

***Biathlon Union of Serbia***

***Biathlon Team Men***

***Report***

***Monthly period/MP 3***

***From 18.07.2016 to 14.08.2016***

***Prepared by Head Coach***

***Ventzeslav Iliev***

# REPORT

## Montly period 3

### General :

**1.Conducting:** Preparation of a team in MP/ 3 was conducted under a preliminary prepared plan :

1. Training camp in Antholz /ITA 16.07-26.07. 2016
2. Training camp in Sjenica/SRB 28.07-12.08.2016
3. Due the lack of sufficient ammunition in Week 3 and Week 4, led to combine any shooting drills with dry shooting.

**2.Athletes participation in training proces :**

<i>Name</i>	<i>Planed training days</i>	<i>Executed training days/ meam program</i>	<i>Executed training days/club program</i>	<i>DNP due to Injuries Illness</i>	<i>Percentage participation</i>	<i>Evaluation</i>
1. Edin Hodzic	27	26			96.3 %	1. <b>Very good</b> fulfilled the planed loading 2. <b>Good</b> shooting performance of workout
2.Dejan Krsmanovic	27	18			66.7 %	1. <b>Good</b> fulfilled the planed loading 2. <b>Good</b> shooting performance of workout
3.Dzenis Avdic	27	26			96.3 %	1. <b>Good</b> fulfilled the planed loading 2. <b>Satisfactory</b> shooting performance of workout
4.Redzep Hodzic	27	26			96.3 %	1. <b>Very good</b> fulfilled the planed loading 2. <b>Average</b> shooting performance of workout
5.Denis Dzekovic	27	26		1	96.3 %	1. <b>Very good</b> fulfilled the planed loading 2. <b>Shooting performance</b> : Prone good,Standing weakly
6.Majda Drndic	27	25			92.6 %	1. <b>Good</b> fulfilled the planed loading 2. <b>Average</b> shooting performance of workout
7. Inesa Zekic	27	20			70.1 %	1. <b>Average</b> fulfilled the planed loading 2. <b>Weakly</b> shooting performance of workout
8. Dzejlana Hasimovic	27	23		3	85.2 %	1. <b>Good</b> fulfilled the planed loading 2. <b>Satisfactory</b> shooting performance
9.Anastasija Vojnovic	27	21		2	77.8 %	1. <b>Average</b> fulfilled the planed loading 2. <b>Average</b> shooting performance of workout

## Conducting, control and analysis of the training process

### A. Analyze the performance in the HR zones

Comparative analysis of the work done by HR zones

HR zones	Plan	Executions	Percentage
CR zone	7.10 h	6.50 h	95.3 %
AR1 zone	26.00 h	26.40 h	102.0 %
AR2 zone	22.30 h	20.20 h	90.4 %
MR zone	6.00 h	5.20 h	88.9 %
ANR zone	2.20 h	1.30 h	64.3%
Total/Average	64.00 h	60.40 h	94.8 %

#### Analysis:

1. Analysis of the data shows good average performance of the planned HR proportions.
2. The energy well-providing mainly aerobic with partly including the anaerobic mechanisms
3. Good realization of the trainings in the area of ALM-ANLM with La to 3-6 ml mol with goal: absorption of high % O<sub>2</sub> from atmospheric air

#### Conclusion for next MP 4:

1. To increase the body's ability for fast recover the pulse and the breathing on the shooting range, during the first 10-15 seconds, as a precondition for successful shooting at submaximal workloads.
2. Functional aims for the MP 4
  - ✓ Further intensive development of aerobic-anaerobic capacity.
  - ✓ Entering the zone of the aerobic-anaerobic energy providing.
  - ✓ The limits of the zone from aerobic limit to anaerobic limit of metabolism with temporary intrusion in zone of MOC, La 6-10 ml mol.
  - ✓ Increasing of aerobic –anaerobics limit of metabolism and economizing of energies consumption.

