

## Coaching the Grouping Practice

**Preliminaries** • Check the firer's clothing and equipment for a comfortable fit

- Check sights for rough zero
- Check that all screws are tight and wpn is in good condition
- Ensure pre-fire cleaning was completed and check firer's ammo and magazines.

**Before Firing** • Determine firer's grouping capacity from record book.

- Confirm firer understands practice
  - Confirm Point of Aim
- Check sight setting when range ordered
  - As firer adjusts position, check:
- ♦ Alignment on correct target
- ♦ Any faults in position and support

**During Firing** • Lie on firer's "open side"

- Watch firer throughout, anticipate and look for:
  - ♦ Changes of Position
  - ♦ Changes in Support
  - ♦ Dwelling on Aim
  - ♦ Trigger Operation
  - ♦ Follow Through

- Record firer's declaration and coach's observations
  - Rest firer during discussions

**After Firing** • Discuss the group with firer by:

- ♦ Compare declarations with shots
- ♦ Plot shots in book and determine MPI
- ♦ Measure size of group - ignore wide shots
- ♦ Examine group pattern for faults
- ♦ Summarize results and encourage firer

Weapon	Sight	Range (M)		Correct Zero Position	Adjustment	
		AT	FOR		Elevation	Direction
C7	Iron	100m	300m	+ 150 mm	¼ turn = 1 inch	1 click = 1 inch
	Iron	25m	300m	ON POA	¼ turn = ¼ inch	1 click = ¼ inch
	Optic	100m	200m	+ 50 mm	1 click = 1 inch (24 mm)	1 click = 1 inch (24 mm)
C9	Optic	100	300	+ 125 mm	1 click = 1 inch	1 click = 1 inch

## Zeroing

**Before Firing** - Check that the sight is dry-zeroed by:

- ensuring sight is centred left-right in the mount (use vertical alignment marks on front of sight mount).
- ensuring sight is level when set at 200 (space between sight unit and mount base is roughly parallel)

### Sight Adjustment - IRON:

To move MPI Right - Turn Windage Dial Clockwise  
To move MPI Up - Turn Front Sight Clockwise

### Sight Adjustment - OPTIC:

To move MPI Right - Turn Lateral Adjustment Screw Clockwise.

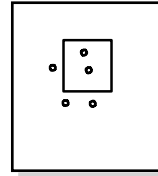
To move MPI Up - Unlock Range/Elevation Dial and Turn Dial Counter-Clockwise.

## Optic Sight

*Clockwise = Down & Right*

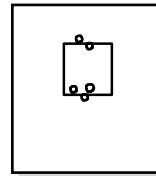
**After Firing Tight Group** - Determine MPI, and determine correction to be applied using the given table.

## Wide Group



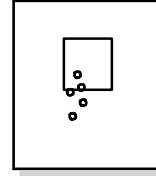
- Lack of Determination
- Variation in Aiming and Holding

## Split Group



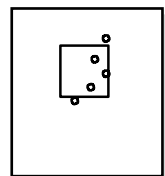
- Changing Position During Firing
- Poor Eye Relief
- Failure to Concentrate on Aiming Pointer

## Vertical Pattern



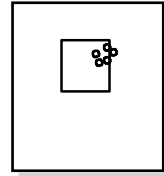
- Poor Aiming
- Incorrect Breathing
- No Follow-Through
- Changing Eye Relief
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## Diagonal Group



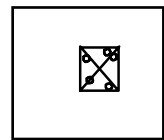
- Head not Upright
- Flinching
- Trigger Snatching
- No Follow-Through
- Incorrect Hold by Trigger Hand

## Tight Group



- Sights may now be adjusted to the CZP (Correct Zero Point) after 4 x 5rd groups.

## Determining MPI



- Draw a rectangle connecting outer edges of all shot holes. Do not include a "wild shot".
- Draw two lines diagonally corner-to-corner.
- Where these lines cross is the MPI.

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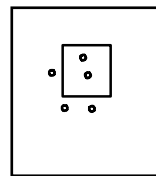
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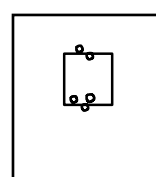
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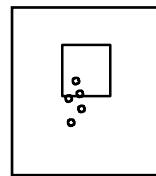
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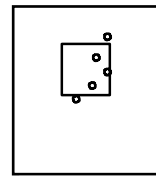
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- Poor Eye Relief
- Failure to Concentrate on Aiming Pointer

## Vertical Pattern



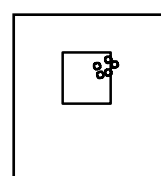
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- Incorrect Breathing
- No Follow-Through
- Changing Eye Relief
- Failure to Concentrate on Aiming Pointer

## Diagonal Group



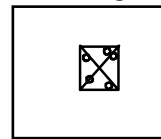
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## Tight Group



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## Determining MPI



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## PWT Level 3 Shoot To Live

