IED TM Lesson 2.7: Static Force Protection in an IED Environment

Overview

2.7.1 Principles of Defence

2.7.2 Forward Operating Base Design

2.7.3 Surveillance and Target Acquisition Planning

Terminal Learning Objectives

At the end of this module, the participant will be able to describe practical measures to reduce the threat of IEDs whist in static locations (Forward Operating Base) in an operating environment affected by IEDs.

Introduction

- Numerous large scale FOB overruns.
- FOB attacks can have high casualty rates, seizure of weapons, ammunition, vehicles and equipment.
- Incidents usually involve the use of IEDs.
- The incidents also carry significant propaganda value.
- Many overruns attributed to poor FOB design and TTPs

2.7.1 Principles of Defence

Principles of Defence

Depth

All round defence

Mutual support

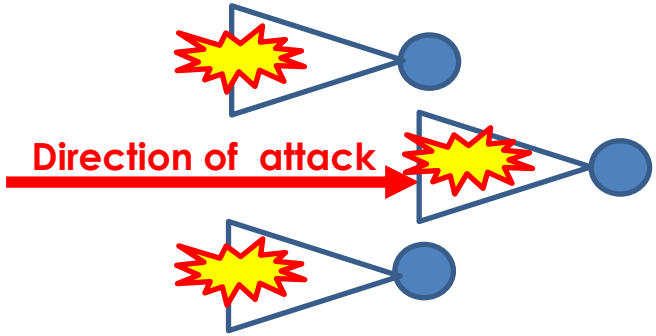
Reserves

Offensive spirit

Deception

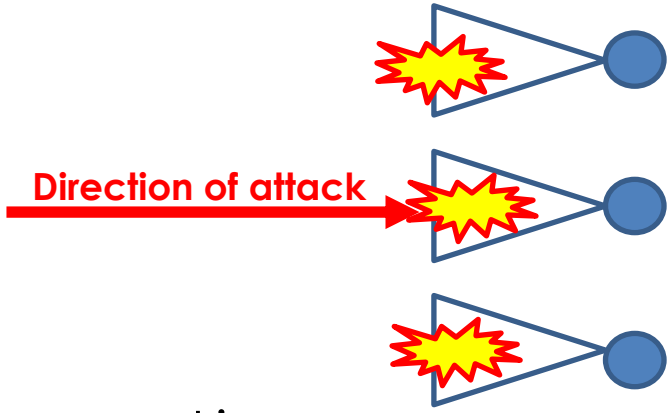