### B. Analyze the performance in the Cyclical means

Comparative analysis of the work done by cyclical means

Cyclical means	Plan	Executions	Percentage
Running	18.00 h	16.10 h	89.8 %
Bicycling	15.00 h	15.00 h	100.0 %
Roller skis	31.00 h	29.30 h	93.0 %
Average	64.00 h	60.40 h	96.6%

**Analysis:** Analysis of the data, shows good average performance of the planned loading in different cyclical means by most of athletes.

**Conclusion:** In the next MP 4 not require adjustments to the planned proportions of different means. Have to follow preliminary planed trainings program.

### C. Analyze the performance in the Shooting training

#### Comparative analysis of the work done by shooting means

<i>Shooting means</i>	<i>Plan</i>	<i>Executions</i>	<i>Percentage</i>
<i>Without loading</i>	<i>450 rds</i>	<i>460 rds</i>	<i>102.2%</i>
<i>CT 1~130 HR</i>	<i>11/660 rds</i>	<i>10/600 rds</i>	<i>90.1 %</i>
<i>CT 2~160 HR</i>	<i>8/500 rds</i>	<i>8/480rds</i>	<i>96.0%</i>
<i>Speed shooting</i>	<i>1/100</i>	<i>1/60 rds</i>	<i>60.0%</i>
<i>Comp. shooting</i>	<i>30 rds</i>	<i>30 rds</i>	<i>100.0 %</i>
<i>Dry shooting</i>	<i>9 h</i>	<i>8 h</i>	<i>88.9 %</i>
<i>Shooting trainings</i>	<i>19 drills</i>	<i>18 drills</i>	<i>94.7 %</i>
	<i>Average</i>		<i>90.3%</i>

**Analysis:** The overall analysis of shooting means, demonstrates good implementation of the planned indicators. Due the lack of sufficient ammunition in Week 3 and Week 4, led to combine any shooting drills with dry shooting.

1. By most athletes have an average adaptation of the shooting performances as was achieved shooting success as follows :

#### Best shooting performance in CT1/HR 130 :

<i>Position</i>	<i>WC Standard</i>	<i>Team average</i>
Prone	Over 95 %	91.7 %
Standing	Over 95 %	85.5 %

1. The delay of the WC standard for this indicator is 3.3 % respectively for prone position and 9.5% for the standing position.
2. Realizing of the shooting success rate in CT1/HR 130 is average 88.6 %. It is necessary to develop these qualities of the shooting to reach success of minimum 90% in the next stage of preparation.

#### Best shooting performance in CT2/HR 160 :

<i>Position</i>	<i>WC Standard</i>	<i>Team average</i>
Prone	Over 90 %	84.2 %
Standing	Over 90 %	82.8 %

1. The delay of the WC standard for this indicator is 5.8 % respectively for prone position and 7.2 % for the standing position.
2. Realizing of the shooting success rate in CT1/HR 160 is average 83.5 %. It is necessary to develop these qualities of the shooting to reach success of minimum 86.0 % in the next stage of preparation.

#### Best shooting performance Competition conditions :

<i>Position</i>	<i>WC Standard</i>	<i>Team average</i>
Prone	Over 90 %	75.0 %
Standing	Over 90 %	69.0 %

1. The delay of the WC standard for this indicator is 15.0 % respectively for prone position and 21.0 % for the standing position.

2. Realizing of the shooting success rate in CT1/HR 160 is average 72.0 %. It is necessary to develop these qualities of the shooting to reach success of minimum 76.0 % in the next stage of preparation.

**Average individual shooting performance reached in MP 3 :**

Name	Prone	Best result	Standing	Best result
EDIN	88.0 %	100.0 %	83.2 %	96.0 %
DEJAN	81.4 %	93.3 %	72.6 %	95.0 %
DZENIS	65.8 %	83.3 %	56.1 %	75.0 %
REDZEP	73.4 %	92.0 %	76.6 %	90.0 %
DENIS	75.6 %	95.0 %	51.3%	73.3 %
MAJDA	70.3 %	95.0 %	50.0 %	72.0 %
DZEJLANA	59.6 %	84.0 %	57.0 %	68.0 %

1. On this indicator results are close to the WCs standard, but they are still inconsistent

2. Currently average level of shooting structure for most athletes:

- Time to first shot within 14sec/18 sec standing/prone
- Shooting tempo between 1st to 5th shot within 12-16 seconds
- Manipulation and leaving the shooting range is between 2-5 seconds.
- There are certain delay of 2- 4 sec in general timely structure of the prone position at the athletes: Redzep Hodzic, Dzenis Avdic and 8-14 sec by all Junior/Women athletes.

