SCOTTISH FA

PRE-SEASON 2017/18 - REFEREES



Overview

This pre-season training programme has been developed to help you arrive at the start of the 2016-2017 season in peak physical condition. It is comprised of two training periods: a general preparatory period (2 weeks) and a specific preparatory period (4 weeks). The general preparatory period is focused on allowing for a safe re-introduction to regular physical training whilst the specific preparatory period will seek to improve the various physical attributes important to refereeing. Accordingly, the programme features the following types of session:

- High-intensity interval training (HIT)
- Speed endurance (SE)
- Repeated sprint ability (RSA)
- Speed, agility, and quickness (SAQ)
- Resistance training (RT)
- Injury prevention (IP)
- Active recovery (AR)

Training Programme

		DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
General Preparatory Period	WEEK 1	HIT 1 IP	OWN CHOICE	REST	HIT 1 IP	OWN CHOICE*	AR IP	REST
Gen Prepa Per	WEEK 2	WEEK 2 HIT 1 OWN REST CHOICE*		HIT 1 IP	OWN CHOICE*	AR IP	REST	
	WEEK 3	HIT 2 IP	SE 1 RT 1	REST	RSA	HIT 2 IP	SAQ 1 RT 2	REST
Specific Preparatory Period	WEEK 4	SE 1 RT 1	HIT 2 IP	RSA	HIT 2 IP	SAQ 1	MD	RT 2 AR
Sper Prepa Per	WEEK 5	REST	SE 2 RT 1	HIT 3 IP	RSA	SAQ 2	MD	RT 2 AR
	WEEK 6	REST	SE 2 RT 1	HIT 3 IP	RSA	SAQ 2	MD	RT 2 AR

^{*} cycling, swimming, road running etc.

Training Guidelines

- All training sessions should be preceded by a comprehensive warm-up: 5-10 min of light aerobic exercise; mini-band routine followed by mobilisation exercises/dynamic stretches; accelerations and short high-intensity actions representative of the session.
- All training sessions should be concluded with a cool down period that includes 10-15 mins of light aerobic exercise followed by 15 mins of static stretching.
- Remember the 4 R's of recovery:
 - Rehydrate: water should be consumed in the hours following training/match (3 hours) to the degree of 1.5x the amount lost in body mass.
 - Refuel and repair: In addition to being a good source of carbohydrate and protein, chocolate milk will aid rehydration
 - o Relax: sleep!!





Movement pattern key

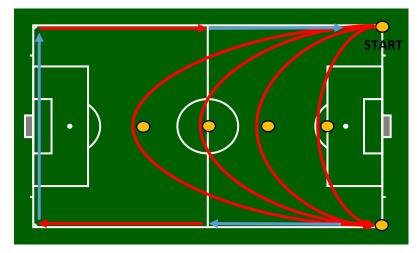


High-Intensity Interval Training (HIT)

The primary objective of these sessions will be to develop your aerobic capacity. Specifically, these sessions will involve you performing high-speed intermittent runs (of varying durations) and will seek to maximise the time you spend in your top HR zone (> 90% HRmax). As a rule of thumb, reductions in interval durations should be accompanied by increases in running speed so as to facilitate an appropriate cardiorespiratory response i.e. running speeds should be greater during 1 min intervals compared to 4 min intervals. Ideally, these sessions should be performed on grass; however, the prescribed work-to-rest ratios can also be implemented on a track or treadmill.

<u>HIT 1</u>
Use a mixture of the following pitch-based HIT exercises during weeks 1 and 2.

	Week 1	Week 2
Interval duration	4 min	4 min
Interval repetitions	3	4
Between-interval recovery duration	3 min	3 min
Sets	1	1
Between-set recovery duration	N/A	N/A

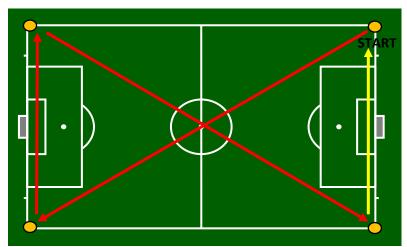


Perform curved run around first in-field cone followed by lap around perimeter of pitch. Repeat sequence for remaining in-field cones. Make a mental note of number of cones reached and try to match/beat this during subsequent intervals.





