

Biathlon Union of Serbia

National Biathlon Team Men

Working plan

Monthly period No 4

From 15.08.2016 to 11.09.2016

Prepared by: Ventzeslav Iliev

Place : Sjenica, Kopaonik, Sjenica

1. Goal and tasks

1.1 Physical tasks

1. Development of abilities for TIKO (Tempo endurance of short distances)

Limits of running:

A) Running/Cross : AR2 zone : 4.00 - 4.10 min/km
 MR zone : 3.50 - 4.00 min/km
 ANR zone : 3.40 - 3.50 min/km

B) Roller-skis : AR2 zone : 2.40 – 2.50 min/km
 MR zone : 2.25 - 2.35 min/km
 ANR zone : 2.20 - 2.25 min/km

2. Development and upraise of the special strength endurance:

1. Roller-skis SST
2. Circuit SST + shooting (30"/30")
3. Running in uphill + shooting
4. GST/Strength training complex in gym hall

❖ **Special focus** : Increasing the level of dynamic power strength of the shoulder girdle (hand, breast, dorsal)

Proportion of loading in strength training : 50% Shoulder girdle 50% Lower limbs (thigh 60% / cruel 40%)

1.2 Physiological tasks

1. Intensive development of aerobic-anaerobic capacity with special effects.
2. Limits of the zone from **Anaerobic limit (ANLM)** to **MOC (Maximum Oxygen Consumption) limit** with a temporary entry in zone of maximum oxygen consumption (MOC)
3. Active functioning of organs at high speed running with minimal acidity in the body's cells.
4. The energy well-providing mainly aerobics-anaerobics with including the anaerobic mechanisms in the zone of **Anaerobics limit of metabolism (ANLM)**. The limits of the zone : the zone of the aerobic-anaerobic transition with L_a to 7-10 ml/mol with a goal: absorption of high % O₂ from atmospheric air.
5. Increasing of level of **Anaerobics limit of metabolism (ANLM)** and economizing of energies consumption

1.3 Technical tasks

1. Improving of ski skating technique:

- All techniques and the transition between them.
- Implementing of jumped skating technique in steep climbs.

2. Development and improvement of special shooting skills and abilities by CT₂/ 160 beats/min:

- Coordination of technical shooting elements by both positions (P and S).
- Quality shooting on metal target. High grouping of shots : AHP/Prone : < 2.5 cm and AHP/Standing < 7.0 cm
- Automatization of Shooting skills (rational stays, concentration, reaction by different weather conditions, tactical behavior by preparation and implementation of shots)
- Shooting structure: Prone/28 sec, and Standing/ 26 sec.
- Improving the structure of the model Relay : 0 penalty (P+S) with max. 1 spare rounds/67 sec. Lower limits of cover the model: min in 30 % of performed tests.

Individual functional zones Running **Correction 12.08/3**

Name	AP1	AP2	LA	MR	LA	ANR	LA	AR2uphil	V/ AR2	V/MR
Edin	140-155	156-171	2.9-4.9	172-184	5.0-8.4	185↑	8.5 ↑		4.00-4.10	3.50-4.00
Denzis	138-153	154-169	2.3-4.8	170-185	4.9-9.1	186↑	9.2↑		4.10-4.20	3.50-4.00
Dejan	140-155	156-171	2.6-4.5	172-186	4.6-8.0	187↑	8.1↑		4.10-4.20	4.00-4.10
Denis	141-156	157-172	3.5-6.8	173-188	6.9-9.9	189↑	10.0↑		4.10-4.20	4.00-4.10
Redzep	141-156	157-172	3.5-5.7	173-189	5.8-9.6	190↑	9.7↑		4.00-4.10	3.50-4.00
Maida	139-154	155-170		171-186		187↑			4.45-4.55	4.35-4.45
Inesa	143-159	160-175		179-184		185↑			4.50-5.00	4.40-4.50
Dzejlana	142-157	158-173		174-188		189↑			5.40-5.50	5.30-5.40
Anastasija	140-154	155-170		171-186		187↑			5.35-5.45	5.25-5.35

