direct into this connection

MORPHIA/SOSOGON/OMNOPON

19 Tubonic Ampoules of Morphia 15 mg/Omnopon 30 mg/Sosogon 1,5 ml

20 Directions

N.B.—In case of severe shock see para 18h

a Morphia

- i Remove from plastic container
- ii Hold upright
- iii Push wire, inside needle, down to break seal, and then discard

- iv Squeeze gently to expel air
- v Inject deeply into a muscle at right angle (in upper arm at 45°)
- vi Fully effective in twenty minutes except in cases of severe shock — see para 18 h

b Sosogon

Comes in a prepared syringe. Note points 20 a iv — vi

21 Important

- a The drug, dosage, date and time given, must be clearly marked on the patient's forehead eg, 15 mg morphia 08/1105. This may be done on an elastoplast strip
- b DO NOT repeat in less than four hours
- c Metric equivalent: $\frac{1}{4}$ grain equals fifteen milligrams

22 Morphia in Head Injuries

NEVER give morphia to any head injury or unconscious patient

23 Morphia in Chest Injuries

Do not use morphia. In cases of great pain where medical help is a long way off Sosogon may be used

CONVOYS

To be implemented for every convoy⁶

1 AUTHORITY

- a See battalion standing orders
- b Get initial authority
- c Appoint Convoy Commanders
- d Appoint Vehicle Commanders

2 CONVOY COMMANDER

- a Organise convoy
- b Check vehicles for road-worthiness/sand bags/water in tyres/ Conveyor belting—Mudguards—driver compartment—on sand bags/ metal shielding for driver/seat belts/loose objects/no canopy on TCV/mine prodders
- c Security: Avoid—routine/regular routes/telephone/clear messages. Remember Troops and civilian employees are not security conscious
- d Orders : Brief ALL personnel fully
 - i Allocation of men to vehicles. No persons on back of stores vehicles or on cab or tool box

- ii Dress/webbing on/helmets on
- iii Allocation and distribution of weapons and grenades
- iv Sentry duties (plus mine sentry on dirt roads—Rodef 45 and 25/in cab if protected)
- v Order of march
- vi Routes
- vii Speed
- viii Timings/halts
- ix Vehicle distances
Action on visual contact being lost
- x Action/halts/breakdown/
Mines/Ambush
- xi Security
- xii Communications/channel/
call-signs

3 VEHICLE COMMANDERS

- a See orders carried out
- b Post and check sentries (minimum of 4)
- c Change every half-hour

ORDERS AIDE MEMOIRE: PATROLS

STAGE MANAGEMENT/ORIENTATION

- 1 Terrain/Any information. Use of Maps/aides/model

SITUATION

- 2 Enemy
 - a Strength/Weapons/Dress
 - b Known Locations/Habits
 - c Threat/Capabilities
- 3 Population
 - a Attitude to SF
 - b Relationship with Enemy
 - c Curfew
- 4 SF
 - a Other SF in area/tasks
 - b Attachments and Detachments

MISSION

- 5 Short/Specific/Clear. Repeat

EXECUTION

- 6 Strength + Composition of Patrols
- 7 Duration
- 8 Individual Tasks
- 9 Use of Guides
- 10 Time out/Routes/Distance
- 11 Areas/Boundaries/Poaching
- 12 Formations

- 13 Action on meeting locals
- 14 Action on meeting enemy
- 15 Action if ambushed
- 16 Action if lost
- 17 Action on Halts
- 18 Rendezvous

ADMINISTRATION + LOGISTICS

- 19 Transport/Helicopter
- 20 Dress/equipment
- 21 Rations/Water
- 22 Ammo/Pyrotechnics
- 23 Claymores/Grenades
- 24 Mine detectors
- 25 Infra Red Intensifier
- 26 Camera/Binos
- 27 Medical

COMMAND + SIGNALS

- 29 Radio/Channel call signs/Codes/Schedules/Recognition

ORDERS AIDE MEMOIRE: ATTACK ON BASE CAMP

STAGE MANAGEMENT

- 1 Seating of O group/Allocation weapons/ammo/grenades/illuminants/explosives/ radios/medical stores/other

ORIENTATION

- 2 Orientate model with maps, air photos and ground (if visible)
- 3 Describe model (bottom to top) and include:
 - a Features
 - b Vegetation
 - c Positions of groups

SITUATION

- 4 Insurgents : Strength/Sentries (change over times)/Alarm system/ Camp defences (type of camp)/ Weapons/Leadership/Faction/ Morale/Dress
- 5 Civilians : Type (Sympathisers)/ Locations/Habits/Curfew
- 6 Security Forces
 - a Battalion/Company Mission
 - b Activities of other SF Air Force/PATU/BSAP/Trackers/ Dogs/other

- 7 Attachments and Detachments : Aircraft/Special Branch/Trackers/ Dogs/PATU/BSAP/other

MISSION

- 8 To eliminate or capture

EXECUTION

- 9 General outline
- 10 Stops/strength and number/tasks
 - a CT escape routes
 - b Security (distance to camp)
 - c Ident target prior to firing
 - d Concealment
 - e Location other stops
 - f Movement with reference to (e)
 - g Location and routes to position
 - h Weapons
- 11 Firegroups/strength and composition/ tasks
 - a Fire position
 - b Security (approach route)
 - c Position of assault group and direction
 - d Routes and timings
 - e Weapons