**Conclusions:**

1. Needed is the next stage of training to improve the quality of shooting in CT1/160 as a precondition to the next stage of development of shooting performance with loading in Competition conditions
2. Developing and stabilization of shooting structure in CT2/160

**D. Analysis Test competitions**

**D.1 Comparative table Sprint competition - BRB Roller cup 1/ 2015 and 2016**

**06.08.2016 BRB Roller Cup 1 /Sprint 10 km**

Rank	Name	P	S	Speed Last loop	Running Time	Race Speed	Race Time	Shoot succes	IMPROVING				
									Speed last loop	Running time	Race speed	Race time	Shoot succes
1.	EDIN	4	4	2.17 min	24.04 min	2.24 min/km	29.04 min	20%	base	- 1.22 min	- 9 sec	+ 1.08 min	- 50 %
2.	DEJAN	2	4	2.18 min	24.39 min	2.27 min/km	28.39 min	40%	base	- 2.01 min	- 13 sec	- 1.31 min	- 10%
3.	REDZEP	3	1	2.19 min	24.57 min	2.29 min/km	27.57 min	60%	base	- 1.14 min	- 8 sec	- 1.44 min	+ 10%
4.	DZENIS	3	3	2.26 min	26.01 min	2.36 min/km	30.01 min	40%	base	-2.20 min	- 14 sec	- 2.50 min	+ 10%
**	DENIS	4	3	2.28 min	20.37 min	2.45 min/km	25.07 min	30%	base	- 6.28 min	- 53 sec	- 6.08 min	- 10%

**08.08.2015 BRB Roller Cup 1/ Sprint 10 km**

<b>Ran k</b>	<b>Name</b>	<b>P</b>	<b>S</b>	<b>Speed Last loop</b>	<b>Running Time/min</b>	<b>Race Speed</b>	<b>Race Time</b>	<b>Shoot succes</b>
1	EDIN	1	2		25.26 min	2.33 min/km	27.56 min	70%
2	DEJAN	1	4		26.40 min	2.40 min/km	30.10 min	50%
3	REDZEP	3	2		26.11 min	2.37 min/km	29.41 min	50%
4	DZENIS	4	3		28.21 min	2.50 min/km	32.51 min	30%
5	DENIS	2	4		27.05 min	3.38 min/km	31.15 min	40%

## D.2 Comparative table Pursuit competitions BRBRC 1/Season 2016 and 2016

07.08.2016 BRB Roller Cup1 / Pursuit 13.2 km

<b>Ran k</b>	<b>Name</b>	<b>P</b>	<b>S</b>	<b>Speed Last loop</b>	<b>Running Time</b>	<b>Race Speed</b>	<b>Race Time</b>	<b>Shoot success</b>	<b>IMPROVING</b>				
									<b>Speed last loop</b>	<b>Running time</b>	<b>Race speed</b>	<b>Race time</b>	<b>Shoot success</b>
1.	EDIN	0 3	1 1	2.23 min	33.42 min	2.30 min/km	37.47 min	75%	base	- 0.19 min	- 5 sec	- 1.09 min	+ 20 %
2.	DEJAN	4 3	3 3	2.23 min	34.28 min	2.33 min/km	42.58 min	35%	base	- 1.27 min	- 6 sec	+ 6 sec	- 20%
3.	REDZEP	2 1	0 2	2.19 min	35.16 min	2.37 min/km	39.46 min	75%	base	- 0.30 min	- 6 sec	- 0.37min	+ 35%
4.	DZENIS	1 2	4 2	2.14 min	34.59 min	2.36 min/km	41.29 min	55%	base	base	base	base	base
**	DENIS	3 2	4 4	2.16 min	28.56 min	3.12 min/km	37.26 min	35%	base	- 3.18 min	-0.44 min	- 1.48 min	- 15%