Serial	Range	# Rds	Target	Position	Description	Scoring	Remarks for Butts
1	100	5	4' w/ Fig 11, white aiming mark	firer's choice	5 rds zeroing, each shot indicated	not scored	- pull tgt after each shot, plug new hole and mark but do not patch old hole - each tgt runs independently - after shoot, plug all 5 holes and raise on order from FP - patch on order from FP
2	100	5	4' w/ Fig 11, white aiming mark	prone supported	5 rounds grouping, no indication for each shot	Group Size: 5 pts - 4" 4 pts - 6" 3 pts - 8" 0 pts > 8"	- No indication during shoot - Score and record group size after serial - plug shot holes and raise tgts on order from FP - patch on order from FP - best 4 shots only to count
3	200	5	Fig 11 in tgt frame	prone supported	5 rounds deliberate, no time limit	1 pt per hit HPS = 5	target falls when hit, then is raised immediately - plug shots and raise for indication on order - record score, patch on order from FP
4	200	10	Fig 11 handheld	prone unsupported and kneeling supported	2 x 5 second exposures, 2 shots per exposure from prone position, 3 x 8 second exposures, shots per exposure from kneeling position	1 pt per hit HPS = 10	- one trial exposure of 5 seconds on order from FP - tgt position varies at each exposure across 4' frontage, all tgts to move in same dir - minimum 10 seconds between exposures - plug shots and raise for indication on order - record score, patch on order from FP
5	200	15 10 rd 5 rd mag	Fig 11 in tgt frame	fire trench or prone supported	begin with 10 rd mag loaded in prone position - firer may be in the aim - one 40-second exposure, fire 15 rds - change mag on own	1 pt per hit HPS = 15	- no trial exposure - no indication of shots during or after serial - record score, patch on order from FP
6	300	5	Fig 11 in tgt frame	prone supported	5 rounds deliberate, no time limit	1 pt per hit HPS = 5	target falls when hit, then is raised immediately - plug shots and raise for indication on order - record score, patch on order from FP
7	300	10	2 x Fig 11 in tgt frame, 4' apart	prone supported	snap, 5 x 5 second exposures, fire 1 shot at each tgt per exposure - wpn must be out of shoulder at start and after each exposure	1 pt per hit HPS = 10	- one trial exposure - minimum 10 seconds between exposures - plug shots and raise for indication on order - record score, patch on order from FP
8	300-25 run down	34 14 rd 20 rd mag	2 x Fig 11 in fwd tgt frame, 2 x Fig 12 in rear tgt frame	prone, kneeling and standing	begin at 400 yd point, 14 rd mag loaded, action forward and on safe	1 pt per hit HPS = 34	Use 2 x Fig 11 in front of frame, 4' apart 2 x Fig 12 in rear of frame, 4' apart

### Details of Rundown

Phase	Range	# Rds	Target	Position	Description	Remarks for Butts
	400			prone	firer with 14 rd mag loaded, wpn on safe When tgt appears, double forward at trail to 300	On order from FP: LOOK OUT, LOOK OUT
1	300	6 rds	2 x Fig 11	prone	- Assume prone position Fire 3 rounds at each Fig 11 - When tgts go down, STOP, wpns on safe - When Fig 11's appear again, double forward at the trail to 200	Fig 11 up for 45 seconds, halfmast for 10 seconds,
2	200	8 rds	2 x Fig 11	kneeling supported	- Assume kneeling supported pos, fire 4 rds at each Fig 11 - When tgts go down, STOP, wpn on safe, change to 20 rd mag - When Fig 12's appear, double forward at trail to 100	Fig 11 up for 45 seconds, halfmast for 10 seconds,
3	100	8 rds	2 x Fig 12	prone unsupported	- Adopt prone unsupported position, fire 4 rds at each Fig 12 - When tgts go down, STOP, wpns on safe, stand up - Adopt standing alert position	Fig 12's up for 45 seconds, halfmast for 10 seconds,
4	100	2 rds	2 x Fig 11	kneeling unsupported	When tgts appear for 8 seconds, - Adopt kneeling unsupported position, fire 2 rds at either Fig 11, firer's choice - When tgts go down, STOP, stand up, selector at S - On command ADVANCE, firer moves at walk, rifle at ALERT, selector at S	Fig 11's up for 8 seconds, halfmast for 35 seconds,
	75	2 rds	2 x Fig 11	standing	Firer advances to 75, stops, and when tgt appears, fires 2 rds standing at a Fig 11, firer's choice - when tgts go down, ADVANCE at ALERT to 50, selector at S	Fig 11's up for 5 seconds, halfmast for 25 seconds
	50	2 rds	2 x Fig 12	standing	Firer advances to 50, stops, and when tgt appears, fires 2 rds standing at a Fig 12, firer's choice - when tgts go down, ADVANCE at ALERT to 25, selector at S	Fig 12's up for 5 seconds, halfmast for 25 seconds,
	25	2 x 3 rds, burst	2 x Fig 11	standing, shoulder or hip position	Firer advances to 25, stops, and when tgt appears, fires one burst per exposure, standing at a Fig 11, firer's choice	Fig 11's up for 5 seconds, halfmast for 5 seconds,  Fig 11's up for 5 seconds, halfmast.