- 12 Assault Group/strength and composition/tasks
 - a F U P
 - b Formation
 - c Direction of assault
 - d Position of fire group
 - e Perimeter search
 - f Direction of flight
 - g Possible ambush on CT camp
 - h Timings and routes
 - j Weapons
- 13 Command Group
 - a Strength and composition/weapons
 - b Position
 - c Timings and routes
- 14 Follow up Group
 - a Strength and composition
 - b Trackers/dogs
 - c Position
 - d Timings and routes
 - e Weapons
- 15 Reserve
 - a Strength and composition/weapons
 - b Position
 - c Timings and routes

- 16 Supporting Fire
 - a Air
 - b Mortars
 - c Artillery F O C
 - d Other
- 17 Co-ordinating Instructions
 - a Waiting area
 - b Action in (a)
 - c Time of move to position
 - d Order of march
 - e H hour and signal to open fire
 - f Security
 - g Deception
 - h Act/surprised by enemy/
compromise by locals
 - j Casualties
 - k Prisoners

ADMINISTRATION AND LOGISTICS

- 18
 - a Use of transport (to and from)
 - b Medical
 - c Rations
 - d Ammunition
 - e Special equipment
 - f Dress

COMMAND AND SIGNALS

- 19 a Position of JOC and Battalion HQ/Company HQ/Command Post
- b Radio/Scantlists/Nicknames/codewords/callsigns

- c Light signals/to open fire/cease fire/etc
- d Password
- e Synchronise Watches

ORDERS AIDE MEMOIRE: AMBUSH

STAGE MANAGEMENT

- 1 Seating of O group/Allocation weapons/ammunition/grenades/illuminants/explosives/radios/medical stores/other

ORIENTATION

- 2 Orientate model with maps, air photos and ground (if visible)
- 3 Describe model (bottom to top) and include:
 - a Features
 - b Vegetation
 - c Position of groups

SITUATION

- 4 CTs intentions, strength/names and order of march/dress/weapons/history/habits/tactics/morale
- 5 Civilians locations/movements/attitude/curfew
- 6 SF
 - a Own Troops, Other call-signs directly engaged in task
 - b Back-up Forces. Scouts/guides/Internal Affairs/etc as applicable to task

- 7 Attachments and Detachments

MISSION

- 8 Short/specific/clear. Repeat

EXECUTION

- 9 General Outline. Brief outline in sequence of entire ambush from move-out to commencement of any follow up
- 10 Detailed Tasks
 - a Killer group
 - b Other groups
 - c Back up Forces

}	Grouping before, during and after contact/arcs/explosives/tasks including post ambush
---	---
- 11 Coordinating Instructions
 - a Timings. Rest/Feeding/rehearsal am & pm/test weapons/prepare explosives/final check/move out/arrive position/time after which CTs expected

- b Move In. Deception plan/vehicles/seating/route/distance/debussing. Move to dispersal point/formations/order of march distance/route/bearing/action if bumped by civilians or CTs
- c Dispersal point. Position/description/action in/arcs/approx time in
- d Recce Group Composition/actions/briefing in situ/return dispersal point/recognition e.g. password
- e Movement of Groups. Formations/routes/guides/timings/action if bumped by civilians or CTs
- f Ambush effective. Times/signals
- g Alarm System. Guards/alerting of groups/individuals/string/touch etc
- h Springing. Who by/how/illuminants/explosives/order of initiation and when/Action if ambush compromised by civilians or CTs
- j Cease Fire. Flare/radio etc
- k Action from springing until daylight/guards/stand to/movement

- m Daylight search. Signal/who by/where/action on finding CTs — tracks — equipment. Action by remainder
- n 360° Sweep. Who by/radius
- p Orders for Follow-Up Forces on standby
- q Call off/Circumstances for/signals/RV/RV procedure/routes to/recognition/action in RV
- r Move back Formation/distance/route/action in meeting CTs etc
- s Casualties. How and who will deal with them
- t Prisoners

ADMINISTRATION AND LOGISTICS

- 12 Dress
- 13 Equipment. Ropes/string/blankets/infra red/etc
- 14 Lights/explosives
- 15 Weapons
- 16 Rations and Water
- 17 Feeding
- 18 Medical J Pack/field dressing/shock pack/morphine (who carries and where). Casevac facilities

COMMAND AND SIGNALS

- 19 Location of commands/chain of commands
- 20 Light Signals. Cease fire/call off/search/etc
- 21 Radio
 - a Restrictions
 - b Signals (alerting etc)
 - c Headphones
 - d Group call-signs
 - e Codes and nicknames
 - f Channels
- 22 Password
- 23 Synchronise watches

LONG TERM AMBUSHING

- 24 In Long Term Ambushes when an administration base is established the following information should be included:
 - a Execution
 - i General Outline. To include establishment of base
 - ii Detailed Tasks. Composition and tasks of ambush/rest/and relief groups
 - iii Coordinating instructions

- (a) Timings. Establishment of base/first move of relief group to ambush/move of ambush group to ambush area/changeover timings
 - (b) Move In. Procedure for establishment of administration base Sequence
 - (c) Administration Base. Location description/sentries
 - (d) Move to and from Administration Base/routes/distance/formations/tactical plan/action if bumped civilians or CTs
 - (e) Recognition. On entering ambush position, administration area
 - (f) Int Briefing. On hand over/take-over (between groups) Production of sketch maps
- b Administration and Logistics
 - i Packs
 - ii Feeding/cooking/fires/water/resupply
 - iii Light/Smoking
 - c Command and Signals
 - i Location commander
 - ii Communications, ambush area/administration base
 - iii Allocation of radios