Individual functional zones/ Roller- skis **Correction 12.08/3**

Name	AP1	AP2	LA	MR	LA	ANR	LA	V/AR2	V/MR	V/ANR
Edin	140-155	156-171	2.9-4.9	172-184	5.0-8.4	185↑	8.5 ↑	2.35-2.45	2.20-2.30	
Dzenis	138-153	154-169	2.3-4.8	170-185	4.9-9.1	186↑	9.2↑	2.35-2.45	2.25-2.35	
Dejan	140-155	156-171	2.6-4.5	172-186	4.6-8.0	187↑	8.1↑	2.35-2.45	2.25-2.35	
Redzep	141-156	157-172	3.5-5.7	173-189	5.8-9.6	190↑	9.7↑	2.35-2.45	2.25-2.35	
Denis	141-156	157-172	3.5-6.8	173-188	6.9-9.9	189↑	10.0↑	2.45-2.55	2.35-2.45	
Maida	139-154	155-170		171-186		187↑		3.05-3.15	2.55-3.05	
Inesa	143-159	160-175		179-184		185↑		3.15-3.25	3.05-3.15	
Dzejlana	142-157	158-173		174-188		189↑		3.25-3.35	3.15-3.25	
Anastasia	140-154	155-170		171-186		187↑		3.10-3.20	3.00-3.10	

Lactate values

AR 1	AR2	MR	MCC
-1.5 to 2.0 mml	-1.2 to - 1.5 mml	- 2.0 mml	-1.5 mml

2. Plan/Execute

	Weeks General indicators	General planned	1		2		3		4		Total execute
			Pl	Ex	Pl	Ex	Pl	Ex	Pl	Ex	
1	Training days	24									
2	Rest days	3									
3	Competition days	1									
4	Trainings/number	44									
5	Training hours	10.30									
6	Competition/numbers										
7	Competition hours	0.30									
8	Total load	101									
	Level of the loading	big									
		average									
		small									
	Specific indicators	Plan	CR	AR1	AR2	MR	ANR	Total			
1	Running	hours	2	2.5	1.5	2.30	1	9.30			
2	Bicycling/hours	hours	1	4	7			12			
3	Roller-skis/hours	hours	4	28	17	6	2	57			
4	Skiing/hours	hours									
5	GST/General Strength Training	hours						4			
6	SST/Special Strength Training	hours						9			
7	GPT/Genera Physical Training	hours						8			
8	Shooting training							15			
SWL	Shooting without loading	rounds						300			
CT1	Compl.Train 1 to~ 130 HR	drills/r						8/550			
CT 2	Compl.train 2 to~ 160 HR	drills/r						7/450			
CS	Competitive shooting	rounds									
SS	Speed shooting	rounds						2/200			
DS	Dry shooting	hours						9			
								TOTAL	1 700		

3. Content of training

3.1 Content week cycle 1

S 2 Developing

15.08 Running gymnastic 30 min 7.00	Bike training in AR2 Uphill 28 km/light profile 140 min Stretching 20 min	Recovering day 1.Dry shooting 50 min/ positioning to 1st shot : 4 series /break 3 min Prone+ Standing	SKATT 2 ATH Stretching A 30 min
16.08 Strength complex 30 min 7.00	1. Hiking with poles in CR/AR1 130 min 2. Swimming 30 min	1. Running CR 30 min 2. SST /Strength training(Circuit training / 80 min /Gym hall : 60% shoulder girdle+40% lower limbs) + Dry shooting	SKATT 2 ATH
17.08 Running gymnastic 30 min 7.00	Roller skis strength training/Up hill : 1.CR 15 min 2. Roller-skis Strength training /Up hill AR 2 : 120 min(20 km) 3.CR 10 min cross +. Stretching 20 min	1.Dry shooting 50 min aiming + making a shot 2.Bike in AR1 80 min	SKATT 2 ATH Stretching B 30 min
18.08	Recovering day Swimming 60 min	Recovering day Sport play 60 min	SKATT 2 ATH
19.08 Running gymnastic 30 min 7.00	Bike training in AR2 1. AR2 Uphill 24 km 130 min 2. Stretching 20 min	1. Running CR 30 min 2. SST /Strength training(Circuit training / 60 min /Gym hall : 60% shoulder girdle+40% lower limbs	SKATT 2 ATH
20.08 Strength complex 30 min 7.00	Roller skis long distance : 1.CR 15 min 2. Roller-skis AR 1- 2 : 120 min 3.CR 10 min cross +. Stretching 20 min	1. Running CR 30 min 2. SST /Strength training(Circuit training / 70 min /Gym hall : 60% shoulder girdle+40% lower limbs) + Dry shooting	SKATT 2 ATH Stretching A 30 min
21.08 Running gymnastic 30 min 7.00	Roller skis strength training/Up hill : 1.CR 15 min 2. Roller-skis Strength training /Up hill AR 2 : 110 min(20 km) 3.CR 10 min cross +. Stretching 15 min	Recovering day 1.Dry shooting 50 min/ Speed shooting 2.Bike in AR1 80 min	SKATT 2 ATH