## PWT Level 3 Shoot To Live

Serial	Range	# Rds	Target	Position	Description	Scoring	Remarks for Butts	Details of Rundown		
								Range	Firing Point	Butts
								400	firer with 14 rd mag loaded, wpn on safe When tgt appears, double forward at trail to 300	On order from FP: LOOK OUT, LOOK OUT
1	100	5	4' w/ Fig 11, white aiming mark	firer's choice	5 rds zeroing, each shot indicated	not scored	- pull tgt after each shot, plug new hole and mark but do not patch old hole - each tgt runs independently - after shoot, plug all 5 holes and raise on order from FP - patch on order from FP	300	- Assume prone position Fire 3 rounds at each Fig 11 - When tgts go down, STOP, wpns on safe - When Fig 11's appear again, double forward at the trail to 200	Fig 11 up for 45 seconds, halfmast for 10 seconds,
2	100	5	4' w/ Fig 11, white aiming mark	prone supported	5 rounds grouping, no indication for each shot	Group Size: 5 pts - 4" 4 pts - 6" 3 pts - 8" 0 pts > 8"	- No indication during shoot - Score and record group size after serial - plug shot holes and raise tgts on order from FP - patch on order from FP - best 4 shots only to count	200	- Assume kneeling supported pos, fire 4 rds at each Fig 11 - When tgts go down, STOP, wpn on safe, change to 20 rd mag - When Fig 12's appear, double forward at trail to 100	Fig 11 up for 45 seconds, halfmast for 10 seconds,
3	200	5	Fig 11 in tgt frame	prone supported	5 rounds deliberate, no time limit	1 pt per hit HPS = 5	target falls when hit, then is raised immediately - plug shots and raise for indication on order - record score, patch on order from FP		- Adopt prone unsupported position, fire 4 rds at each Fig 12 - When tgts go down, STOP, wpns on safe, stand up - Adopt standing alert position	Fig 12's up for 45 seconds, halfmast for 10 seconds,
4	200	10	Fig 11 handheld	prone unsupported and kneeling supported	2 x 5 second exposures, 2 shots per exposure from prone position, 3 x 8 second exposures, shots per exposure from kneeling position	1 pt per hit HPS = 10	- one trial exposure of 5 seconds on order from FP - tgt position varies at each exposure across 4' frontage, all tgts to move in same dir - minimum 10 seconds between exposures - plug shots and raise for indication on order - record score, patch on order from FP	100	When tgts appear for 8 seconds, - Adopt kneeling unsupported position, fire 2 rds at either Fig 11, firer's choice - When tgts go down, STOP, stand up, selector at S - On command ADVANCE, firer moves at walk, rifle at ALERT, selector at S	Fig 11's up for 8 seconds, halfmast for 35 seconds,
5	200	15 10 rd 5 rd mag	Fig 11 in tgt frame	fire trench or prone supported	begin with 10 rd mag loaded in prone position - firer may be in the aim - one 40-second exposure, fire 15 rds - change mag on own	1 pt per hit HPS = 15	- no trial exposure - no indication of shots during or after serial - record score, patch on order from FP	75	Firer advances to 75, stops, and when tgt appears, fires 2 rds standing at a Fig 11, firer's choice - when tgts go down, ADVANCE at ALERT to 50, selector at S	Fig 11's up for 5 seconds, halfmast for 25 seconds,
6	300	5	Fig 11 in tgt frame	prone supported	5 rounds deliberate, no time limit	1 pt per hit HPS = 5	target falls when hit, then is raised immediately - plug shots and raise for indication on order - record score, patch on order from FP	50	Firer advances to 50, stops, and when tgt appears, fires 2 rds standing at a Fig 12, firer's choice - when tgts go down, ADVANCE at ALERT to 25, selector at S	Fig 12's up for 5 seconds, halfmast for 25 seconds,
7	300	10	2 x Fig 11 in tgt frame, 4' apart	prone supported	snap, 5 x 5 second exposures, fire 1 shot at each tgt per exposure - wpn must be out of shoulder at start and after each exposure	1 pt per hit HPS = 10	- one trial exposure - minimum 10 seconds between exposures - plug shots and raise for indication on order - record score, patch on order from FP	25	Firer advances to 25, stops, and when tgt appears, fires one burst per exposure, standing at a Fig 11, firer's choice	Fig 11's up for 5 seconds, halfmast for 5 seconds,
8	300-25 run down	34 14 rd 20 rd mag	2 x Fig 11 in fwd tgt frame, 2 x Fig 12 in rear tgt frame	prone, kneeling and standing	begin at 400 yd point, 14 rd mag loaded, action forward and on safe	1 pt per hit HPS = 34	Use 2 x Fig 11 in front of frame, 4' apart 2 x Fig 12 in rear of frame, 4' apart			Fig 11's up for 5 seconds, halfmast.

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