VHF CHANNEL COMPATABILITY CHART

A60 Mk I	A60 Mk II	A60 Mk III	1A A61 GF	A63	BSAP A73	A76	Remarks
1	1	1	1	1	1	A50	ALL HQ 1 Bde Area
2	2	2	2	2	2	A60	ALL HQ 2 Bde Area
3	3	3	3	3	3	A70	ALL HQ 3 Bde Area
4	4	4		4		A52	
5	5	5		5	5	A62	Army/Air Force/BSAP
6	6	6	9	6	6	B00	ALL
	7	7		7	7	A42	Army/Air Force/BSAP
	8	8	6	8	8	A82	ALL
	9	9	8	9	9	A92	ALL
	10	10		10		B02	
	11			11		B12	
	12			12	12	B20	ALL Less IA/GF
			7	13		A02	
				14	14	A90	ALL
				15		A22	
			4	16		A32	
				17	17	A72	
				18		B22	
				19		B30	
				20		B32	
				21		B42	
				22		B52	
		5		23		A80	ALL less BSAP
				24	24	B62	ALL less IA/GF

Note: For inter service working channel 1 (A50 on SRA76) is the emergency contact frequency

LL/8/77

T.R. 48

OPERATION

Connect fully charged Nicad/Gooseneck Whip Antenna and Telehand into either of the two Audio sockets

TUNING

Select required frequency. Set Power switch to high position. Set Mode Selector Switch to tune position. Rotate Tune Control in direction

indicated by illuminated red light in Meter. When light extinguishes continue adjusting Tune Control to achieve greatest meter deflection to the right

VOICE OPERATION

Set Mode Switch to L.S.B. or U.S.B. Set Power Switch to low or high as required. During reception adjust the Audio Level by using the A.F. Gain (volume) control

ANTENNA LENGTHS FOR DIPOLES

a A dipole is a $\frac{1}{4}$ wavelength either side of feeder.

b To find the correct length of dipole in metres for any particular frequency:

i Divide 72 by the frequency required (in megahertz — MHz)

ii Subtract 10% from the answer obtained

iii This gives the required length of dipole in metres (i.e. half of the total aerial length)

iv E.g. Suppose the frequency is 3 MHz. The length of dipole required will be:

$$72 \div 3 - 10\% = 24 - 2,4 = 21,6\text{m}$$

APPOINTMENT TITLES

Air Force	See B2
Armour	IRONSIDE
Army	CRUSADER
Artillery	SHELLDRAKE
BSAP	BAILIFF
BSAP Ground coverage	SCOUTER
BSAP Support unit	MANTLE
Engineers	HOLDFAST
FAC or GAC	FORTUNE
Intelligence	ACORN
Internal Affairs	LIGHTHOUSE
LAD	BLUE BELL
Liaison Officer	GLOWORM
Medical	STARLIGHT
MP or RP	WATCHDOG
Ordinance	RICKSHAW
QM	NUTSHELL
Senior Ops Officer	SEAGULL
Signals	PRONTO
Tracker	SPARROW
Training Officer	WOODPECKER
Transport	PLAYTIME
Psyac	SENSOR

SECTION LEADERS CHECK LIST

- 1 Physical condition of men in his section—that no one is suffering from any ailment which is likely to hinder the patrol activities
- 2 Physical check of all boots—that they are in good condition
- 3 Physical check on items of equipment, rucksack straps, belt fittings, identity discs, rations
- 4 Physical check of all firearms, magazines, ammunition and cleaning materials.
- 5 First aid kits and that each man in his section has taken anti-malaria tablets
- 6 Each man has Field Dressings
- 7 Each man properly camouflaged
- 8 That all water containers are full, plus water tablets
- 9 Compasses, protractors and maps
- 10 Wireless sets, on correct channel receiver and transmitter are working, spare batteries, call signs and distress signals, codes
- 11 Transport check

BATTLE APPRECIATION

Divide ground into Left/Centre/Right, and consider each in turn as under

- 1 Enemy dispositions/fields of fire/dead ground
- 2 Cover for movement
- 3 Assault position — distance from
- 4 Positions for supporting fire — best angle in relation to assault
- 5 Obstacles and distances — their effect on speed
- 6 Select best alternative and implement

INTERROGATING CTs

At time and place of capture

- 1 Search immediately and make a list of all weapons, ammo, and documents found — send the latter back a.s.p.
- 2 Put articles in a bag and label.
Note: Doppies should be collected from individual fire positions and put into separate bags. Each bag numbered and referenced to a sketch map of the contact area. This is important for forensic purposes
- 3 Question immediately and note answers
 - a Name and Faction
 - b When captured did any other CTs get away? How many? Where would they have gone?
 - c Where has he come from? Who was left there?
 - d Where was he going? Who did he expect to meet there?
 - e CT camps/resting places in the area?
 - f CT supply dumps/caches in the area?
 - g Carrier letter boxes in the area?
 - h CT routes and Rendezvous?
 - j Local supporters in the area?
- 4 DO NOT:—
 - a Bring the prisoner into any Army H.Q. unless told to do so
 - b Show maps or documents used by SF
 - c Allow operational conversations in any language to be overheard (including the radio)

BASES

PRINCIPLES

- 1 General — all stops, however temporary
 - a Security: Site base tactically. Remember: silence/deception/ not the obvious place/dog's leg — one track in/obliterate aerial spoor/track plan/fires-smoking/dress/equipment packed in readiness for immediate move/stand-to positions/arcs of fire/sentries — 2 at night/buddy-buddy system for everything/weapons carried. Obliterate all sign on final departure. In longer term: Clearance patrols 500 m out/register mortars/dig-in
 - b Good communications
 - c Tasks: Base to be sited so that patrol tasks can be adequately carried out from there
 - d Avoid game trails
- 2 In longer term add:
 - a Water: Availability
 - b Hard standing
 - c Resupply: Ease of/Landing Zones etc