09.08.2015 BRB Roller Cup 1 / Pursuit 12 km

<b>Rank</b>	<b>Name</b>	<b>P</b>	<b>S</b>	<b>Speed Last loop</b>	<b>Running time</b>	<b>Competition Speed</b>	<b>Race time</b>	<b>Shoot success</b>
1.	EDIN	3 3	3 0		34.01 min	2.35 min/km	38.49 min	55%
2.	DEJAN	1 3	4 1		34.55 min	2.39 min/km	42.52 min	55%
3.	REDZEP	4 3	3 2		35.46 min	2.43 min/km	40.23 min	40%
4.	DZENIS				DNF			
**	DENIS	2 1	3 4		32.14 min	3.56 min/km	39.14 min	50%

## D.3 Comparative table Specific power test hands / EM stimulator/Max 5 min

<b>Name</b>	<b>11.07.2016 Distance/m</b>	<b>Speed m/s</b>	<b>HR</b>	<b>08.08.2016 Distance/m</b>	<b>Speed m/s</b>	<b>HR</b>	<b>Improvement</b>
1.Edin	1 333m	4.43 m/s	180	1 393 m	4.64 m/s	175	+ 60 m/+0.21 m/s
2.Dzenis	1 249 m	4.29 m/s	186	1 371 m	4.57 m/s	175	+122 m/+0.38 m/s
3.Redzep	1 258 m	4.11 m/s	179	1 316 m	4.31 m/s	174	+ 58 m/+ 0.20 m/s
4.Denis	1 167 m	3.97 m/s	185	1 224 m	4.08 m/s	180	+ 57 m/+ 0.16 m/s
5.Dejan	1 270 m	4.23 m/s	182	<b>DNP</b>			
<b>WOMEN TEAM 3 min</b>							

1.Maida	677 m	3.66 m/s	188	700 m	3.89 m/s	180	+ 23 m/+0.23 m/s
2.Anastasja	<b>DNP</b>	<b>DNP</b>		<b>DNP</b>			<b>DNP</b>
3.Dzejlana	686 m	3.82 m/s	192	696 m	3.87 m/s	180	+ 10 m/+ 0.05 m/s
4. Inesa	676 m	3.81 m/s	190	702 m	3.90 m/s	177	+ 16 m/+0.09 m/s

**Analysis:** The comparative analysis **Competition tests on 10 km Sprint**, show the following trends:

1. Significantly increase the **Running time** in the race at almost all athletes an average of **1.44 min faster** , compared with the previous season 2015.
2. Significantly increase the **Race speed** in the competition at almost all athletes an average of **11 sec/km faster** , compared with the previous season 2015.
3. Significantly increase the **Race time** at almost all athletes an average of **1.48 min faster** , compared with the previous season 2015.
4. Increase the **Shooting success** at most athletes an average with **10 % more** , compared with the previous season 2015.
5. Realization of an average Running speed of **2.27 min / km** , which compared to the previous season at this stage ( 2.40 min/km) is with **13 sec/km** faster.

#### **Conclusions :**

1. Data from the comparative analysis showed a significant increase of the functional level in almost all athletes compared with the previous 2015 season, which is primarily a result of accumulated cumulative training effect.
2. Significant dynamics of development in terms of: speed, running time and competition time.
3. Higher speeds running at almost all athletes at lower values of HR
4. Significant economizing of lactate activity. Realization of lower lactate values.
5. High level of the endurance on long distances, which is a very good precondition for the development of the endurance of short distances.
6. The comparative analysis of the tests for special strength endurance hands in MP 2 and MP 3, showed an increase of the special power potential of the shoulder girdle, as the average increase of the covered distance is 74.2 m, and the average increase in the speed is with 0.23.8 m/ sec faster.