3.2 Content week cycle 2

S 3 Stabilizing

Date	1st/ Morning training	2nd/Afternoon training	3rd/Evening training
22.08 Strength complex 30 min	1. Hiking with poles in CR/AR1 140 min 2. Swimming 30 min	1. Dry shooting 50 min/ / positioning to 1st shot : 4 series /break 3 min 2. Bike in AR1 80 min Speed shooting	Stretching B 30 min
23.08	Bike /long distance in AR1-2 Kopaonik-Sjenica 1. CR 10 min 2. AR1-2 240 min 3. Stretching 15 min	Recovering day	
24.08 Running gymnastic 30 min	Recovering day	Cross training CT1/AR1(model SP 3+2 /focus 1st shot-right aiming ①) 1. Dry shooting 10 min 2. CT1/AR1 : 12 x 1 km(3SP/paper +3SP/metal) 70 min +Bike 50 min AR1	Massage
25.08 Running gymnastic 30 min LA/2	Running/stadium ANR 20x400 m 1. CR 20 min 2. ANR 4 x 5x400m, break 2-6 min(78 sec) 60 min 3. AR1 20 min 4. 3. CR 10 min + Stretching 20 min	Roller training CT1/AR1/stabilizing model SP : whole structure/ Prone/26-28 sec/standing/24-26 sec 1. Dry shooting 10 min PPPP MMMMM 2. CT1/AR1(3+2) : 10x 1.5 km + 20 min AR/90 3. CR 10 min + Stretching 10 min	
26.08 Strength complex 30 min	Roller training CT1/AR1/developing model SP : shooting tempo 1st to 5th shot ①-⑤ 10-12 sec 1. Dry shooting 10 min PMMM PMMM PM 2. CT1/AR1 : 10 x 2.0 km + 20 min AR1 110 min 3. CR 15 min +Stretching 10 min	Recovering day Sport play 60 min	Massage
27.08 Running gymnastic 30 min LA/2	Roller training CT2/MR(model SP accent ①-⑤ /structures 10-12 sec. 1. Dry shooting/10 min comb. paper/metal 2. CR 10 min 3. CT2/MR with 3 series x 4 x 1.5 km /break 1.30/5.30 min/ 90 min. / 1+2 series with rifle 4. KR 10 min + Stretching 10 min	1. Cross AR1 30 min 2. SST/ Strength Circuit training/7 rounds X 10 min/ per round(10 positions) 60% shoulder girdle +40% lower limbs	Massage
28.08	Bike training AR1-2 long training 1. CR 10 min 2. AR 1-2 150 min 3. CR 15 min +Stretching 10 min	1. Dry shooting(timing structure, drills by special conditions) 60 min 2. Cross in AR 1 50 min	Stretching

3.3 Content week cycle 3

S1 Stressfull

Date	1st/ Morning training	2nd/Afternoon training	3rd/Evening training
29.08	Recovering day	Recovering day	Massage
30.08 Running gymnastic 30 min LA/2	Roller training/Prestart model ANR: 1.Dry shooting 10 min + Test SP/metal +CR- 20 min using 2.0 km loop 2.Prestart model/ANR 2 series 5 x1.0 km + 4x 0.4 km : 1 loop rifles- 1 loop no rifle /break 1.30/5.30 3. AR1 30 min + Stretching 10 min	1.Dry shooting(timing structure, drills by special conditions) 60 min 1.Bike : AR 1 50 min 2. Stretching 20 min	
31.08 Running gymnastic 30 min LA/1	Qualification race 6 : Sprint competition 10 km: 1.Dry shooting 10 min + Test SP/ metal+ CR 20 min 2. Sprint race 10 km in MR /25 min break 10 min 3. MR : 1 series 4 x 1.5 km/no rifle 4. Stretching 20 min	1.Cross AR1 30 min 2. SST/ Strength Circuit training/7 rounds X 10 min/ per round(10 positions) 60% shoulder girdle +40% lower limbs	Stretching 30 min
01.09 Strength complex 30 min	Cross training/ CT1/AR1 (Developing model REL 3+1 / accent to 1- 4 shots (structures 10 + 8 sec) 1.Dry shooting 10 min comb. paper/metal 2.CR- 10 min 3.CT1/AR 1 6x1.5km + 4x1.0 km /REL model 3+1 90 min. 3. CR 10 min	Roller technique training 1.CR 10 min 2.AR1 70 min 2-1 active pushing/2-1 leading arm/1-1/only legs 3.CR 10 min + Stretching 10 min	Massage
02.09 Running gymnastic 30 min	Roller ski training AR1-2 /Long distance 2. CR 10 min/ Tactical using of technical skating kind 3. AR1-2 130 min 4. CR 10 min + Stretching 10 min	Roller ski /SST Strength training 1.CR 10 min 2. AR 2 : 4x 2.3 km up hill 70 min 3.CR cross 20 min 4. Stretching 10 min	Stretching 30 min
03.09	Recovering day	Recovering day Sport play 60 min/ basketball	Massage
04.09 Strength complex 30 min	Cross training CT1/AR2 /developing model REL 3+2 PPMM MMPP MM 1.Dry shooting 15 min +CR- 10 min 2. CT1/AR2 : 10 x 1.5 km 90 min 3. T CR 10 min +Stretching 10 min	1.Dry shooting(timing structure, drills by special conditions) 50 min 2.Bike : AR 1 60 min 3. Stretching 20 min	Stretching 30 min