PROCEDURE FOR SETTING UP

- 3
 - a Patrol Commander sees likely spot
 - b Recce group forward/dog's leg in
 - c Sentry out
 - d 2 Rfn back to collect Patrol/via dog's leg
 - e Patrol arrives
 - f Patrol Commander indicates 12/4/8 o'clock positions, and Section arc of fire
 - g Sections move-in
 - h Stand-to/clearance patrol out/ Patrol Commander checks all-round defence/sites MAGs
 - j Clearance Patrol returns
 - k Patrol Commander's O.Group — See para 4
 - m Stand-down/sentry on duty

ORDERS

- 4 To include: Base security/alarm scheme and action/stand-to and stand-down/password/sentries — who and where/clearance patrols/digging-in/defence measures e.g. claymores/routine tomorrow/maint. weapons - who and when/tasks/cooking/restrictions — smoking, water etc/rubbish/latrines

CONVOY ANTI-AMBUSH DRILLS

PREPAREDNESS

- 1 Training in vehicle anti ambush drills
- 2 Orders and regular rehearsals
- 3 Adequate mine proofing/seat belts/vehicle preparation, e.g. tail board down
- 4 Full equipment worn at all times
- 5 Helmets to be worn at all times
- 6 All weapons facing out and cocked, a proportion to be on automatic
- 7 W.P. grenades immediately ready to be thrown/launched

IMMEDIATE ACTION

- 8 Drivers:
 - a Get clear of the killing ground
 - b Only stop on order of vehicle Commander
- 9 Sentries:
 - a Open fire immediately both sides
 - b Throw/launch W.P. grenades to mark target area and confuse enemy

- c Continue firing until ordered to cease fire, or until all other occupants have debussed
- d Debuss
- c Prepare to counter attack

10 Vehicle Commander:

- a Assess situation
- b Control and win the fire fight
- c Issue order to stop and debuss
- d Coordinate counter attack with other call signs

11 Other Personnel

- a Return fire immediately
- b Continue firing until ordered to stop/change magazines
- c Debuss and regroup in area indicated by vehicle commander
- d Prepare to start counter attack
- e MAG's Unless otherwise ordered stay with vehicle and provide supporting cross-fire

COUNTER ATTACK

- 12 When no vehicles have entered the killing ground —
 - a Troops in the first vehicle to debuss, mark target (W.P.), and lay down heavy fire into ambush position
 - b Troops from second vehicle to commence immediate flanking attack at 90°
 - c Regroup, commence follow up
- 13 When all vehicles are clear ahead of the killing ground
 - a Troops in the rear vehicle to debuss, mark target (W.P.), and lay down heavy fire into ambush position
 - b Troops from second last vehicle to commence immediate flanking attack at 90°
 - c Regroup, commence follow up
- 14 When some vehicles are clear of the killing ground and others are halted short
 - a Unless otherwise ordered, the party which has not yet entered the ambush should make the counter attack
 - b Other troops to deploy rapidly in order to give 90° cross-fire where possible
 - c A high degree of coordination between parties is required to prevent each shooting the other up
- 15 Vehicles forced to stop in killing area
 - a Sentries:
 - i Return fire and throw/launch W.P. grenades
 - ii Stay at post until all other occupants have debussed
 - iii Debuss and regroup
 - b Vehicle commander:
 - i Order debuss left or right
 - ii Make rapid assessment and aggressive plan
 - iii Muster men and counter attack
 - iv Wounded must be left until after counter attack
 - c Other personnel:
 - i Fire until ordered to debuss
 - ii Debuss, regroup, change magazines/counter attack

OP GUIDE

- 1 Avoid crest lines/obvious places
- 2 Don't alter the OP (cut trees/move rocks)
- 3 Always keep fully camouflaged/avoid glint
- 4 Keep all equipment hidden/camouflaged
- 5 Avoid talking
- 6 Don't smoke or cook
- 7 Don't move about
- 8 No soap — toothpaste or deodorant
- 9 Keep an OP Log
- 10 Triple check before calling Fire Force
- 11 OP must remain clandestine throughout and after contact
- 12 See OP Aide Memoire/Fire Force deployment procedure (W2)

SILENT SIGNALS

- a i CTs at distance — Thumb pointed towards the ground, fist clenched
- a ii CTs close to — weapon into aim at target
- b No insurgents in sight, all clear or 'OK' — Thumb pointed upwards, fist clenched
- c Support group (MAG) — Clench fist, raise arm
- d Recce group — Clenched fist with forefinger upright
- e Rifle group — The victory sign
- f Section commander — Two fingers held against upper arm
- g You — Point at man concerned
- h Track junction — Arms crossed
- j House or hut — Thumb pointing down from an open hand with fingers extended and together so as to form an inverted V between thumb and forefinger
- k Reconnaissance — Hand up to the eye as though using a monacle
- m Immediate ambush — Hand placed over the face followed by pointing to place from which CTs are approaching
- n Game/livestock — Touch ear
- p Spoor found — Pug mark with hands
- q Spoor lost — Pug mark upwards
- r Obstacle — Touch back of head
- s Locals — Touch nose

RULES OF THUMB

- 1 Patrolling speed: Normal by day allow $1\frac{1}{2}$ min/100 m, not including stops or detours. Night patrols allow 2-3 min/100 m. Fighting-through, allow 6 min/100 m
- 2 Approximating angles at distances i.e. for directing supporting arms
 - a Extend fist to arm's length, knuckles up
 - b Looking along the arm between:
 - i First two knuckles approximates 3°
 - ii First and fourth knuckle approximates 8°
 - iii Finger span (not thumb) approximates 12°
 - iv Full span approximately 19°
 - c 1° at 1000 m is 17,5 m on the ground
 - d Binoculars: Distance between the large vertical lines represents 1°

