

Tabletop Exercise

INTRODUCTION

- Definition
 - Analysis Tool
 - Rapid/High level Assessment
 - Physical Protection Systems
 - » Detection
 - » Delay
 - » Response
 - Cost Effective
 - Scalable
 - Results Oriented

ROLES & RESPONSIBILITIES

- Blue Team
 - Response force
- Red Team
 - Opposing Force
- Green Team
 - Referees
- Facilitator
 - Facilitates Exercise
 - Adjudicates with input from Green team
- Recorder/Scribe
 - Annotates Movements

PREPARATION

–Opposing Forces Plan

- Define Threat

- Numbers

- » Upper limit
 - » Lower limit
 - » Insider

- Capabilities

- » Transportation
 - » Weapons
 - » Explosives

- Motivation

- » Theft
 - » Sabotage

ASSUMPTIONS

- Response Force configuration
- Rules of Engagement
 - Agreed on by:
 - Red Team
 - Blue Team
 - Green team
 - Specific in Scope
 - Numbers of forces
 - Pre-Positioning forces
 - Equipment accessibility
 - Time of day
- Adversary task times

Bomb Blast Injury Data Example

Explosive effects of
1000 Pound Bomb on hard surface

Distance	
	100% Killed or Disabled (KOD)
	% KOD % Suppressed for xx seconds
	% KOD % Suppressed for xx seconds
	% KOD % Suppressed for xx seconds
	% Suppressed for xx seconds

EQUIPMENT

- Maps/Models
 - Types
 - Scales
- White Boards/Flip Charts
 - Track key events
- Player Tracking
 - Dry erase markers
 - Game pieces
 - Post-it notes
 - Wood/Tags
 - Computer icons
- PH/PK Calculation Tool
 - Tables
 - Dice
- Computers & Projectors
 - Screen
 - 3D Capability

SIMULATION

- Facilitator
 - Directs Blue Team to Layout Positions
 - Personnel
 - Vehicles
 - Red Team positions according to scenario
 - Personnel
 - Vehicles
 - Facilitator
 - Establishes time increment based on level of activity
 - Tracks movement and activities of players

SIMULATION

- Facilitator directs scribe to:
 - Note element movements
 - Potential engagements
 - Annotate on white board/computer
- Facilitator ensures:
 - Interactions and engagements are validated
- Facilitator does not:
 - Advise on activities or tactics
 - Evaluate tactics

SIMULATION

- Green Team
 - Examines each engagement and determines:
 - Engagement feasibility
 - Line of sight between players
 - Within range of weapon system
 - Run PH/PK calculations and declare results
 - Personnel casualties
 - Personnel suppressed
 - Vehicle casualties

SIMULATION

- Facilitator
 - Recaps actions and engagements
 - Describes what each element would have seen
 - Establishes the next slice of time
 - Asks Red Team for intentions during next slice
 - Explains what each Blue Team element is experiencing
 - Asks for Blue Team actions or reactions
- Simulation continues until Green Team feels the objective has been achieved

EXAMPLE EXERCISE PARAMETERS AND PROCESS

EXAMPLE MOVEMENT RATES

	10 Seconds		30 Seconds		60 Seconds	
	Personnel	Vehicle	Personnel	Vehicle	Personnel	Vehicle
Slow	7 m 2 kph <i>(crawling or crouch)</i>	27m 10 kph	20m 2 kph <i>(crawling or crouch)</i>	80m 10 kph	40m 2 kph <i>(crawling or crouch)</i>	160m 10 kph
Medium	13m 5 kph <i>(walking or team B/O)</i>	133m 48 kph	40m 5 kph <i>(walking or team B/O)</i>	400m 48 kph	80m 5 kph <i>(walking or team B/O)</i>	800m 48 kph
Fast	26m 10 kph <i>(running)</i>	266m 97 kph	80m 10kph <i>(running)</i>	800m 97 kph	160m 10 kph <i>(running)</i>	1600m 97 kph
Very Fast	n/a	400m 145 kph	n/a	1200m 145 kph	n/a	2400m 145 kph

EXAMPLE EXERCISE PARAMETERS

Step 1	Find base PH by cross-referencing weapon type and range to target (rounds down range)
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Weapons PH table