Principles of Defence

Depth



In depth

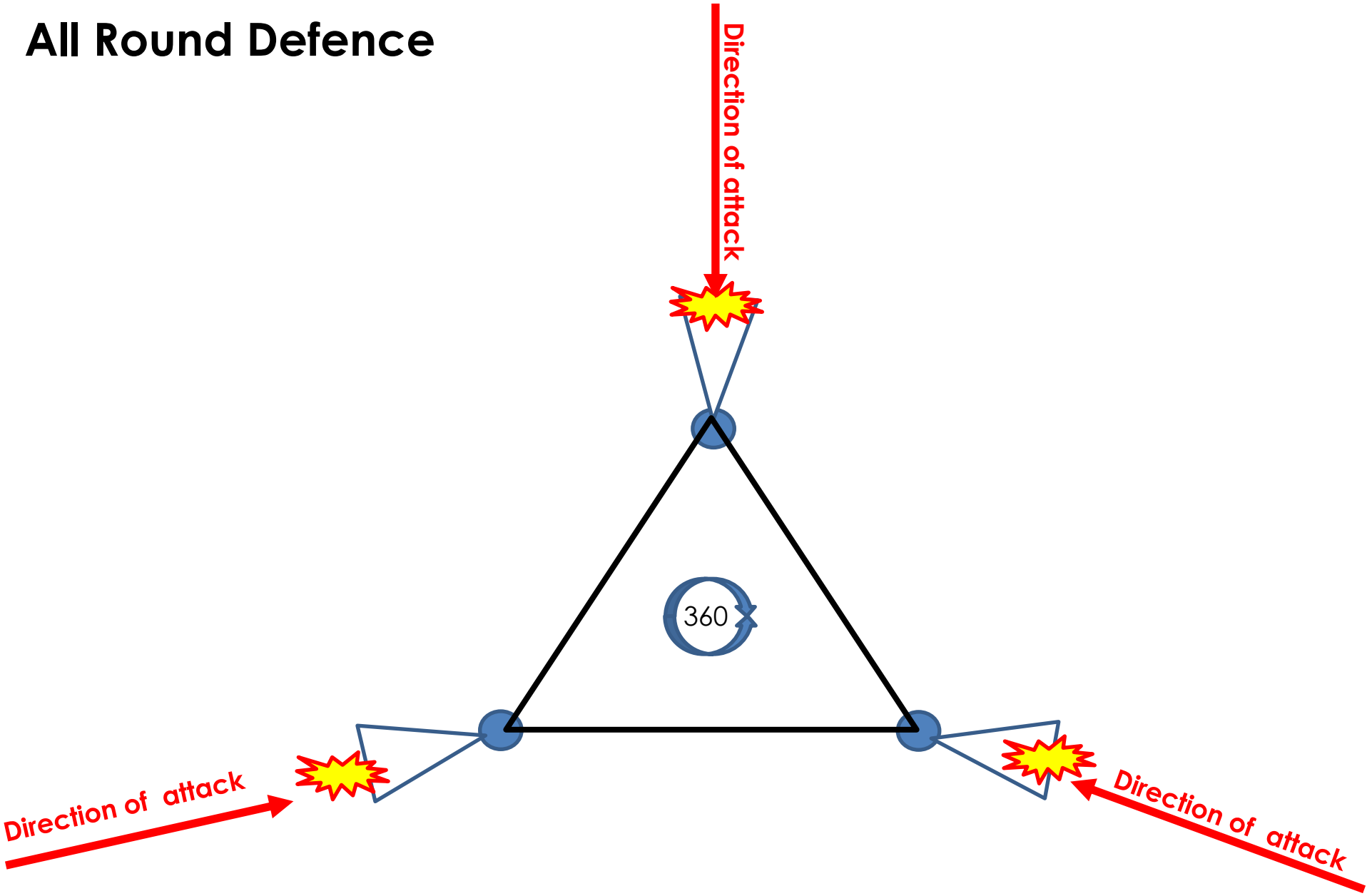
VS



Linear

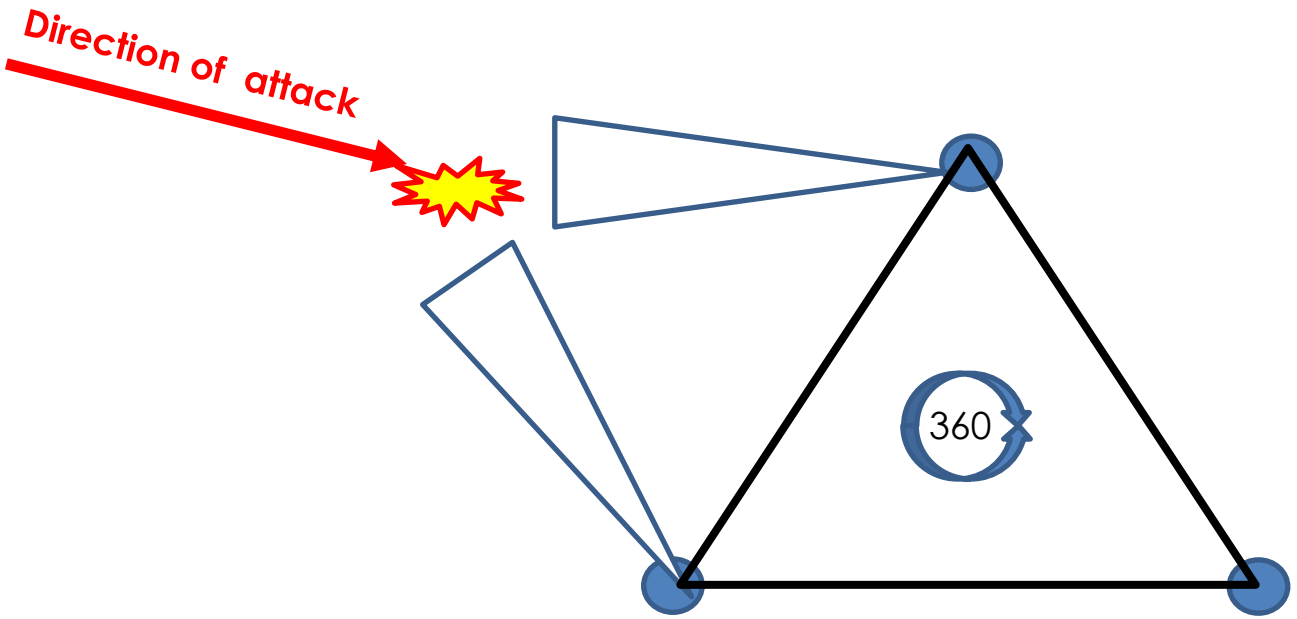
Principles of Defence

All Round Defence



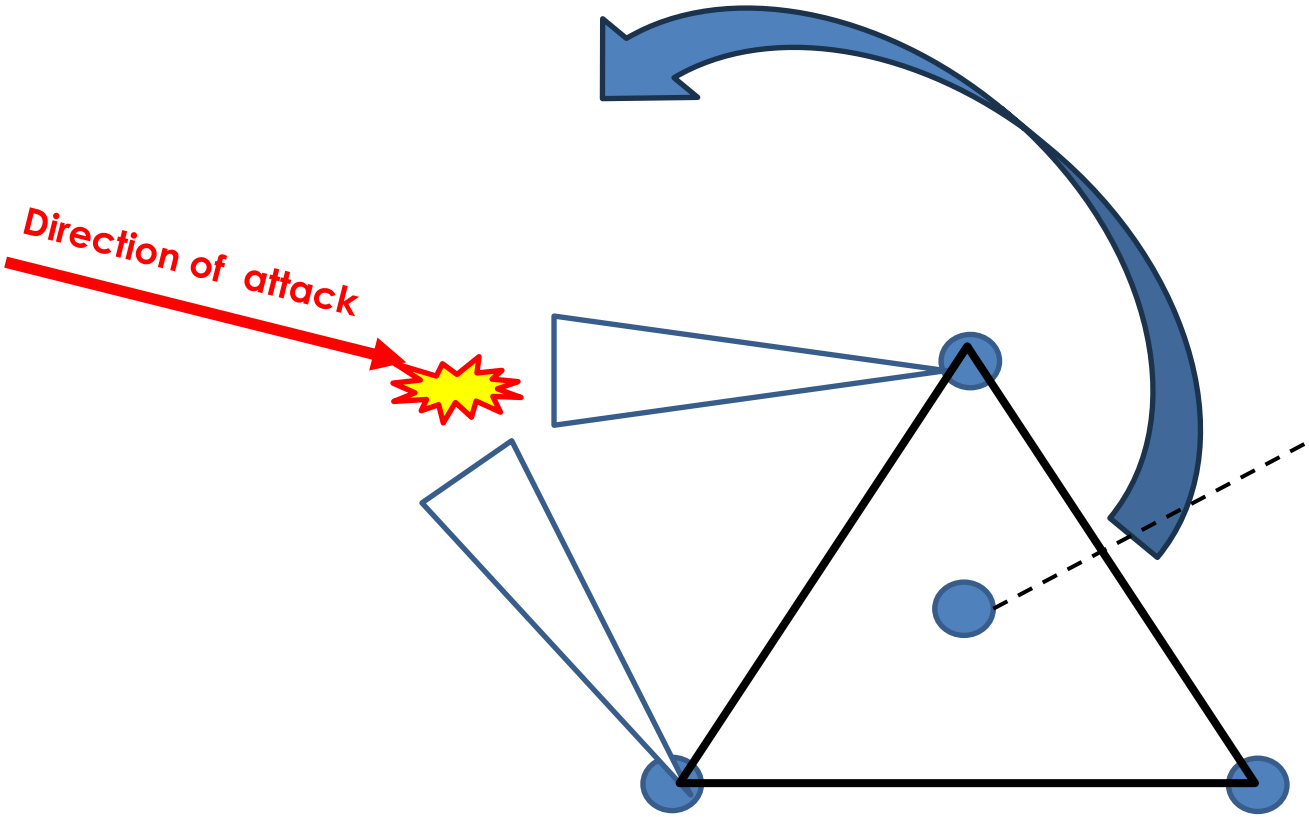
Principles of Defence

Mutual Support



Principles of Defence

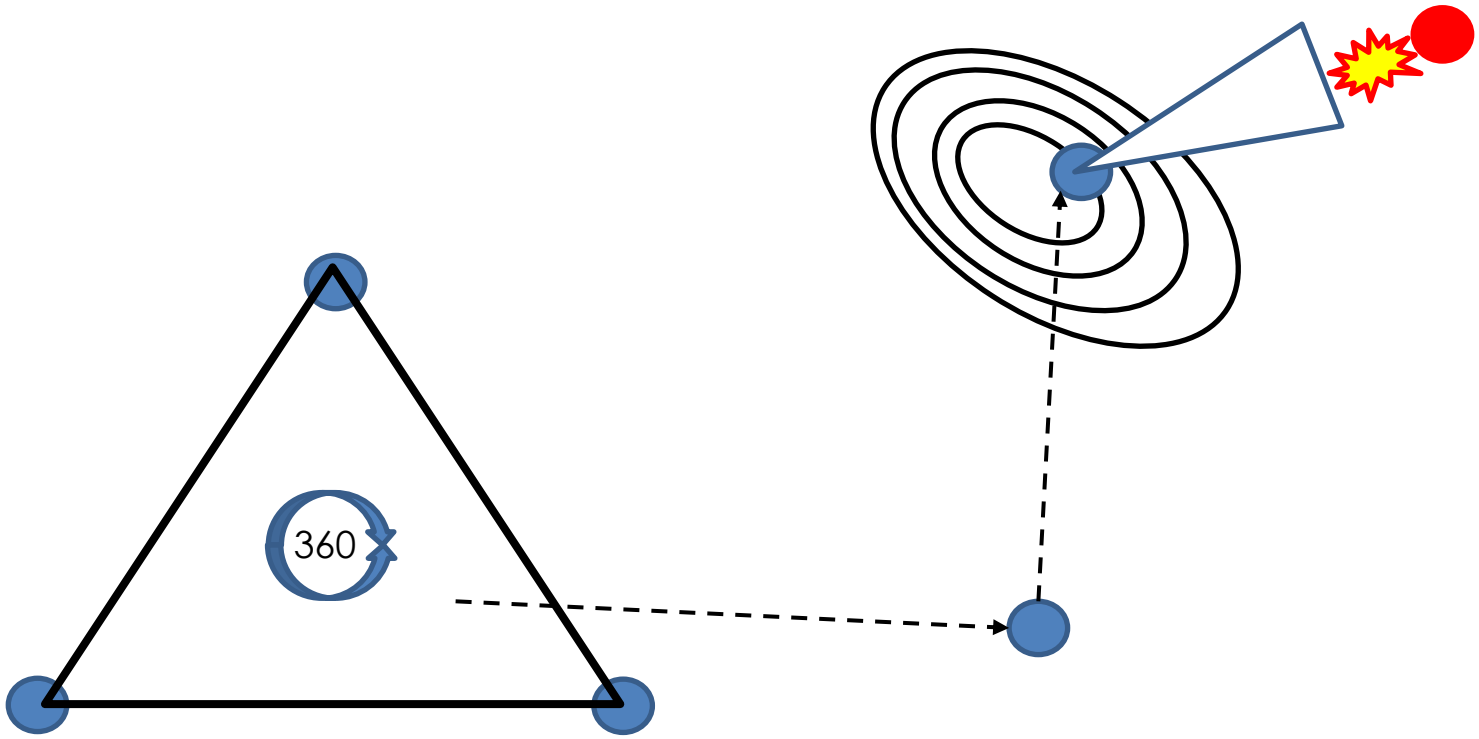
Reserves



Reserve forces can be committed at the commanders digression

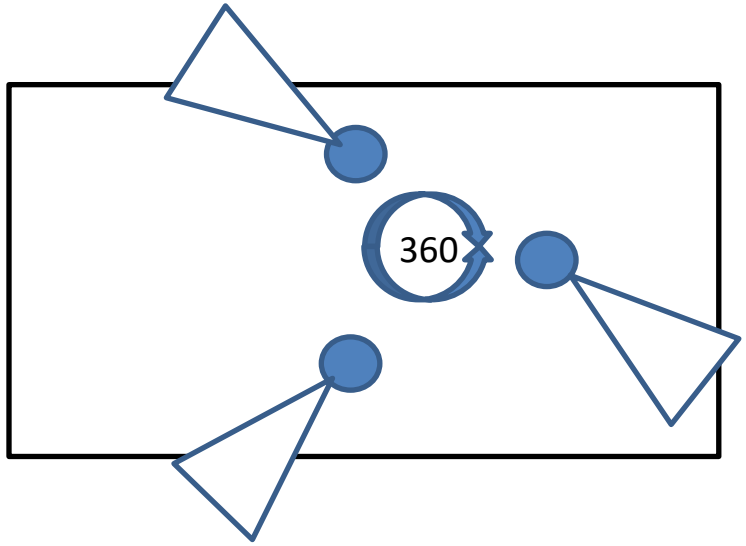
Principles of Defence

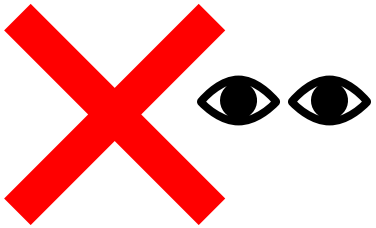
Offensive Spirit



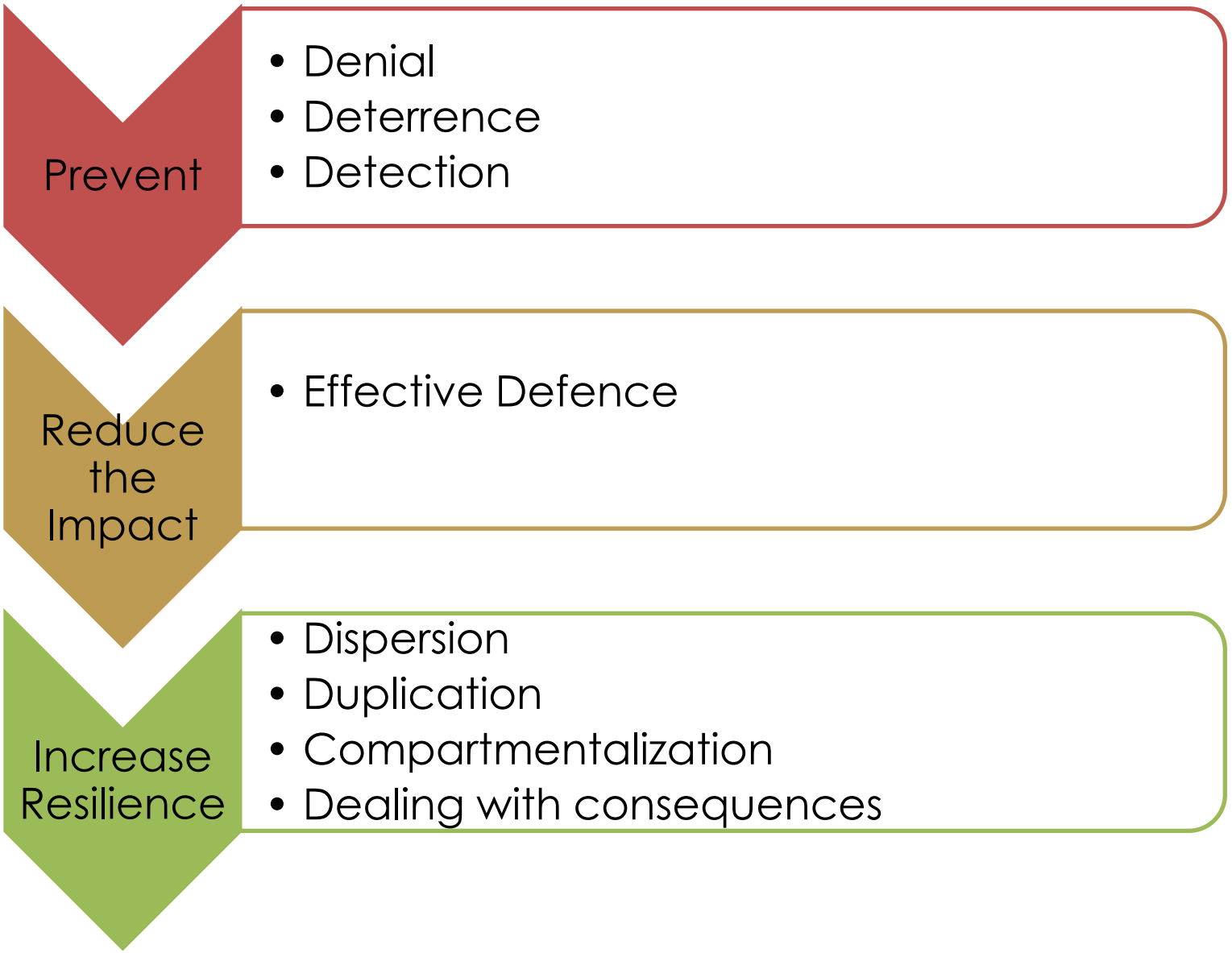
Principles of Defence

Deception

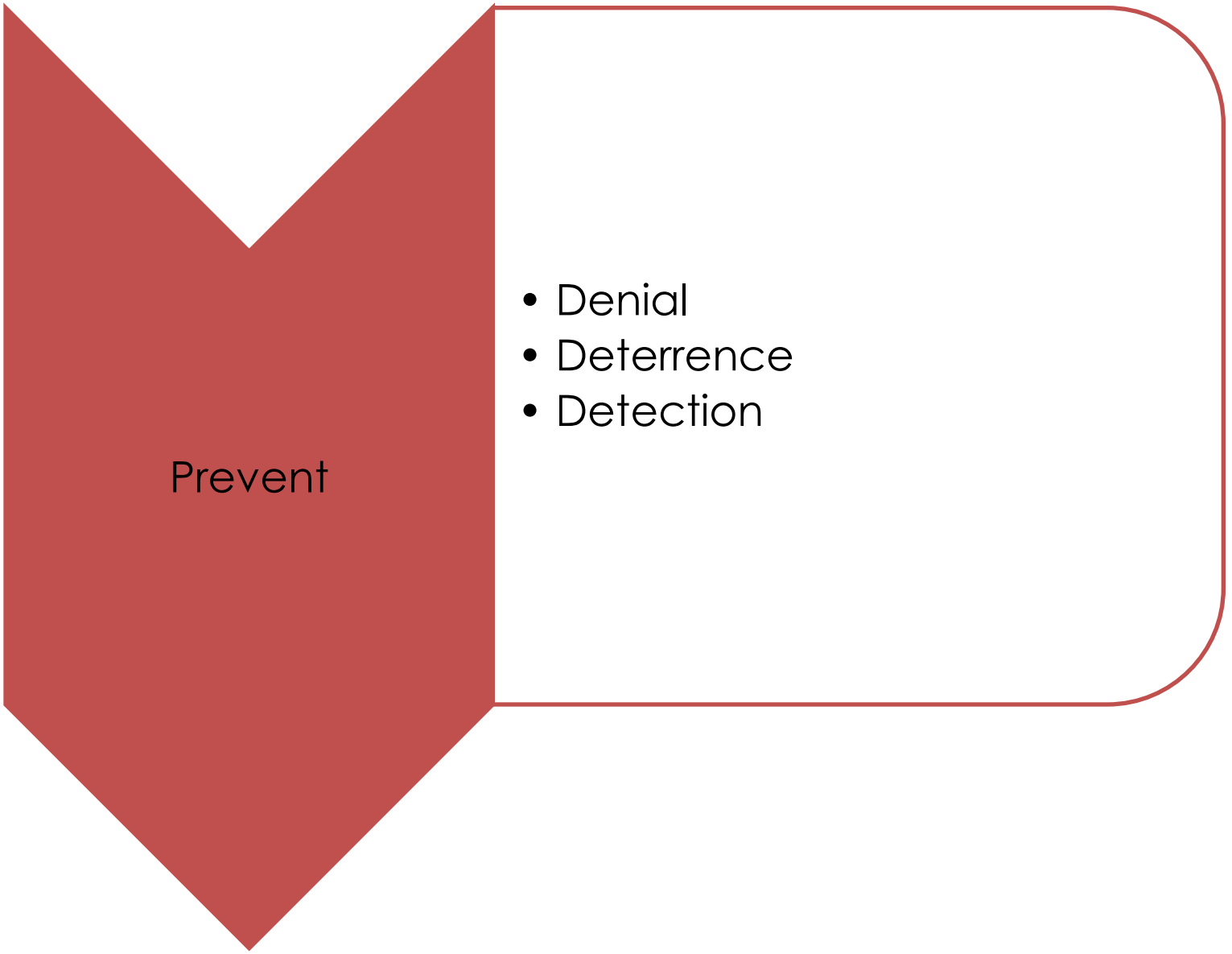




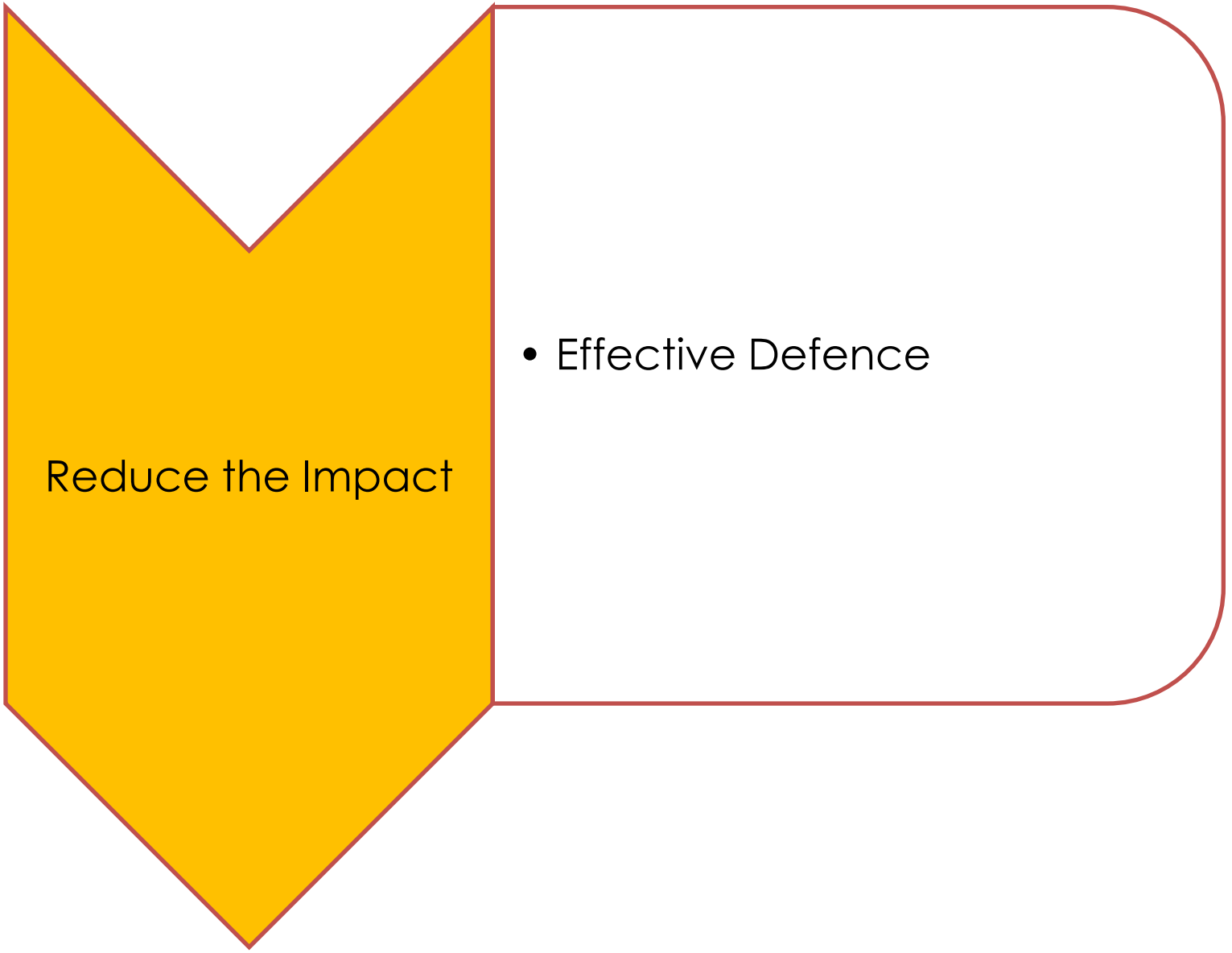
Principles of Defence



Principles of Defence



Principles of Defence



Principles of Defence

2.7.2 Forward Operating Base Design

FOB Design

Likely Types of Attacks

- Direct Fire
- Hand thrown weapons e.g. grenades
- Indirect Fire