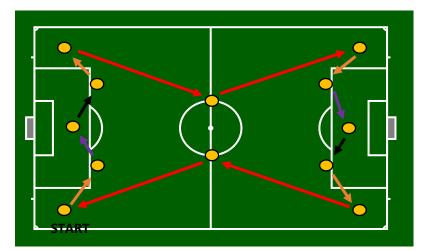




Perform 3 high-speed runs to corners followed by 1 walk back to start. Repeat sequence for remainder of 4 minute interval. Make a mental note of number of laps completed and try to match/beat this during subsequent intervals.

<u>HIT 2</u>
Use a mixture of the following pitch-based HIT exercises during weeks 3 and 4.

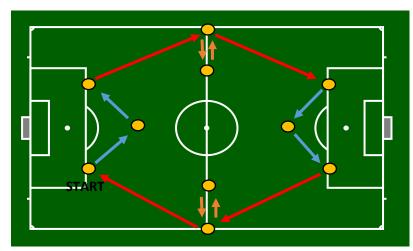
	Week 1	Week 2
Interval duration	2 min	2 min
Interval repetitions	6	8
Between-interval recovery duration	1 min	1 min
Sets	2	2
Between-set recovery duration	4 min	4 min



Perform specified movement patterns (sideways, sprint, backwards, high-speed run) around pitch. Repeat sequence for remainder of 2 minute interval. Make a mental note of number of laps completed and try to match/beat this during subsequent intervals.



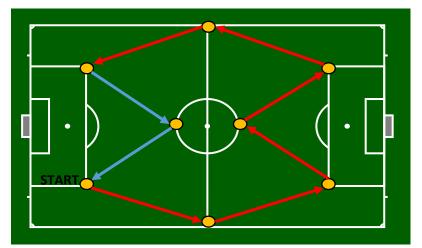




Perform specified movement patterns (jog, high-speed run, sideways) around pitch. Repeat sequence for remainder of 2 minute interval. Make a mental note of number of laps completed and try to match/beat this during subsequent intervals.

<u>HIT 3</u>
Use the following pitch-based HIT exercise during weeks 5 and 6.

	Week 5	Week 6
Interval duration	1 min	1 min
Interval repetitions	8	10
Between-interval recovery duration	1 min	1 min
Sets	2	2
Between-set recovery duration	4 min	4 mins



Perform specified high-speed runs around pitch followed by walk back to start. Distances between cones can be altered to ensure high-speed running duration is ~1 min.



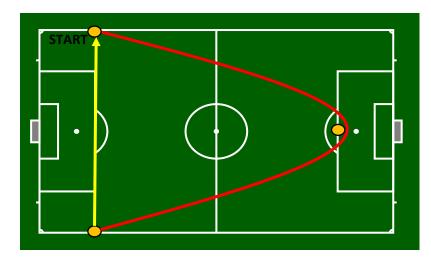


Speed Endurance (SE)

The primary objective of these sessions will be to develop your ability to maintain high running speeds for extended periods of time. In line with the literature, running speeds just below maximal should be used whilst sessions should adopt work-to-rest ratios of 1:5.

<u>SE 1</u>

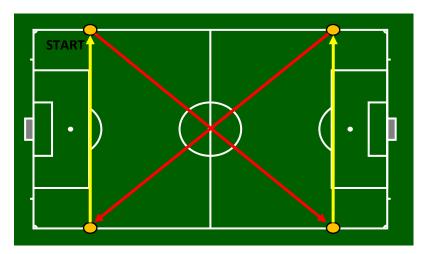
	Week 3	Week 4
Interval duration	30 s	30 s
Interval repetitions	6	8
Between-interval recovery duration	150 s	150 s
Sets	1	1
Between-set recovery duration	N/A	N/A



Perform specified high-speed run at approximately 95% of maximal speed. Distances between cones can be altered to ensure high-speed run duration is ~30 s. Allow yourself 150 s to walk back to start and commence the next effort.

<u>SE 2</u>

	Week 5	Week 6
Interval duration	15 s	15 s
Interval repetitions	8	10
Between-interval recovery duration	75 s	75 s
Sets	1	1
Between-set recovery duration	N/A	N/A



Perform high speed run at approximately 95% of maximal running speed. Distances between cones can be altered to ensure high-speed run duration is ~15 s. Allow yourself 75 s to walk to next cone before recommencing the next effort.