OBSTACLES

ISSUE STORES LIST PER 100 m

LOW WIRE I

Short picket angle iron	200
Barbed wire (130 m per reel)	15 reels

CAT WIRE I

Long pickets angle iron	64
Barbed wire reels	6
*Dannert coils	12

CAT WIRE II

Long pickets angle iron	96
Barbed wire reels	9
*Dannert coils	24

CAT WIRE III

Long pickets angle iron	128
Barbed wire reels	12
*Dannert coils	30

DOUBLE APRON

Long pickets	40
Short pickets	82
Barbed wire reels	13

*Concertina Barbed Tape may be used alternatively — same quantities apply

GRENADES AND FLARES

GRENADE/FLARE	EFFECT	DANGER AREA m	MAX RANGE m	DELAY SECS	BURNING SECS
M 962 — Fragmentation	A.P.***	270 m	—	4-5	—
M 970 — W.P.	A.P./Smoke	30 m	—	4-5	—
Candle — Blue/orange	Sigs	—	—	4-5	50
A 2 — Blue	Sigs	—	—	4-5	50
A 3 — Orange	Sigs	—	—	4-5	50
Pencil — Wh/red/gr/yell	Sigs/light	—	75	Inst.	10
Hand illum. (star)	Light	—	—	1,5	45
Elec. illum.	Light	—	—	Inst.	45
Icarus Rocket*	Light	—	300	6-7	30
Trip flare	Light	—	—	Inst.	90
M 970 — Rifle	A.P./Smoke	30 m	200	4-5	—
A 8 — Rifle	A.P.	30 m	200	4-5	—
42 Z — Rifle**	A.P.	30 m	400	Impact	—

* Icarus Rocket — Up to 350 m height, 1×10^6 lux, noisy.

** 42 Z: a 3 firing positions:

- i From hip — short range cartridge — range 150 m
- ii Mortar role — short range cartridge — 45° angle — 250 m
- iii Mortar role — long range cartridge — 45° angle — 400 m

b Armed after 30 m

c Guaranteed lethal area 15 m

*** A.P. — Anti personnel

CLAYMORE MINES

	MINI	R1M1
1 Horizontal spread	30 m	60 m
2 Effective range	15-20 paces	25-30 paces
3 Danger area — forward	250 paces	250 paces
— backblast serious	16 paces	25 paces
4 Operational pack:		
a Multi strand twin cable	30 m	30 m
b Legs	2	Attached
c Mine	1	1
d Detonator (D4M1) in wooden block	1	1
e Detonator box	1	1
f New Radio battery	1	1
5 Mass of pack excluding 4 (e) and (f)	1,3 kg	
6 Ambush position — to rear and side of mine, behind cover, not within	20 paces	30 paces
7 Radio frequency hazards:		
No transmissions of the following within:		
a Service Mobile antennae		300 m
b Mortar locating antennae		100 m
c Infantry patrol radio antennae		2 m

8 Setting up procedure: Three man team

Note: Detonator to be kept away from battery and mine at all times until final arming

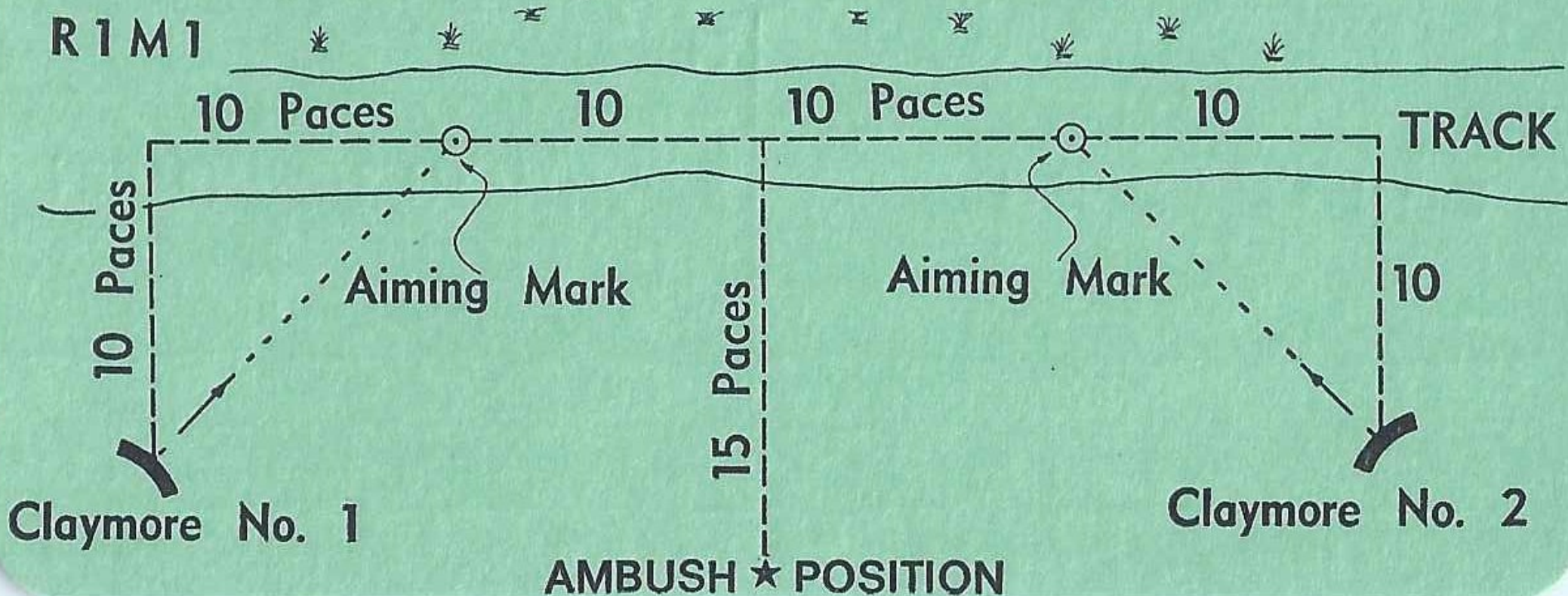
- a No's 1, 2, and 3 move to killing area (see diagrams for paced out measurements)
- b No. 1 sites mine (aim below knees)
- c No. 3 remains on guard
- d No. 2 lays out cable (making sure that the ends are twisted together) to initiation centre
- e No. 2 returns camouflaging cable