#### D.4 Comparative table Ranking regards the best reached speed and success factor/MP3

<b>Reached the best speed in MP 3 2016</b>		
<b>Rank</b>	<b>Name</b>	<b>Best reached Speed min/km</b>
1.	EDIN HODZIC	<b>2.24 min</b>
2.	DEJAN KRSMANOVIC	<b>2.27 min</b>
3.	REDZEP HODZIC	<b>2.29 min</b>
4.	DZENIS AVDIC	<b>2.36 min</b>
5.	DENIS DZEKOVIC	<b>2.45 min</b>
<b>WOMEN TEAM</b>		
1.	MAJDA DRNDIC	<b>2.55 min</b>
2.	ANASTASIJA VOJNOV	<b>3.05 min</b>
3.	INESA ZEKIC	<b>3.11 min</b>
4.	DZEJLANA HASIMOV	<b>3.21 min</b>
<b>MEN Team average</b>		<b>2.27 min/km</b>
<b>WOMEN Team average</b>		<b>3.08 min/km</b>

<b>Reached best speed in MP 3 2015</b>			<b>Improving Speed/km</b>
<b>Rank</b>	<b>Name</b>	<b>Best reached Speed min/km</b>	
1.	EDIN HODZIC	<b>2.33min</b>	- 9 sec
2.	DEJAN KRSMANOV	<b>2.40 min</b>	- 13 sec
3.	REDZEP HODZIC	<b>2.37 min</b>	- 8 sec
4.	DZENIS AVDIC	<b>2.50 min</b>	- 14 sec
5.	DENIS DZEKOVIC	<b>3.38 min</b>	- 53 sec
<b>WOMEN TEAM</b>			
1.	MAJDA DRNDIC	<b>DNP</b>	
2.	ANASTASIJA VOJNO	<b>3.11 min</b>	- 6 sec
3.	INESA ZEKIC	<b>DNP</b>	
4.	DZEJLANA HASIMO	<b>4.34 min</b>	- 1.13 min
<b>MEN Team average</b>		<b>2.40 min/km</b>	-13 sec
<b>WOMEN Team average</b>		<b>3.53 min/km</b>	- 45 sec

#### E. Control and registration of the training process

##### **Analysis:**

1. In all the basic training was registered control in terms of:

- Running speed(min/km) : loops speed and average speed
- Pulse(HR) : loops and average HR
- La(value of lactate) : loops and average value

This system of registration of parameters in basic training(speed, heart rate and LA) enable to register the adaptation to planed functional stress,correction of zones and planning of new functional stress.

#### **Comparative table Functional test Maximal O2 Consumption**

<b>Name</b>	<b>Functional test 10.07.2016</b>			<b>Functional test</b>			<b>Improvment</b>	
	<b>VO2 Max/ml</b>	<b>VO2/KG ml/kg</b>	<b>Running Time</b>	<b>VO2 Max/ml</b>	<b>VO2/kg ml/kg</b>	<b>Running Time</b>	<b>Running Time</b>	<b>VO2 Max/ml</b>
EDIN	6 240	69.3	21.00 min					
DEJAN	4 910	59.9	23.20 min					
REDZEP	4 570	73.7	23.20 min					
DZENIS	5 570	77.4	23.30 min					
DENIS	4 140	71.4	20.00 min					
<b>Average</b>	<b>5 086</b>	<b>70.34</b>	<b>22.23 min</b>					



1. The conducted test for functional diagnostics in SMC Beograd, showed the following trends:

- ✓ High level of functional parameters
- ✓ High average running time during the test - **22.23 min.**
- ✓ Deep and smoothly deployment of the glycolytic chain with displacement of ANLM(aerobic-anaerobic limits of metabolism) within the limits of 18 minutes - 20 minutes of the test
- ✓ Implementation of test at significantly lower  $\dot{V}_{O_2}$  HR values, speaks of high economic efficiency in the implementation of the effort during the test

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