3.4 Content week cycle 3

S 3 Developing

Date	1st/ Morning training	2nd/Afternoon training	3rd/Evening training
05.09 Running gymnastic 30 min	Roller skis training CT2/AR2 /developing model REL 3+2 PMMM PMMM 1.Dry shooting 15 min +CR- 10 min 2. CT2/AR2 : 4 x 2.0 km with rifle/ 4 x2.0 km no rifle 90 min 3.CR 10 min +Stretching 10 min	Roller ski /SST Strength training 1.CR 10 min 2. AR 2 : 4x 2.3 km up hill 70 min 3.CR cross 20 min 4. Stretching 10 min	Massage
06.09	Biking in CT1/AR1 (model Pursuit) 1.Dry shooting 15 min + CR- 10 min comb. paper/metal 3.CT1/AR1 Bike AR1 with 10 x 3 km (3+2) 90 min. 4.CR 15 min + Stretching 10 min	1.Dry shooting(timing structure,) 50 min 2.Bike : AR 1 60 min 3. Stretching 20 min	Stretching 30 min
07.09	Roller ski training AR1-2 /Long distance 2. CR 10 min/ Tactical using of technical skating kind 3. AR1-2 120 min 4. CR 10 min + Stretching 10 min	1.Cross AR1 30 min 2. SST/ Strength Circuit training/6 rounds X 10 min/ per round(10 positions) 60% shoulder girdle +40% lower limbs	Swimming 50 min
08.09	Traveling to Bansko Camp Bansko	Traveling to Bansko Adaptation day : 1.Cross in AR1 50 min 2. Dynamic Stretching 30 min	
09.09 Strength complex 30 min	Roller skiing in CT1/AR2 (model PUR) sh.tempo 1.Dry shooting 15 min and Test metal(PUR) + CR- 10 min PMMM PMMM PM 2. CT1/AR1 Roller-skis 10 x 1.7 km) shootings 90 min. 4.CR 15 min + Stretching 10 min	1.Cross AR1 30 min 2. SST/ Strength Circuit training/8 rounds X 10 min/ per round(10 positions) 60% shoulder girdle +40% lower limbs. 3. Stretching A 20 min	Stretching 30 min.
10.09 Running gymnastic 30 min	Roller ski training/ CT2/MR (model PUR accent to ①-⑤)/sh. structures 10-12 s 1.Dry shooting/10 m+ Test PUR P/paper S/metal 2. CR 10 min comb. paper/metal 3. CT2/MR with 2 series x 5 x 1.5 km /break 1.30/5.30 min/ 90 min. rifles/no rifles 4. CR 10 min + Stretching 10 min	Roller technique training 1.CR 10 min 2.AR1 70 min 2-1 active pushing/2-1 leading arm/1-1/only legs 3.Dry shooting 40 min	Sauna
11.09 Strength complex 30 min	Roller skiing in CT1/AR1 (model Sprint) focus to shooting tempo 10-12 sec ①-⑤ shot/speed shooting 1.Dry shooting 15 min and Test paper S +CR-10 min 3.CT1/AR1 Roller-skis AR1 with 10 x 2.0 km) shootings 110 min. 4.CR 15 min + Stretching 10 min	Recovering day Swimming 60 min Sauna	Stretching 30 min