- f No. 2 and 3 move back to initiation centre
- g No. 1 meanwhile connects detonator to main cable. (Note: Detonator to be placed behind back during this operation)
- h No. 1 arms mine (this is the last thing to be done before leaving)
- j No. 1 connects main cable to detonator box

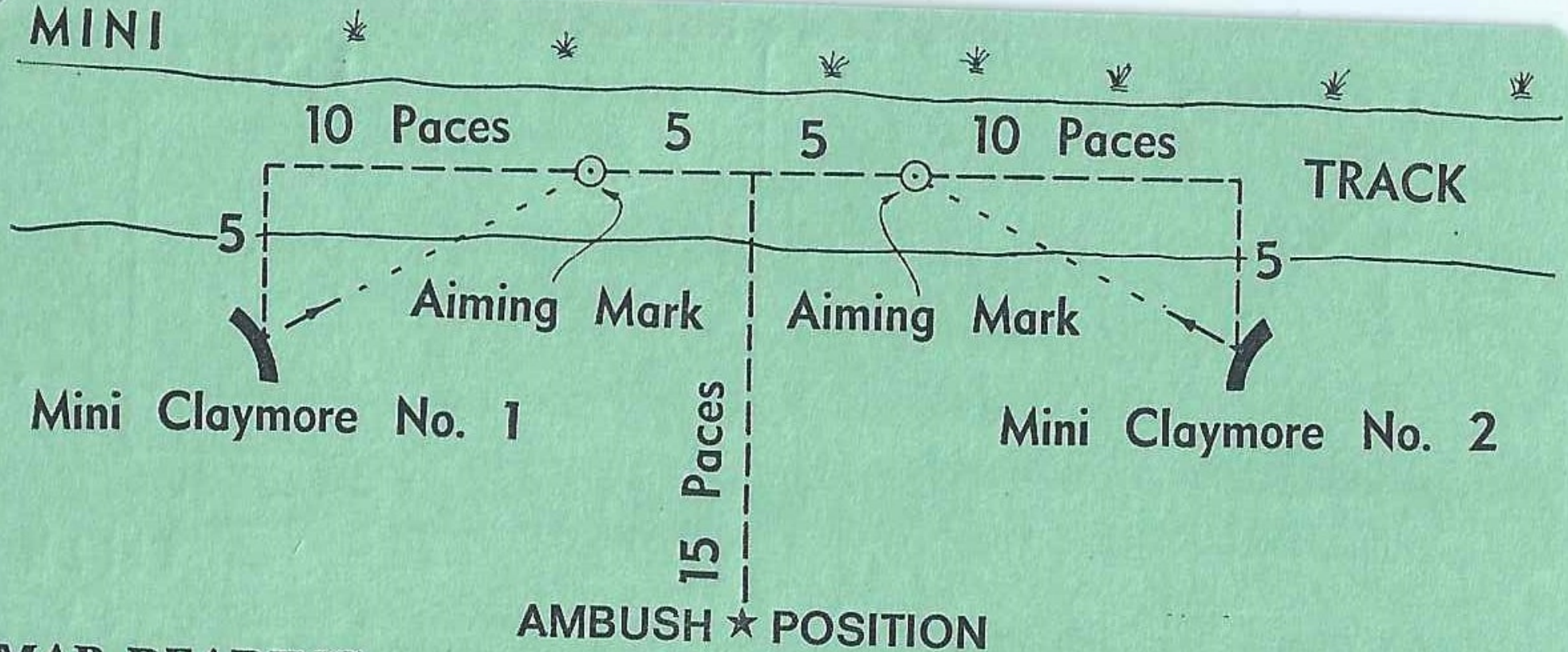
9 Disarming

Disarm the mine in the reverse order to arming

G12/11/77



MINI



MAP READING

1 GRID REFERENCES

- Read along the TOP (or bottom) of the map first (Easting) — going from left to right.
- Read up the SIDE next (Northings) — going from bottom to top

2 CONVERTING BEARINGS

- Going from Magnetic to Grid, subtract the magnetic declination (this is approximate but practical)
- Going from Grid to Magnetic, add the magnetic declination

3 BACK BEARINGS

- Bearings less than 180° add 180°
- Bearings greater than 180° subtract 180° , e.g. Bearing of 190° , back bearing is $190 - 180 = 10^\circ$

4 RESECTION

- Identify feature both on the ground and on the map
- Take a compass bearing
- Convert to grid (see para 2)
- Place protractor (correctly aligned) on map with centre over the feature identified

- e Draw a line through the angle noted and the feature
- f Repeat for second and if possible third, features
- g Produce all lines backwards to intersect
- h The spot where they cross (or the centre of the triangle formed) is your approximate position

NAVIGATION

When a compass is not available the following methods may be used as quick aids to direction