- IED attacks e.g. PBIED, VBIED
- Complex attack- use of more than one method of attack

Big vs Small?

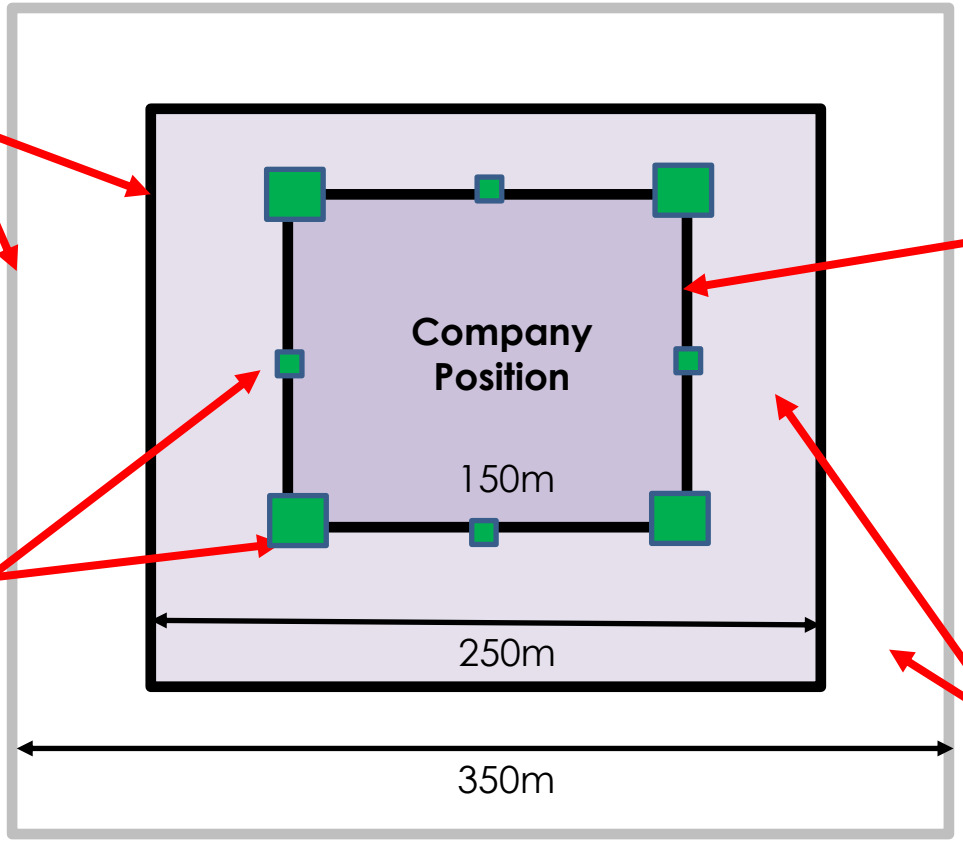
FOB Design

Basic FOB Layout

Obstacles:

Double Concertina Razor Wire

Anti Vehicle Ditch



Bullet proof barrier:

Sandbags, Hesco or 2m Berm

Fire Positions:

Sangar

Trenches

Sandbag fire positions.

Fields of fire:

Area Cleared of all foliage and trees.

Dead ground identified and denied.

FOB Design

While setting up or improving a FOB, consider the following :

- **Perimeter** – what fencing material to be used ?
- **Accommodation** – Locating accommodation and material to be used e.g. tents, ponchos etc.
- **Defensive Positions** – Trenches and Fire positions.
- **Fields of View** – Clearing your arcs and securing dead ground.
- **Security** – Patrols, sentry positions and entry & exit points.

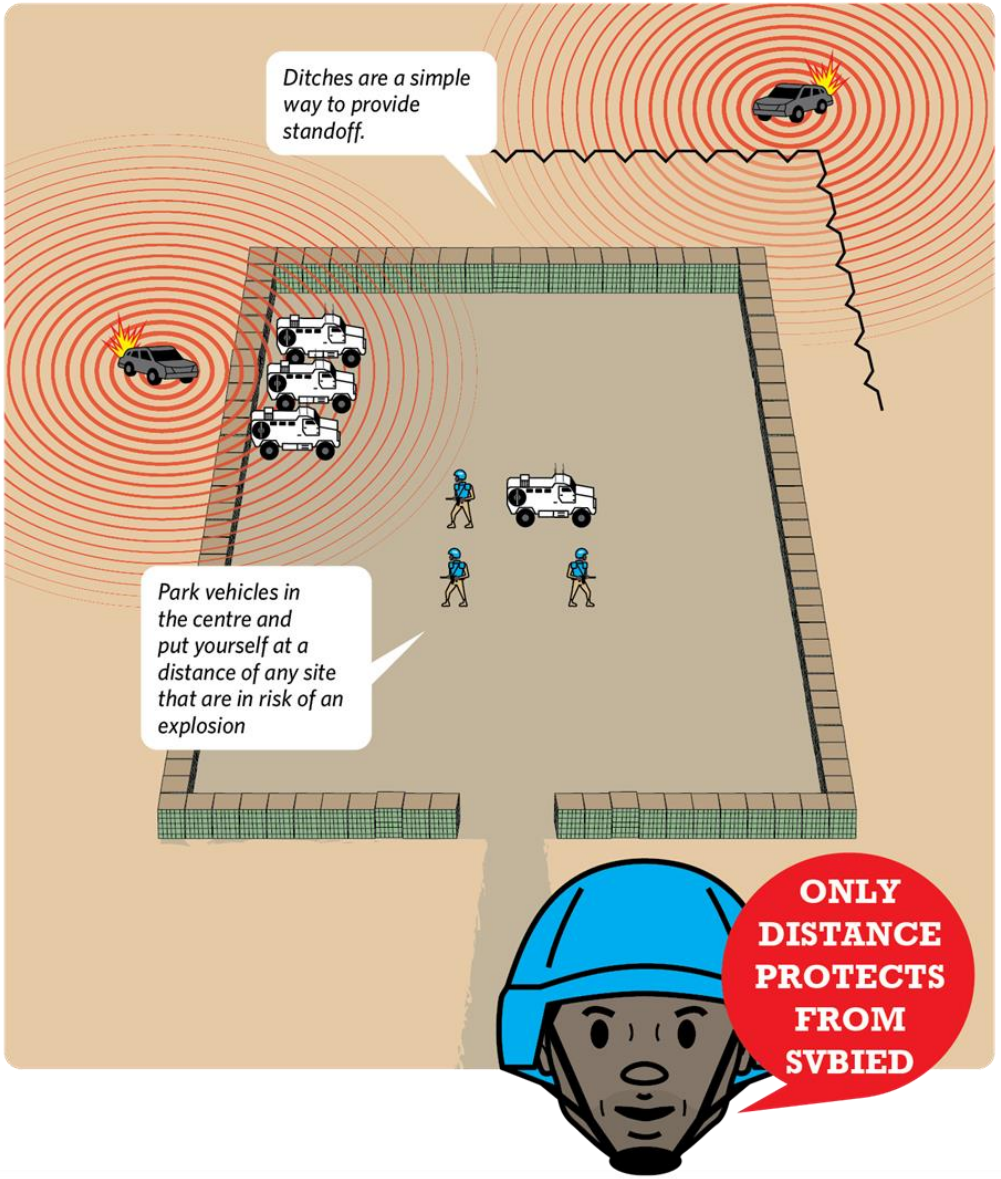
FOB Design

Perimeter

FOB Wall – HESCO, Sandbag, Berm?

