

# 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



# EQUIPMENT

- Maps/Models
  - Types
  - Scales
- White Boards/Flip Charts
  - Track key events
- Player Tracking
  - Dry erase markers
  - Game pieces
- 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**

# MOVEMENT RATES

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

# EXERCISE PARAMETERS

## Step 1

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

### 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

# 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

# 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 ... -3*





# 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  $\leq$  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.*



# EXERCISE PROCESS

*Vehicle PK Table*

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



# EXERCISE PARAMETERS

- *\*If vehicle is armored, shift two columns to the left to find result; RPG never shifts.*
- *Vk = 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*