1 WATCH-SUN METHOD

- a February 8th to November 4th (Zambezi Valley)/January 3rd to December 13th (Limpopo Valley)
 - i Stand with your back to the sun, i.e. so that your shadow is immediately to your front
 - ii Point the 12 of your watch at your chest
 - iii Bisect the angle between the hour hand and the 12 o'clock position
 - iv Produce this line through the centre of the watch. It points approximately south
- b November 5th to February 7th (Zambezi Valley)/December 14th to January 2nd (Limpopo Valley)

- i Stand with your back to the sun
- ii Point the hour hand at your chest
- iii Bisect the angle between 12 o'clock and the hour hand
- iv This line produced through the centre of the watch points approximately North

c Note

- i Due to the acute angle of the sun between November/December and January/February this method is not always reliable at this time of year
- ii Interpolate for areas between the Zambezi and Limpopo Valleys

2 SPARROW WEAVERS NESTS

Build their nests in colonies on the west side of trees. Nests look like untidy handfuls of dry grass caught up in the branches

3 BUFFALO WEAVERS NESTS

Large untidy community nests. Built on west side of trees — often Baobabs

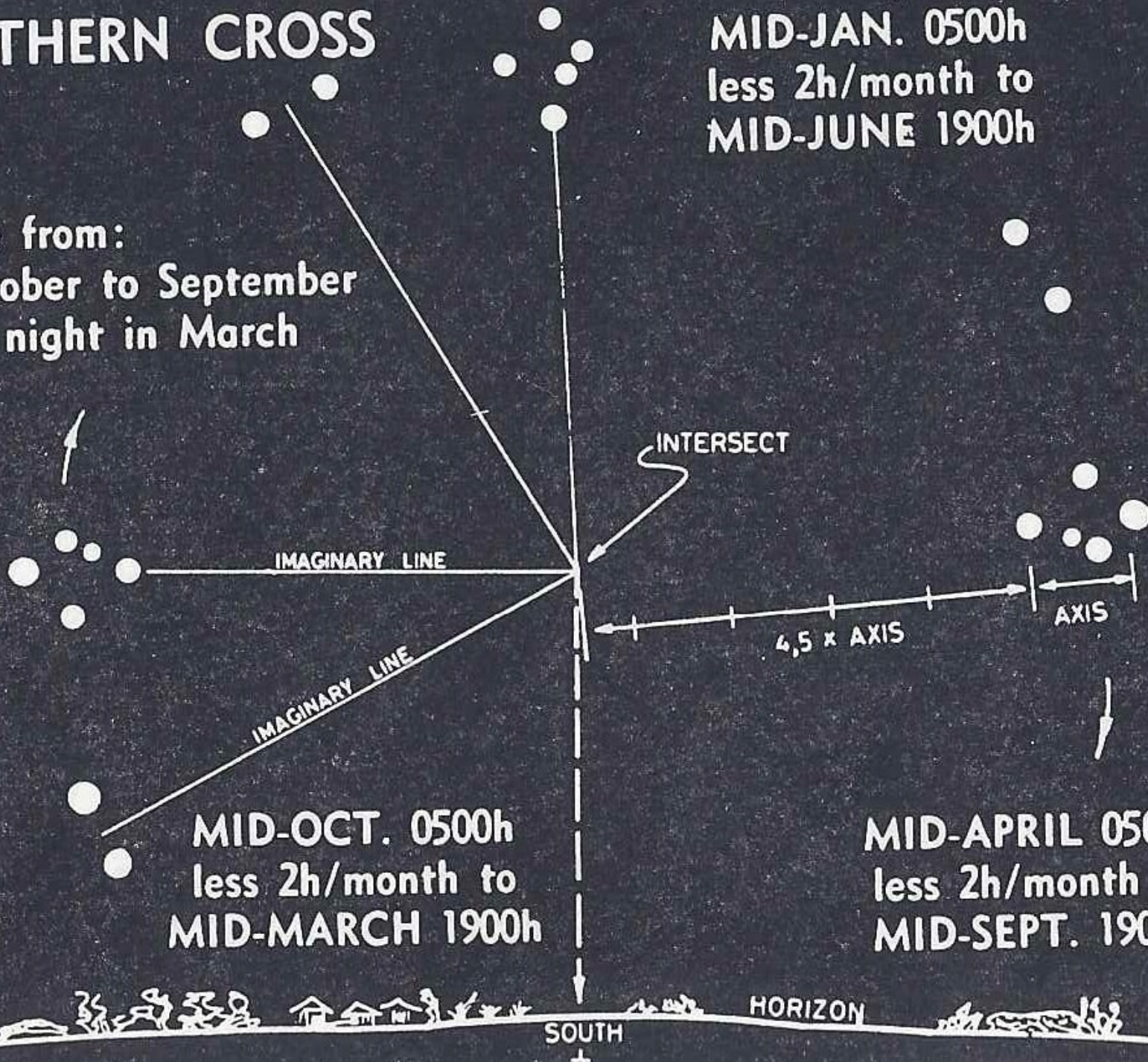
4 MOON/STARS

- a Moon rises \pm east/sets west

SOUTHERN CROSS

MID-JAN. 0500h
less 2h/month to
MID-JUNE 1900h

Visible from:
a. October to September
b. All night in March



MID-OCT. 0500h
less 2h/month to
MID-MARCH 1900h

MID-APRIL 0500h
less 2h/month to
MID-SEPT. 1900h