Anti-vehicle – Ditch, barrier

Anti-personnel – Razor wire or fence.

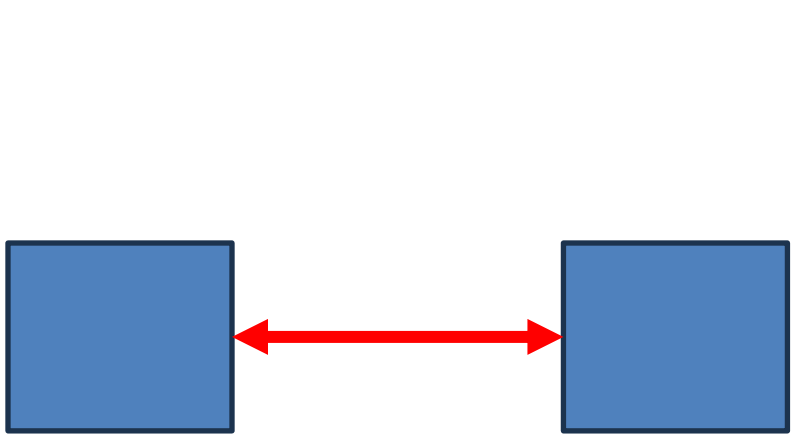


FOB Design

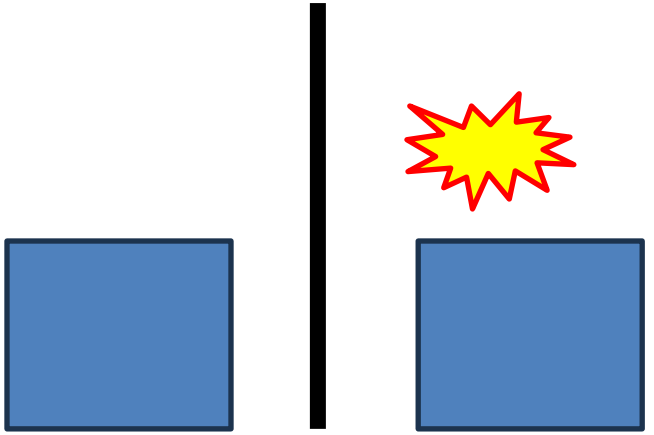
Accommodation

Technical accommodation, HQs or sleeping and eating areas.

- Dispersion
- Compartmentalization



Dispersion



Compartmentalization

FOB Design

Defensive Positions

Consideration needs to be made for where our defensive positions are sited and how they are constructed.

- Sentry Positions
- Trenches or individual fire positions

FOB Design

Defensive Positions – Sentry/Sangars

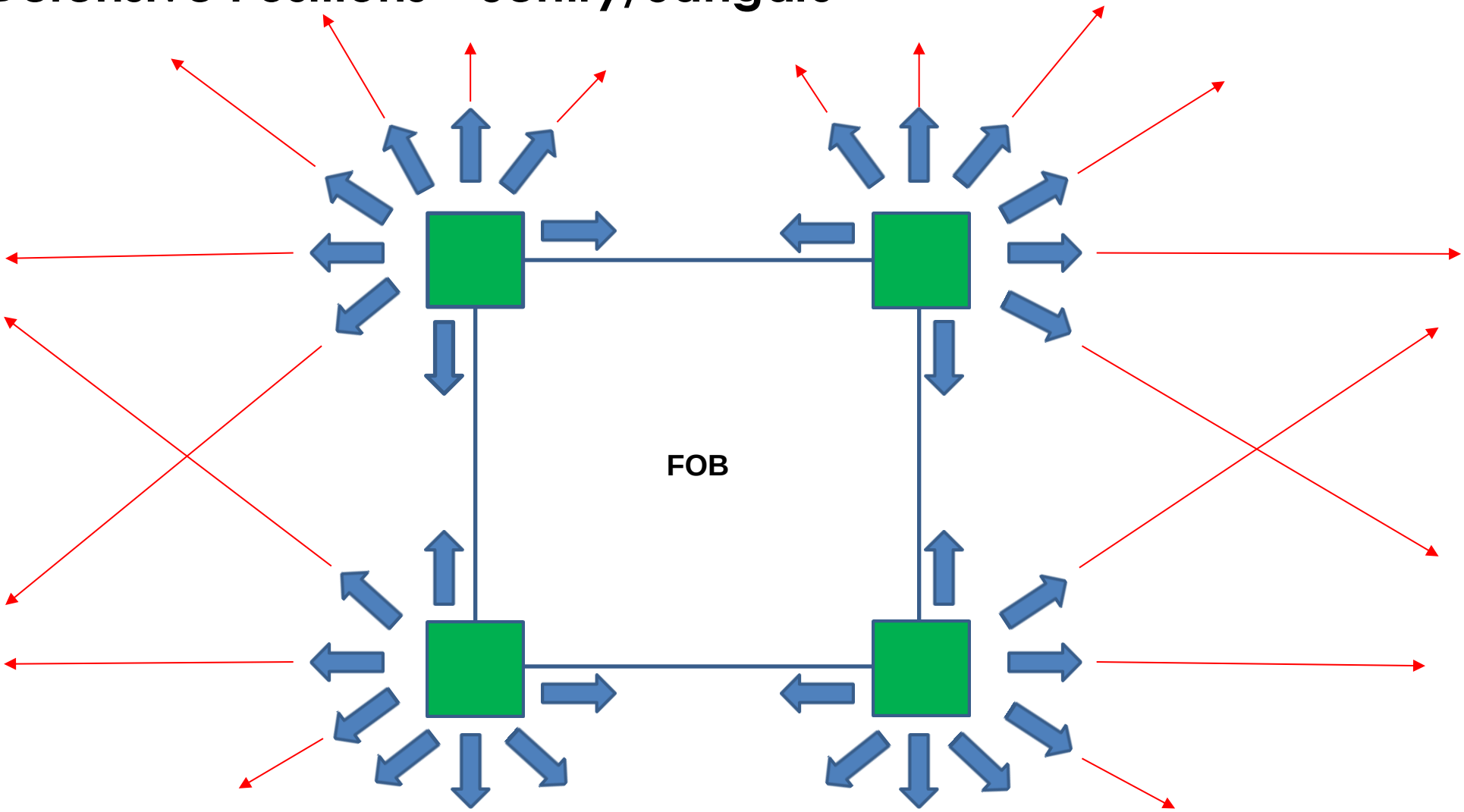
- Interlocking arcs or fire (mutually supporting).
- Construction.
- Elevation.
- Range cards.

FOB Design

Defensive Positions – Sentry/Sangars

FOB Design

Defensive Positions – Sentry/Sangars



FOB Design

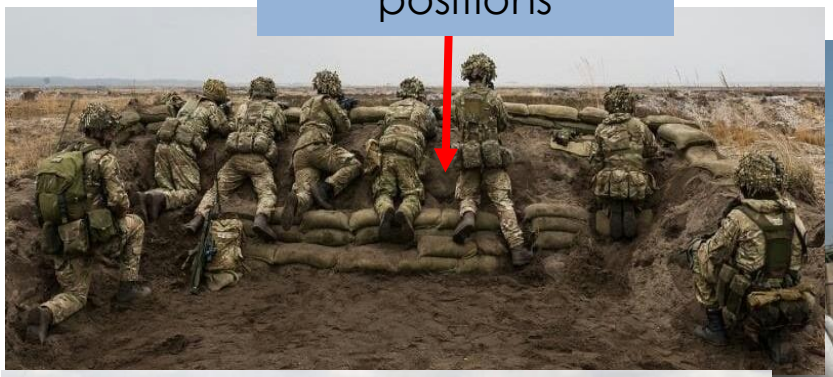
Defensive Positions – Fire positions and Tenches

- Trenches are positioned between sangar positions, this allows resupply and communications to take place under cover, during a fire fight.

- Extra trenches can be constructed further back into the FOB to give depth positions.

- Subsequent fire positions are to be placed between sangars for dismounts and vehicle platforms. These can be sandbag fire positions, tank scrapes or vehicle ramps.

fire position to construct between sangar positions



Use the natural step of the HESCO configuration for fire positions.

Reveted trenches to be used for comms and resupply between sangars and fire positions

Fire positions built into the bund

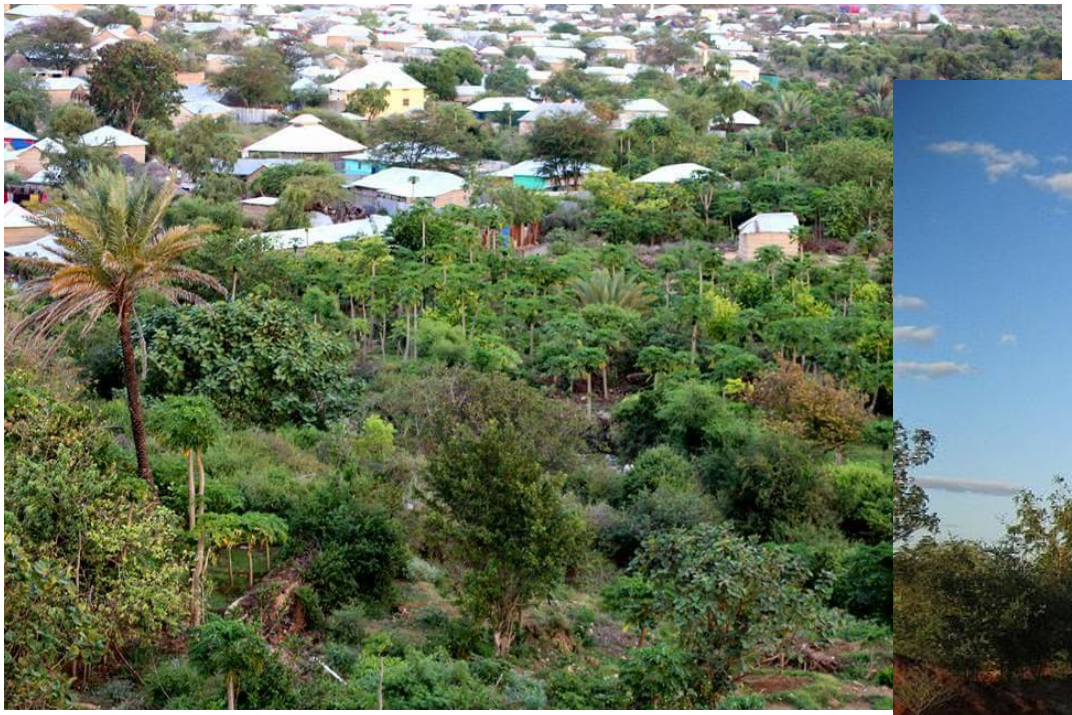
FOB Design

Fields of View

- Clear fields of fire are needed to enhance sentry positions and fire positions.
- Trees, hedge rows, bushes, grass and in some cases buildings must be removed to open up your fields of view.
- Dead ground must be marked and denied using obstacles. This prevents the hostile elements gaining the advantage.

FOB Design

Fields of View



Field of View from your sangar, what should you do?

FOB Design

Security

- Security plan should be robust, well planned, rehearsed and regularly monitored.
- Adapt the plan with changing threat.
- Inspections should be carried out regularly.
- Maintain an offensive spirit.