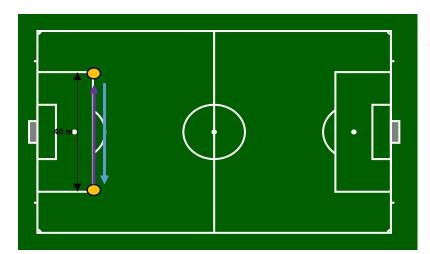


Repeated Sprint Ability (RSA)

The primary objective of these sessions will be to develop your ability to recover between sprints and therefore enhance your repeated sprint performance. Specifically, these sessions will involve you performing a series of near-maximum sprints with incomplete recovery.

RSA 1

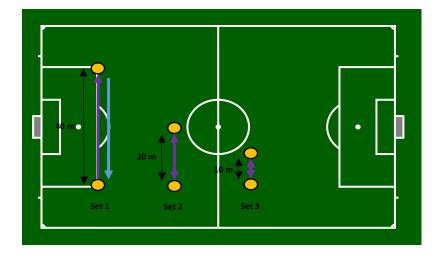
	Week 3	Week 4
Reps	5	6
Distance	40 m	40 m
Between-sprint recovery	30 s	30 s
Sets	3	3
Between-set recovery duration	3 min	3 min



Perform the 40 m sprint and then jog back to the start – you should take 30 s recovery between sprints.

RSA 2

	Week 5	Week 6
Reps	5	6
Distance	40 m	40 m
Between-sprint recovery	30 s	30 s
Sets	3	3
Between-set recovery duration	4 min	4 min



Similiarly to weeks 3 & 4, you will cover a distance of 40 m during each sprint effort; however, changes of direction (COD) will now be incorporated. Sprint efforts during sets 1, 2, and 3 will involve:

Set 1: 1 x 40 m sprint (0 COD)

Set 2: 2 x 20 m sprints (1 COD)

Set 3: 4 x 10 m sprint (3 COD)



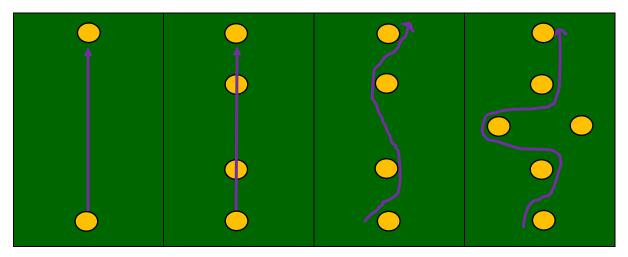


Speed, Agility, and Quickness (SAQ)

The primary objective of these sessions will be to develop both your sprint performance (acceleration and maximal speed) and change of direction ability. Specifically, these sessions will involve you performing a series of maximal sprint efforts with complete recovery.

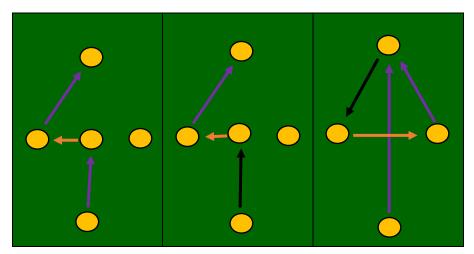
SAQ 1

Set out the cones as shown below and perform four repetitions of exercises 1-4. Please note that exercise 4 should be completed on both sides (L & R). Allow HR to drop to < 65% HRmax before commencing next effort.



<u>SAQ 2</u>

Set out the cones as shown below and perform four repetitions of exercises 1-3. Please note that exercises all should be performed four times on both sides (L & R). Allow HR to drop to < 65% HRmax before commencing next effort.







Resistance Training (RT)

The primary objective of these sessions will be to develop your muscular strength and power characteristics. Specifically, these sessions will be gym-based and will involve you performing various resistance exercises. Click on the hyperlinks to view any exercises you are unsure about.