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ORION OVERHEAD

G16/8/77



ORION SETTING

MID-DEC. 0510h
less 2h/month to
MID-JUNE 1710h



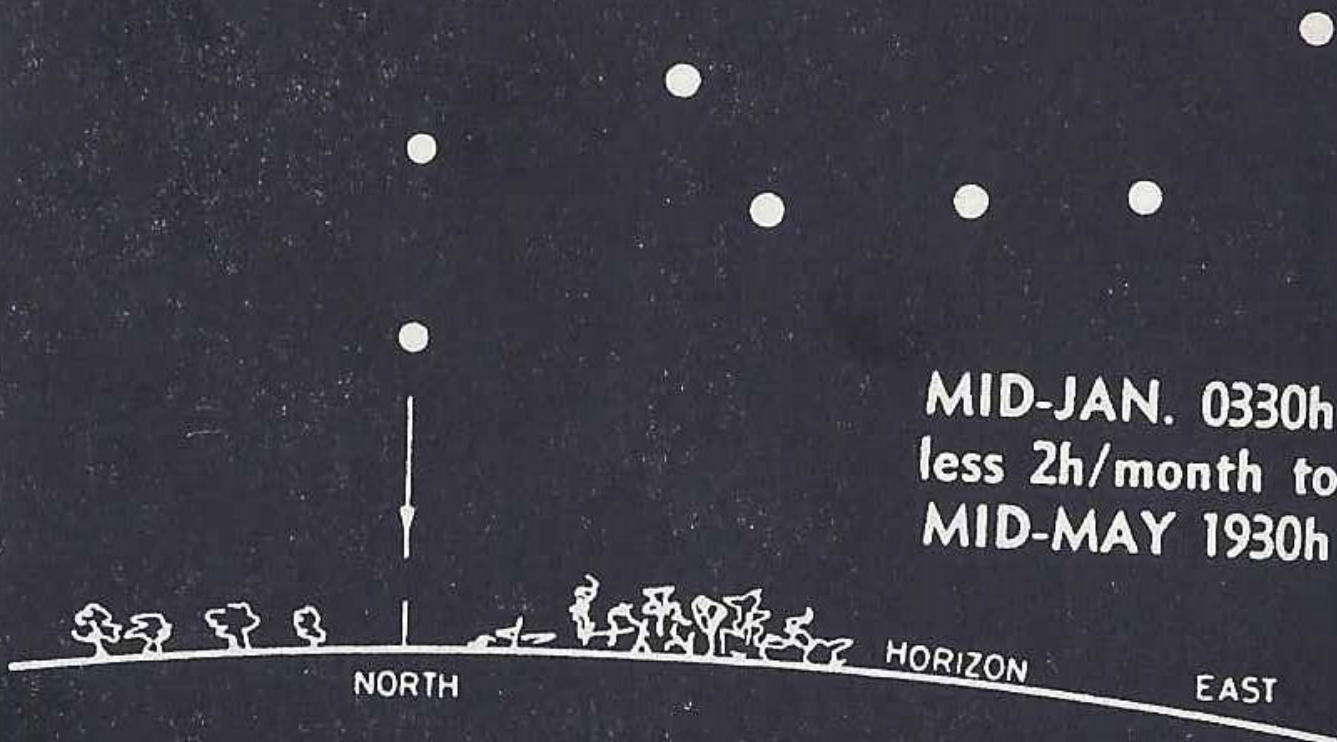
ORION RISING

MID-JULY 0500h
less 2h/month to
MID-DEC. 1900h



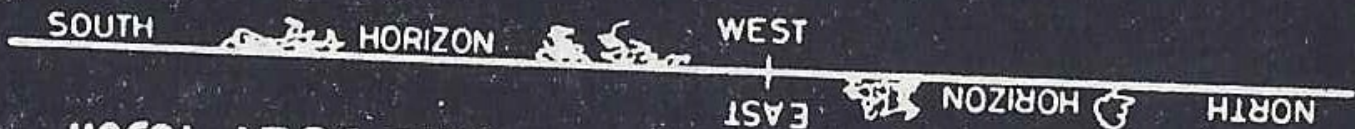
PLOUGH (BIG DIPPER)

G17/8/77



AQUILA (ALTAIR) SETTING

MID-JULY 0540h
less 2h/month to
MID-DEC. 1930h



MID-JULY 1850h
less 2h/month to
MID-FEB. 0450h

AQUILA (ALTAIR) RISING

WEAPON	AMMO	MAX. RANGE	RATE OF FIRE	OTHER INFORMATION
MORTARS				
81mm Long	4,2 kg H.E.	5025	V. slow: 1	Minimum range 100m. Lethal area 20m. Danger area 100m. Penetration: 30cm with 0,05 sec. fuse. Also fires colour H.E. (Red/green/yellow/blue/black) and smoke
81mm Short	3,2 kg H.E.	4575	Slow: 2	
	3,2 kg H.E.	4125	Normal: 3	
			Rapid: 5	
60mm Hotchkiss-Brant	1,8 kg H.E.	2050	Intense: 10	
60mm Commando	1,8 kg H.E.	1050		
ANTI-TANK				
88mm Rocket Launcher	1,7 kg Energa:	100	Sustained: 1 Rapid: 1 per 6 sec. 5 rounds max. followed by 15 min. cooling	Penetration: 28cm armour plate Backblast: triangle 22 x 27m
	Static	450		
	Moving	275		
	Static	1200		HEAT: 450mm steel/2m concrete HESH: 160mm steel/2m concrete HEAP: 63 x 300m Backblast: triangle 50 x 50m
106mm RCL	Moving	800		
	12,7mm Tracer	3100		
		1300		
ARTILLERY				
25 pounder (88mm)	H.E.	12300 planning	25 pounder	Safety distance: Predicted 400m Observed 200m
	Smoke	9200	V. slow: 1	
	HEAT	16500	Slow: 2	Predicted 500m Observed 400m
	HESH	13700	Normal: 3	
5,5 in. (140mm)			Rapid: 4	
			Intense: 5	

G18/12/77