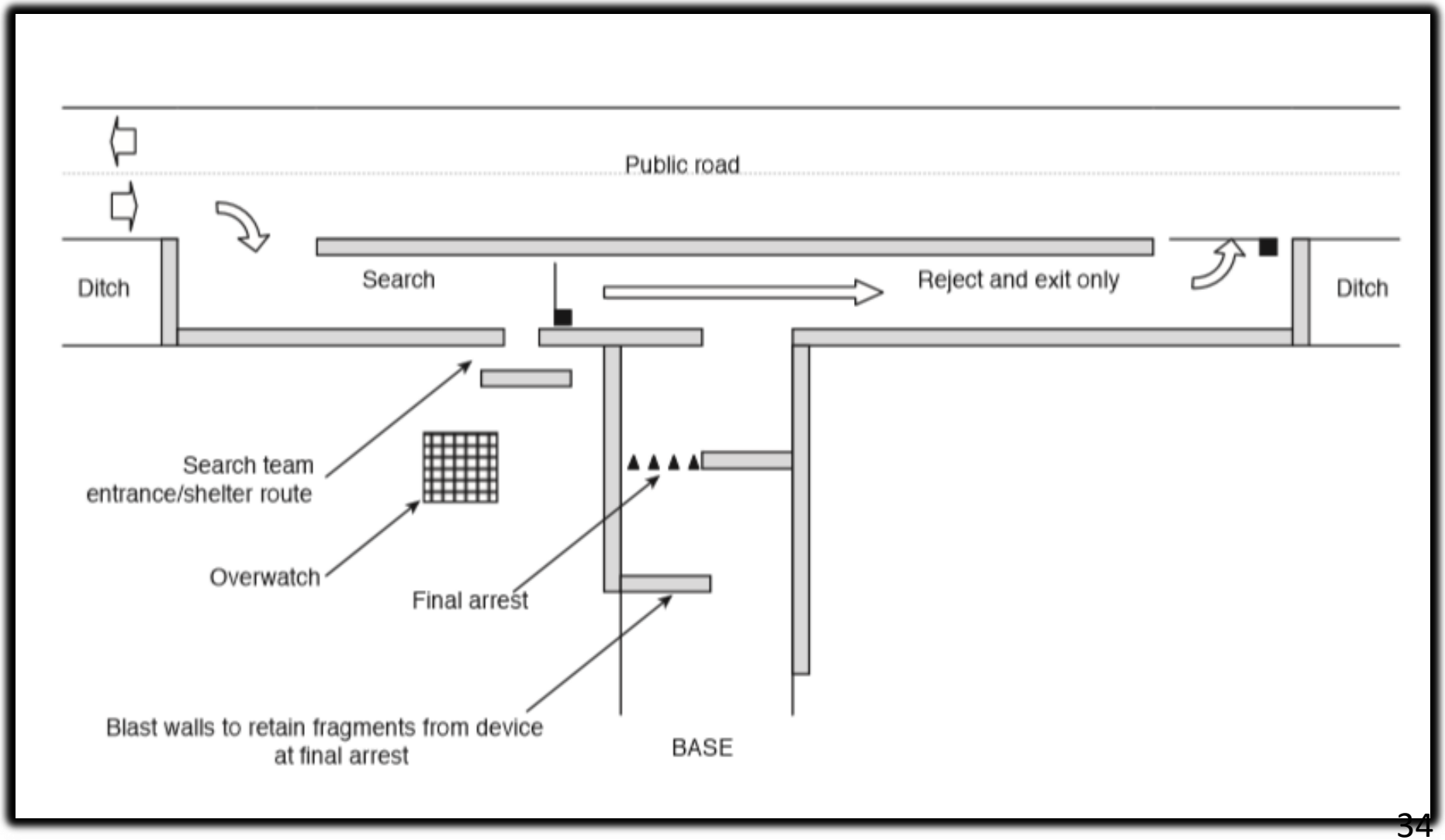
FOB Design

Security – Main Entry Point/Entry Control Point

- The MEP is highly susceptible to VBIED attacks.
- Correct design, security and searching will prevent hostile elements from gaining entry into the FOB.
- Security measures at the entry point .
- Security forces at the MEP are to be vigilant, professional, thorough and not to set patterns.

FOB Design

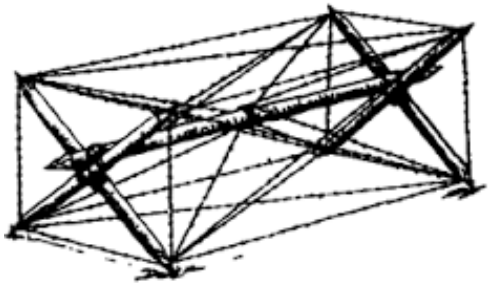
Security – Main Entry Point/Entry Control Point



FOB Design

Security – Main Entry Point/Entry Control Point

Simple nail board placed across the road



Knife rest constructed with pickets or timber, wrapped in barbed wire

Natural road block using local fill

Oil drums or used tyres filled with concrete

Metal spike boards and tyres to channel and slow vehicles down

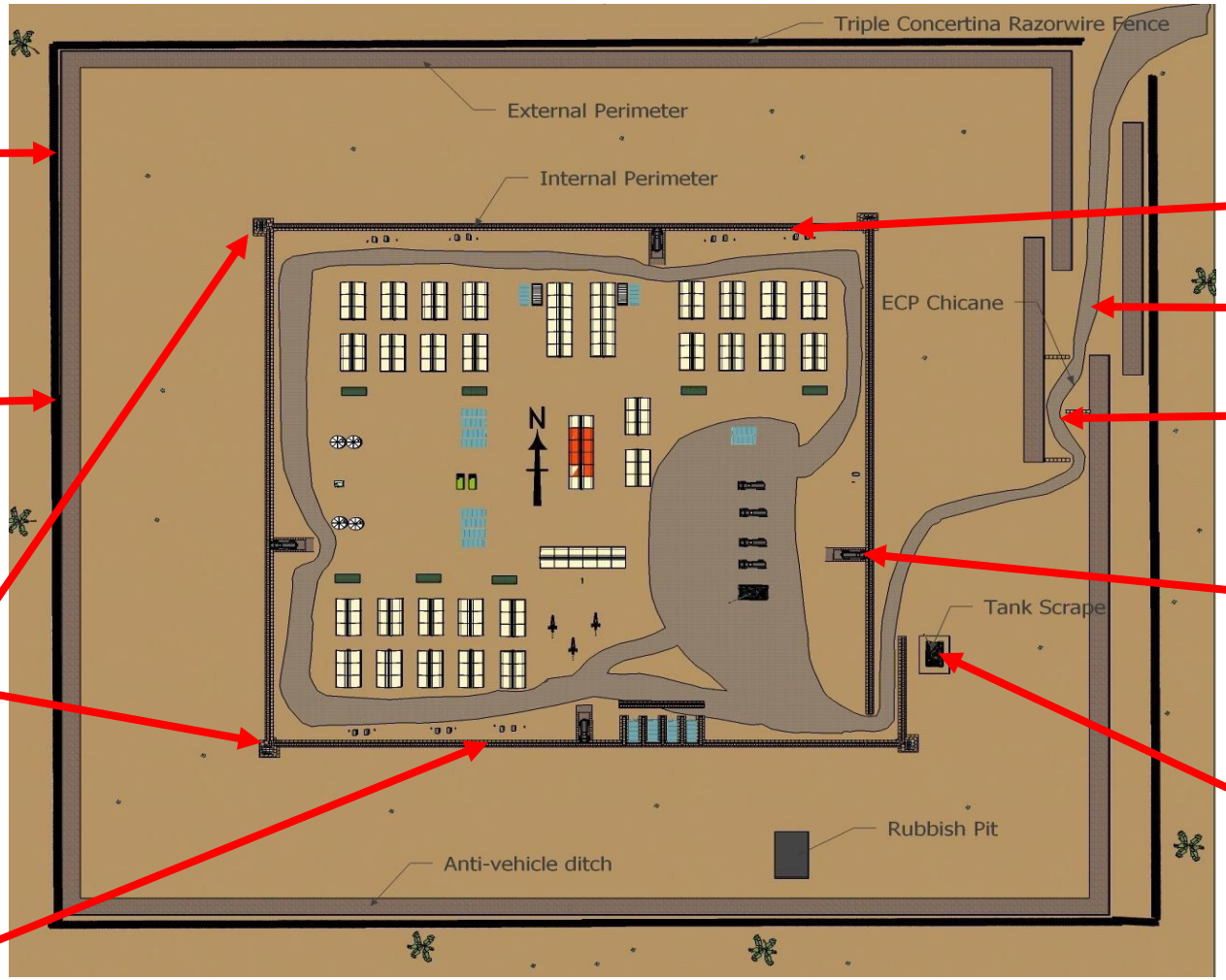
FOB Design

Security – Main Entry Point/Entry Control Point

A simple Entry Point on the approach to FOB

Entry Point of FOB

FULL EXAMPLE OF A WELL-DESIGNED FOB



Triple Concertina Razor Wire

Anti Vehicle Ditch

Sangars on every corner with interlocking arcs

HESCO or Wire perimeter. Think cover from view screens if wire

Extra sentry positions

MEP

Chicane

Vehicle Platforms

Secondary entry point with barrier

Questions?

UNMAS

2.7.3 Surveillance and Target Acquisition Plan (STAP)

STAP

Introduction

- Surveillance - The systematic observation of an area. This includes by a person or through other means and includes by visual, audio or other electromagnetic means

- Target Acquisition - The detection, identification and location of a target to enable the employment of kinetic or non-kinetic effect.

This is a conventional military skill that can be employed to reduce the threat of direct attacks and IEDs while operating from an FOB.

STAP

Developing a STAP

An effective STAP requires a STAP estimate:

1. Conduct an assessment of your operating environment.

2. Determine where you need to focus your surveillance.

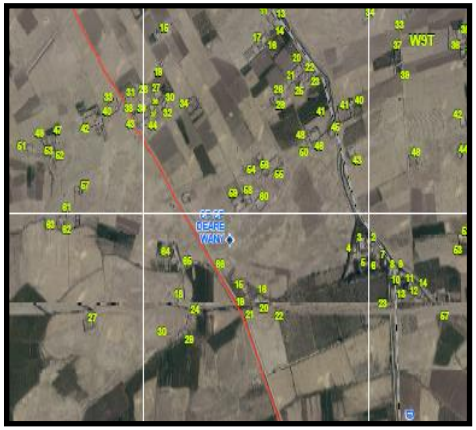
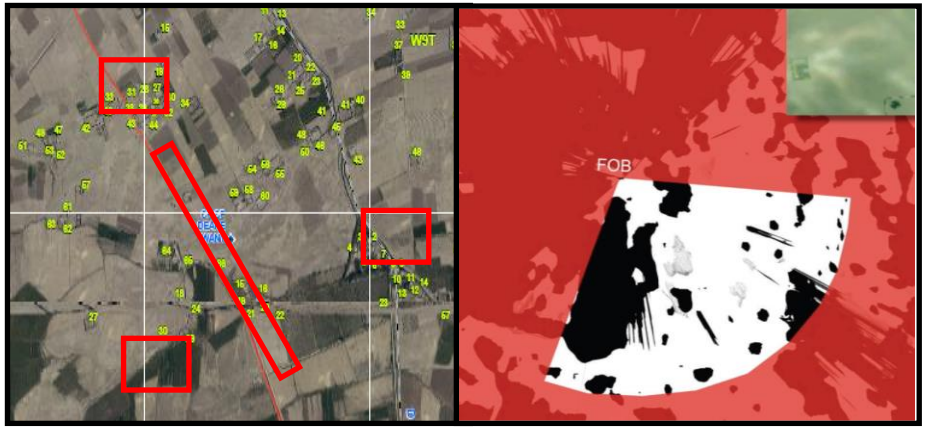
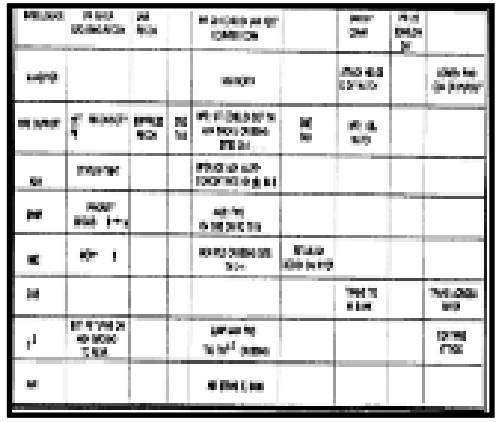
3. Allocate resources to look at the areas that require surveillance.