<u>RT 1</u>

Exercise	Load		We	eks		Coaching Boints	
Exercise	LUdu	3	4	5	6	Coaching Points	
	Reps	6	6	6	6	Weight through heels, pull shoulders back and push chest	
Goblet squats	Sets	2	2	2	2	through, push knees outwards over toes	
	Load					tillough, pash knees outwards over toes	
	Reps	8	8	6	6	Wide stance with toes pointing at 45, pull shoulders back	
BB sumo deadlift	Sets	3	3	3	3	and push chest through	
	Load					and push chest through	
	Reps	8	8	6	6	Squeeze through glutes and keep body aligned from knee	
SB DB bench press	Sets	3	3	3	3	to head – do not allow hips to drop	
	Load					to flead – do flot allow flips to drop	
	Reps	8	8	6	6	Keen feet flat on floor and neck in neutral necition (keen	
BB hip thrust	Sets	3	3	3	3	Keep feet flat on floor and neck in neutral position (keep chin tucked to chest and not extended back)	
	Load					chill tucked to chest and not extended back)	
	Reps	8	8	6	6	Perform on each side with DB on same side as kneeling	
Half-kneeling SA shoulder press	Sets	3	3	3	3	leg. Keep core braced throughout and restrict lateral	
	Load					flexion.	
	Reps	8	8	6	6	Perform on each side with DB in both hands. Ensure	
DB Bulgarian split squat	Sets	2	2	2	2	stance is wide enough so that front knee does not	
	Load					protrude over front toes.	
	Reps	8	8	6	6	Hands positioned directly under shoulders. Keep core	
SB press ups w/ shoulder taps	Sets	2	2	2	2	braced during shoulder taps and prevent any movement	
	Load					of hips.	
	Reps	45 s	45 s	60 s	60 s	Hands positioned directly under shoulders. Alternate	
<u>Up down plank</u>	Sets	2	2	2	2	Hands positioned directly under shoulders. Alternate side which initiates movement from elbows to hands.	
	Load					Side which initiates movement nom elbows to hallds.	





<u>RT 3</u>

Fugurion	Lood		We	eks		Coaching Beinte	
Exercise	Load	3	4	5	6	Coaching Points	
	Reps	6	6	6	6	Keep legs as straight as possible during inchworm. Eyes	
Inchworm to push up to rotation	Sets	2	2	2	2	follow hand during rotation.	
	Load					Tollow Harld during rotation.	
	Reps	8	6	6	4	Controlled movement. Explode on lift; however, do not	
BB or DB bench press	Sets	3	3	3	3	bounce off chest.	
	Load					bounce on chest.	
	Reps	8	8	6	6	Squeeze through glutes and maintain alignment between	
<u>Horizontal row</u>	Sets	3	3	3	3	head to toe. Squeeze shoulder blades together and pull	
	Load					chest to bar. Raise feet on box to increase difficulty.	
	Reps	8	8	6	6	Dorform quarter equat and then explode unwards	
BB or DB push press	Sets	3	3	3	3	Perform quarter squat and then explode upwards pushing BB/DB overhead.	
	Load					pushing bb/ bb overneau.	
	Reps	8	8	6	6	Underhand grin use resistance hand to decrease	
<u>Chins</u>	Sets	3	3	3	3	Underhand grip – use resistance band to decrease difficulty.	
	Load					difficulty.	
	Reps	8	8	6	6		
Incline DB chest flys	Sets	2	2	2	2	Bring little fingers together at top of movement.	
	Load						
	Reps	30 s	45 s	45 s	60 s	Pody aligned from head to too – keep hins raised and do	
Side plank w/ reach under	Sets	2	2	2	2	Body aligned from head to toe – keep hips raised and do not allow to sag. Reach as far under as possible.	
	Load					not allow to sag. Reach as fai under as possible.	

KEY: BB, barbell; DB, dumbbell, SB, Swiss ball, SA, single arm





Injury Prevention (IP)

The primary objective of these sessions is to develop your core strength and improve mobility with the aim of ultimately reducing your risk of suffering a non-contact injury. Specifically, these sessions will involve you performing various prehab exercises. Click on the pictures to view any exercises you are unsure of.



Active Recovery Training (AR)

The primary objective of these sessions will be to facilitate your recovery following intense training sessions.

- Light aerobic activity that is ideally non-impact (cycling, swimming, cross-training). The aim of this is to increase blood flow and to aid in the removal of waste products and metabolites. This will help prevent muscle soreness and prepare you for subsequent training sessions during the week. Target HR should be 50-60% HRmax.
- Static stretches and mobility exercises should be undertaken to restore range of motion.
 Stretches should be performed twice and be held for 30 s each.