Weapon Type	RANGE ->	10m	20m	30m	40m	50m	60m	70m	Max eff
Rate of fire in 10 Seconds									
# rds. fired									
Pistol (9mm)	2	7	5	3	1	x	x	x	50m
Assault Rifle (9mm)	2	7	5	3	3	2	1	1	100m
Weapon Type	RANGE ->	100m	300m	500m	700m	900m	1100m	1300m	Max eff
Rate of fire in 10 sec.									
# rds. fired									
Assault Rifle (5.56)	2	7	5	3	1	x	x	x	600m
Light Machine Gun (5.56)	3	6	4	2	1	x	x	x	600m
Heavy Machine Gun (7.62)	3	6	4	2	2	1	1	x	1000m
Heavy Machine Gun (50 cal)	3	5	5	5	3	3	3	1	1800m
Sniper Rifle (7.62)	2	7	7	5	3	1	1	x	1000m
Sniper Rifle (50 cal)	1	7	7	5	3	3	3	1	1800m
RPG-7	1	6	3	1	x	x	x	x	500m
40 mm	1	6	3	x	x	x	x	x	350m
40 mm belted	3	6	4	4	3	3	2	2	1600m
Spotting only	n/a	5	3	1	0	0	0	0	0

Modify spotting PH +1 for target firing, +1 for target moving, +1 for large target, +1 for pos rep from friendly unit; all modifiers are cumulative. Example: PH to spot a moving vehicle at 700 Meters is $0 + 1 + 1 = 2$

EXAMPLE EXERCISE PROCESS

Step 2

Modify PH by shooter status:

- *If Shooter is moving fast ... -3*
- *Cannot fire from Fast or Very Fast vehicle*
- *If Shooter is moving medium ... -2*
- *If Shooter is moving slow ... -1*
- *If Shooter was Suppressed in last 10sec phase ... -2*
- *If Shooter fired at same target in last 10sec phase*
 +1

EXAMPLE EXERCISE PROCESS

Step 3

Modify PH by target status:

- *If Target is personnel, select one:*
 - *In a prepared fighting position ... -2*
 - *Stationary (i.e. using available cover/concealment) -1*
 - *Moving medium, or mounted in vehicle, or performing a task... no modifier*
 - *Moving fast ... -1*
- *If Target is a vehicle:*
 - *Stationary ...+2*
 - *Moving slow ... +1*
 - *Moving medium ... -1*
 - *Moving fast ... -2*
 - *Moving very fast (145kph) ... -3*

EXAMPLE EXERCISE PROCESS

Step 4

Determine Rate of Fire (ROF) from PH table, for weapon type.

–ROF = equals number of dice rolled, per 10 second phase.

Step 5

Roll dice & apply result

–Compare each die to the modified PH on the weapons PH table;

If die roll <= modified PH, target is hit

- For Personnel target ... each hit = one Kill*
- For Vehicle target... for each hit, find the column representing the weapon firing, roll one die for effect on vehicle and/or passengers, and apply result show on the vehicle PK table.*

EXAMPLE EXERCISE PROCESS

Vehicle PK Table

<i>Die roll:</i>	<i>Vs. armor*</i>	5.56mm	7.62mm	.50cal	40mm HEDP	RPG	9mm (No effect on Armor)
1	Vk	Vk	Vk 1 KIA	Vk 2 KIA	Vk 2 KIA	Vk all KIA	1 KIA
2-3	1 KIA	1 KIA	Vk	Vk 1 KIA	Vk 2 KIA	Vk 2 KIA	1 KIA
4-5	No effect	1 KIA	Vk	Vk 1 KIA	Vk 1 KIA	Vk 2 KIA	No effect
6-7	No effect	1 KIA	1 KIA	Vk 1 KIA	Vk 1 KIA	Vk 1 KIA	No effect
8-9	No effect	No effect	1 KIA	Vk	Vk	Vk 1 KIA	No effect
10	No effect	No effect	1 KIA	1 KIA	1 KIA	Vk 0 KIA	No effect

EXERCISE PARAMETERS

- **If vehicle is armored, shift two columns to the left to find result; RPG never shifts.*
- V_k = *Vehicle is disabled*
- KIA = *kill the indicated number of passengers/crew; distribute randomly*
- $SUPPRESSION$ lasts 10 seconds
 - *Any personnel target (team) that has a member KIA is suppressed*
 - *If Die roll = PH+1, PH+2, or PH+3 target is suppressed (includes exposed gunners on vehicle-mounted weapons)*
 - *While Suppressed: cannot move; fire with -2 PH modifier*