4. Review and update (day, night, low vis etc)

STAP

Developing a STAP

Stage 4 **Review and Update**

Stage 1	Stage 2	Stage 3
		
Where should I look? What am I looking for?	Where do I want to have an effect? Where can I/ can't I see?	How shall I resource it? What are my priorities?

STAP

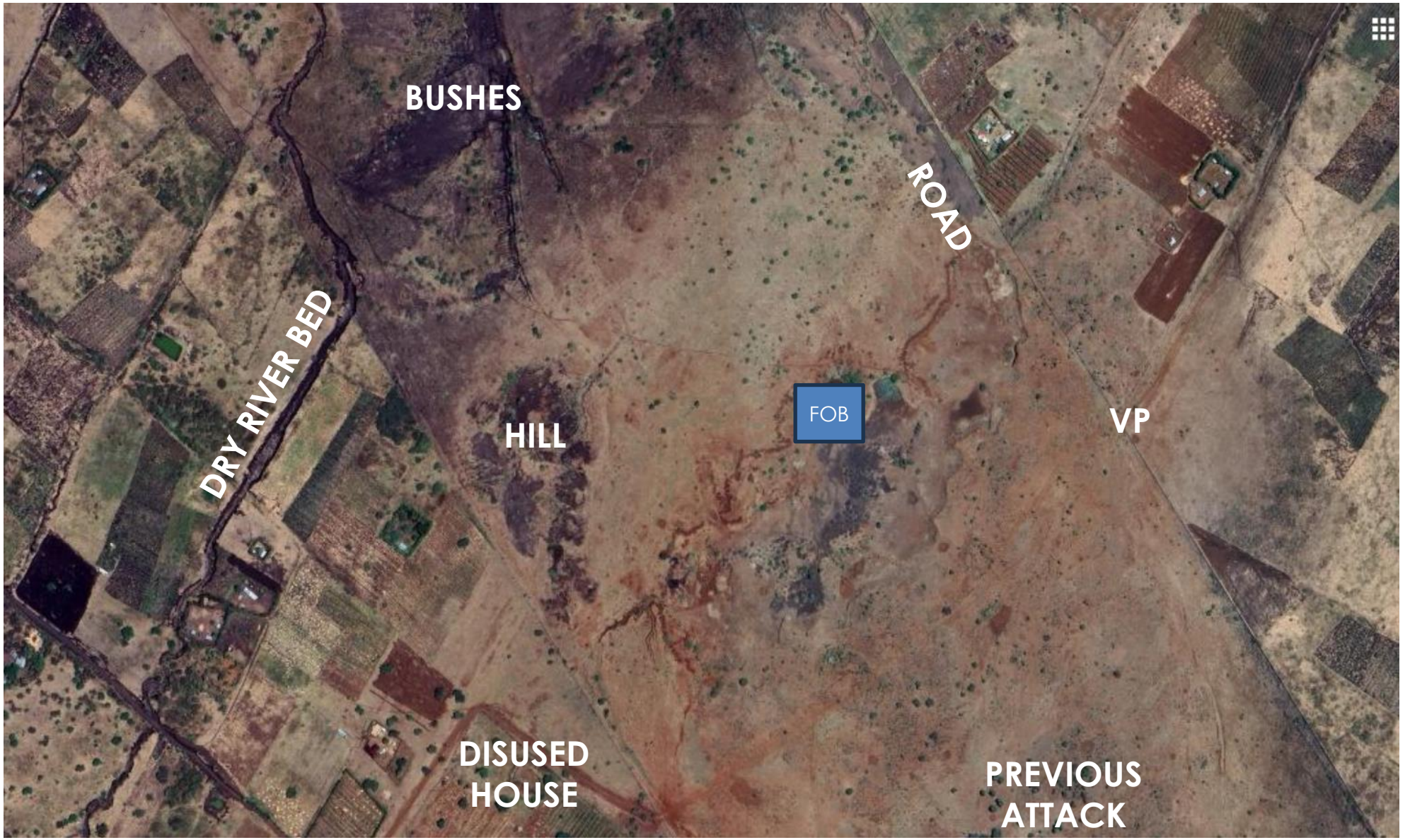
Stage 1 – Assess the Environment

Considerations.

- Terrain.
- Pattern of life
- Building of interest
- Roads/Routes
- VPs & Vas
- Dead ground
- Previous firing points

STAP

Stage 1 – Assess the Environment



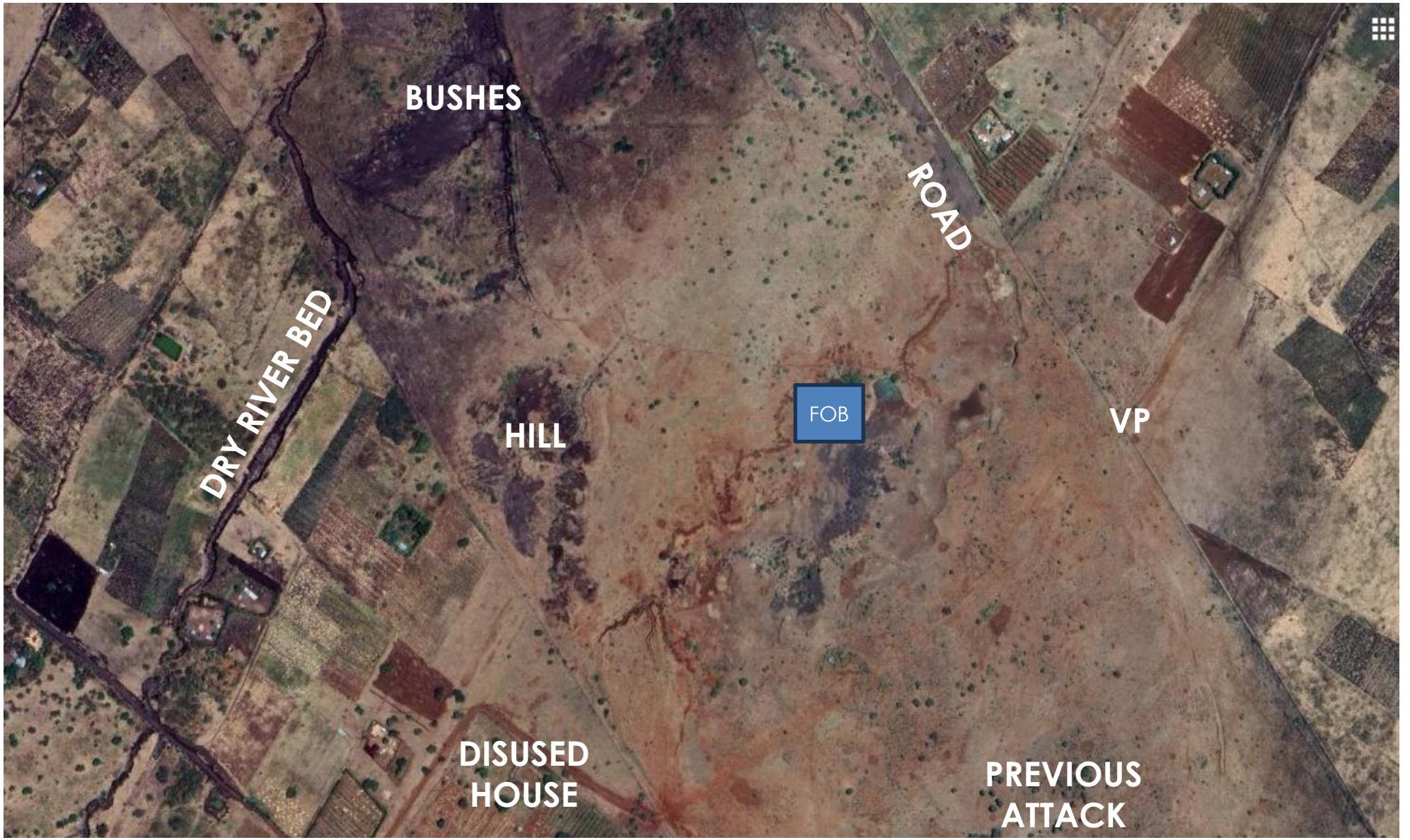
STAP

Stage 2 – Determine Where to Look

- Determining where to focus surveillance assets – we can't look everywhere!
- Designate areas of interest (AOIs/NAIs).
- Conduct intervisibility study.

STAP

Stage 2 – Determine Where to Look

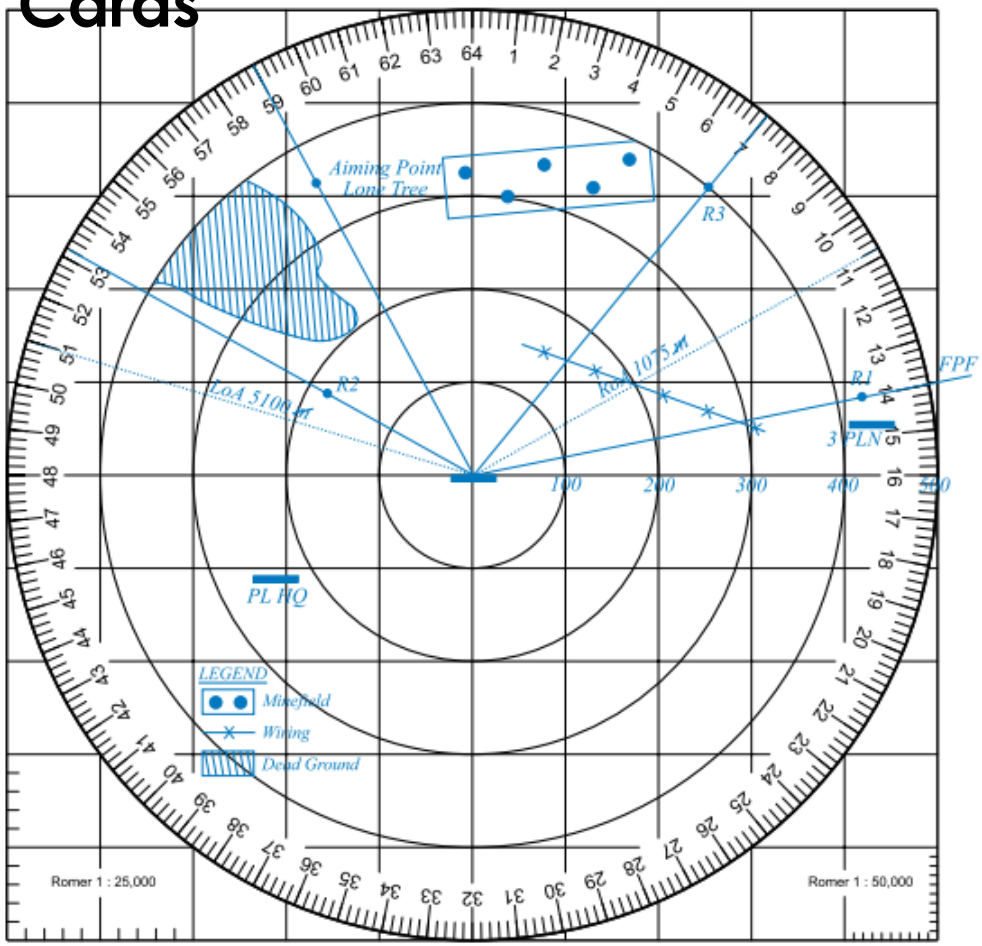


STAP

Stage 2 – Determine Where to Look

STAP

Intervisibility Study – Using Range Cards

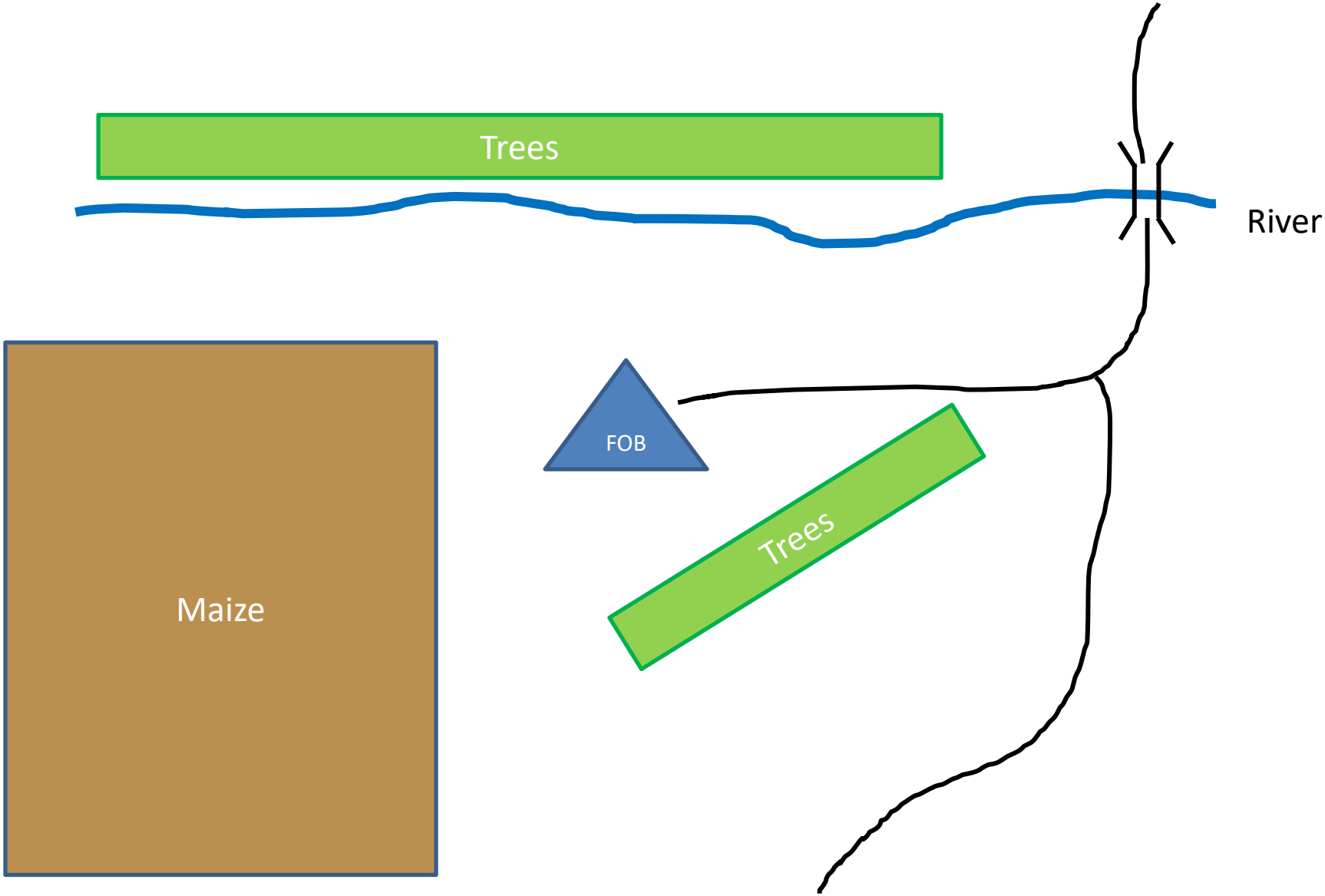


Range Card

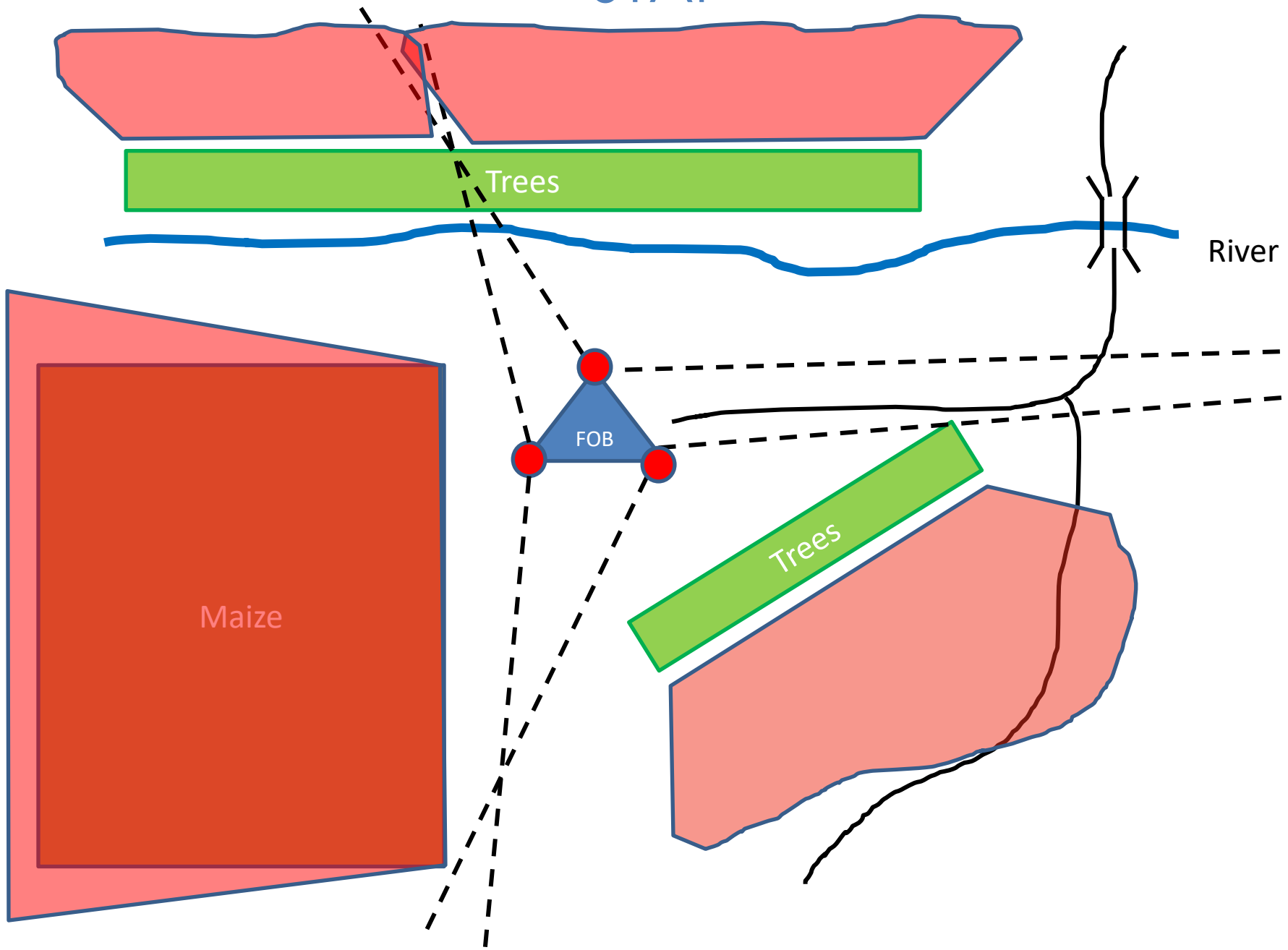
No	Grid ref	Bearing ø/	Tgt description or DF No	Range m	Line switch ø/	A of
1	437885	1400	UM 1010(FPF)	440		
2	437814	5320	Farm House	175		
3	434829	700	Corner of wood	400		
4	434829	4260	PL HQ Trench	200		
5						
6						
7						
8						
9						

Description Lone Tree
Range 350 m
Made out by 2 Sect Comd
Date 10 Jan 01
Map sheet SPTA(W)
Scale 1:50,000

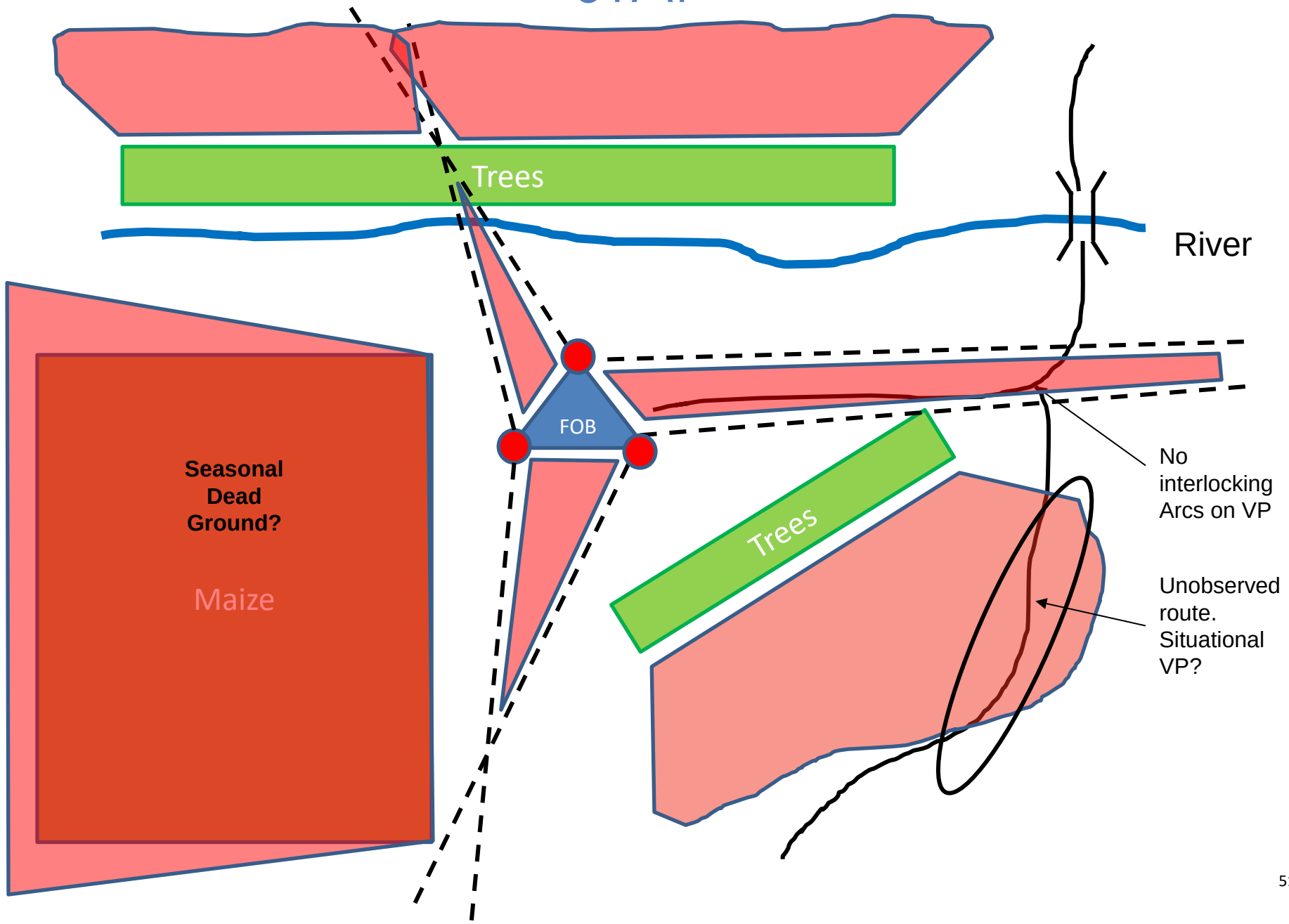
STAP



STAP

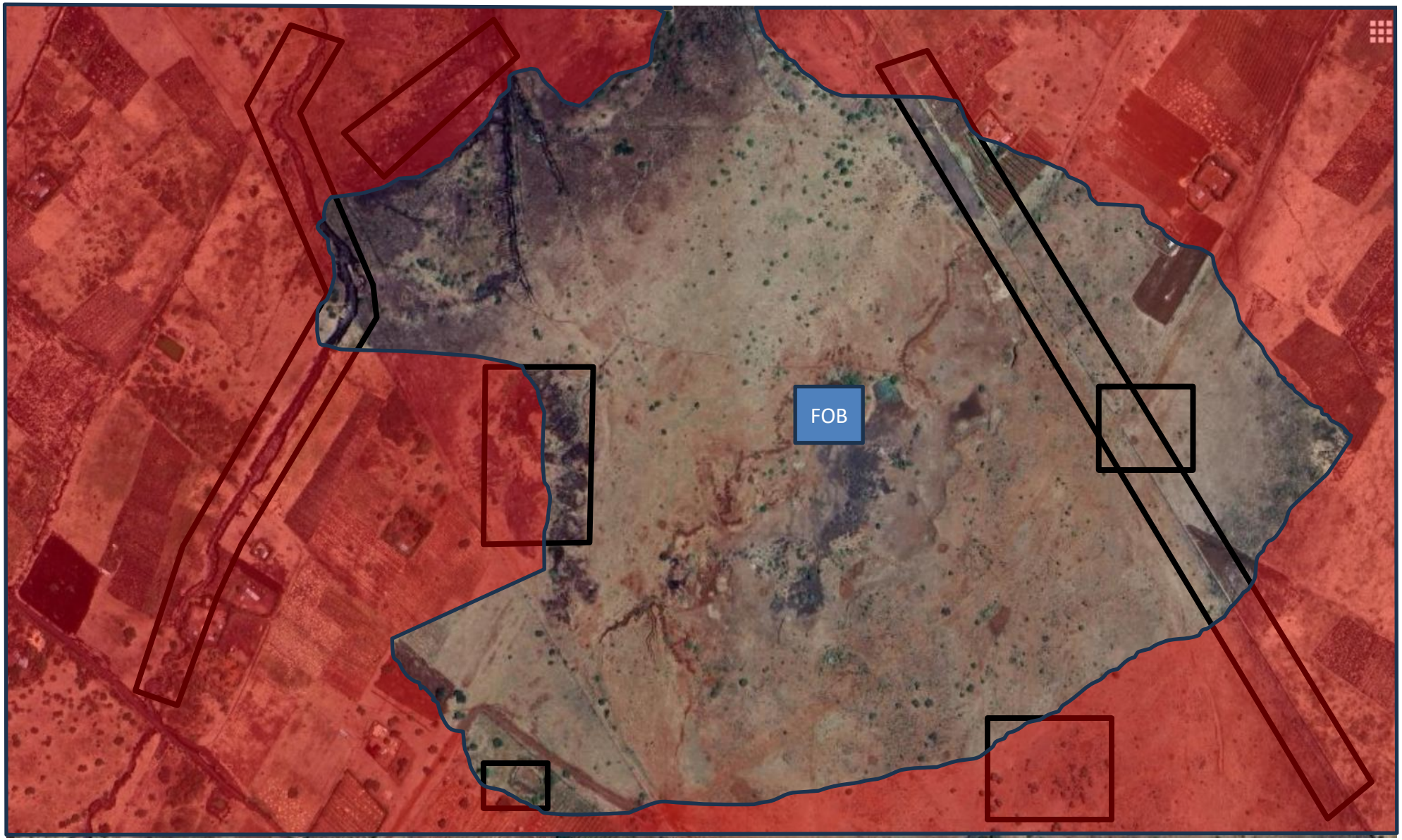


STAP


Trees
River
FOB
Seasonal
Dead
Ground?
Maize
Trees
No
interlocking
Arcs on VP
Unobserved
route.
Situational
VP?

STAP

Stage 2 – Determine Where to Look



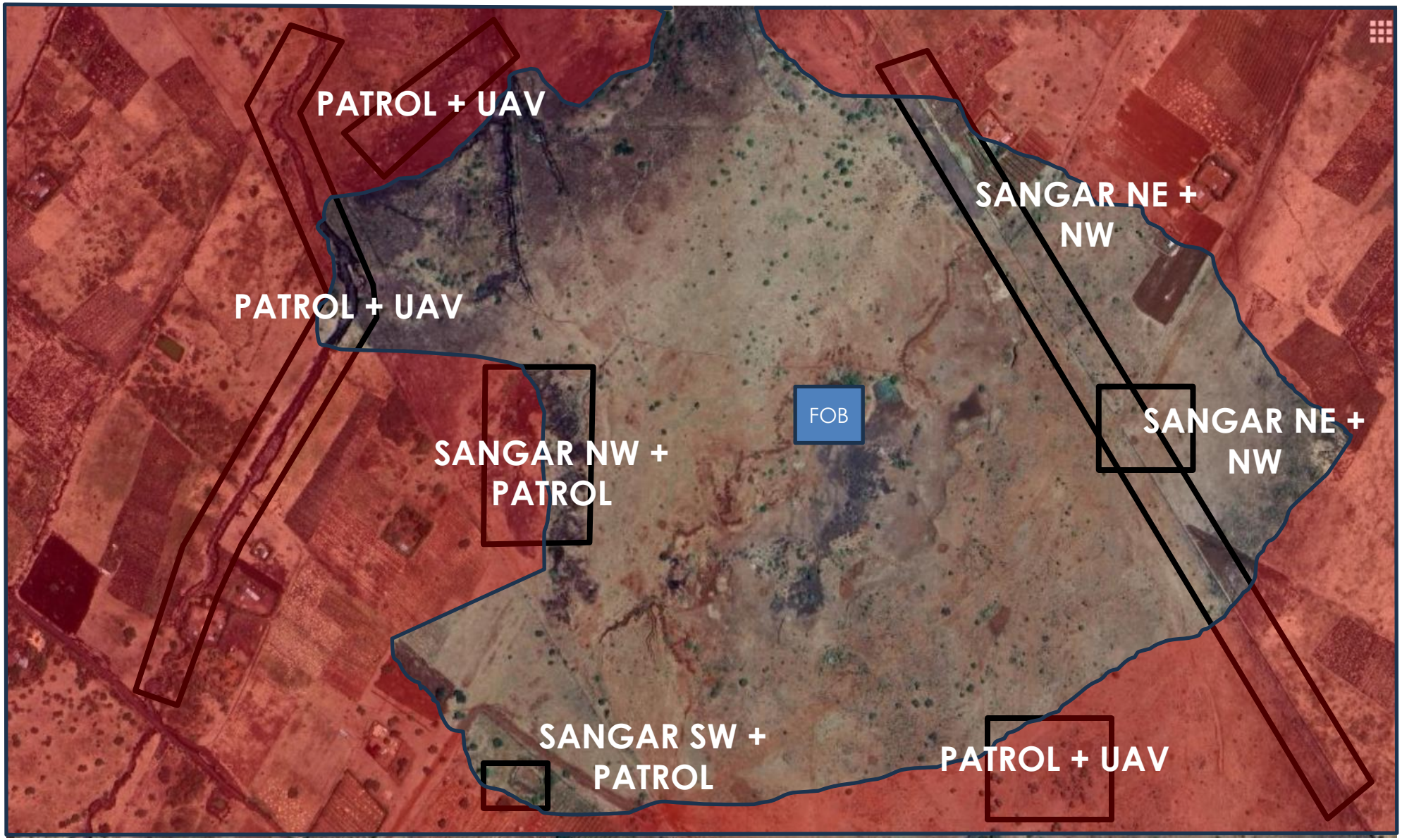
STAP

Stage 3 – Allocating Resources

- What resources do we have?
  - Sentry positions (sangars, guard towers)
  - Patrols
  - Cameras
  - UAS/UAV
  - Higher formation assets
  - Neighbouring FOB
- Apply the resource/asset to the area of interest.
- Remember the resource capability need to suit the task.
- Identify gaps and take action
  - Bid for additional resources
  - Move assets
  - Elevate sentry positions
  - Remove vegetation or obstructions

STAP

Stage 3 – Allocating Resources



STAP

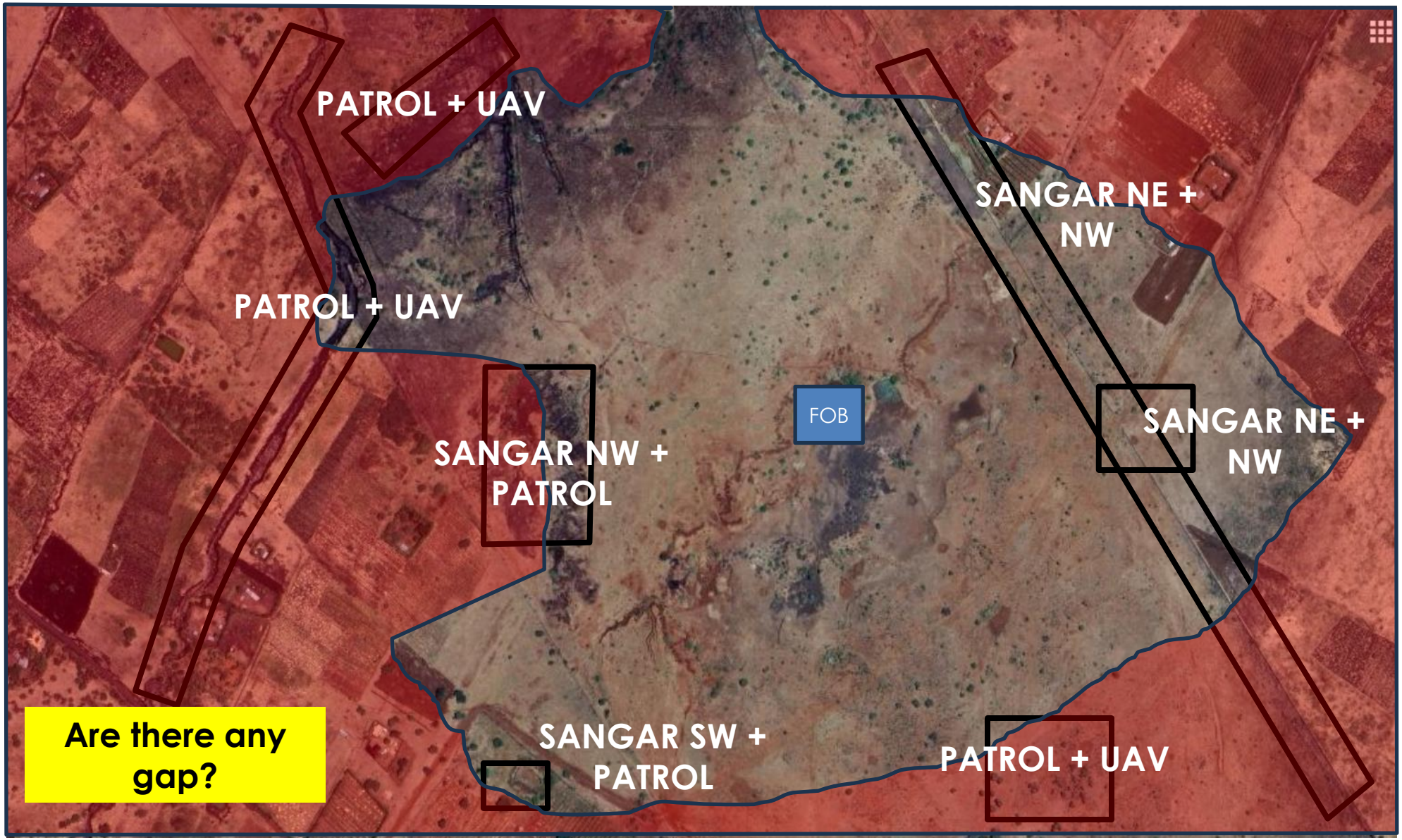
Stage 3 – Allocating Resources

Using a matrix can help with allocating assets/resources as well as managing the STAP

Ser	AOI	Location	Description	Asset	Priority
1	001	Grid reference	Road	Pri – Sangar NE Sec – Sanger SE	3
2	002	…	VP	Pri – Sangar SE Sec – Sangar SE	4
3	003	…	Previous attack	Pri – Patrols Sec – UAV	5
4	003	…	Disused house	Pri – Sangar SW Sec – Patrols	6
5	005	…	Hill	Pri – Sangar NW Sec – Patrols	1
6	006	…	Dry river bed	Pri – Patrols Sec - UAV	2
7	007	…	Bushes	Pri – UAV Sec - Patrols	7

STAP

Stage 3 – Allocating Resources



STAP

Stage 4 – Review and Update

- Implement the plan.
- Make changes based on changes based on the situation.

Questions?

UNMAS