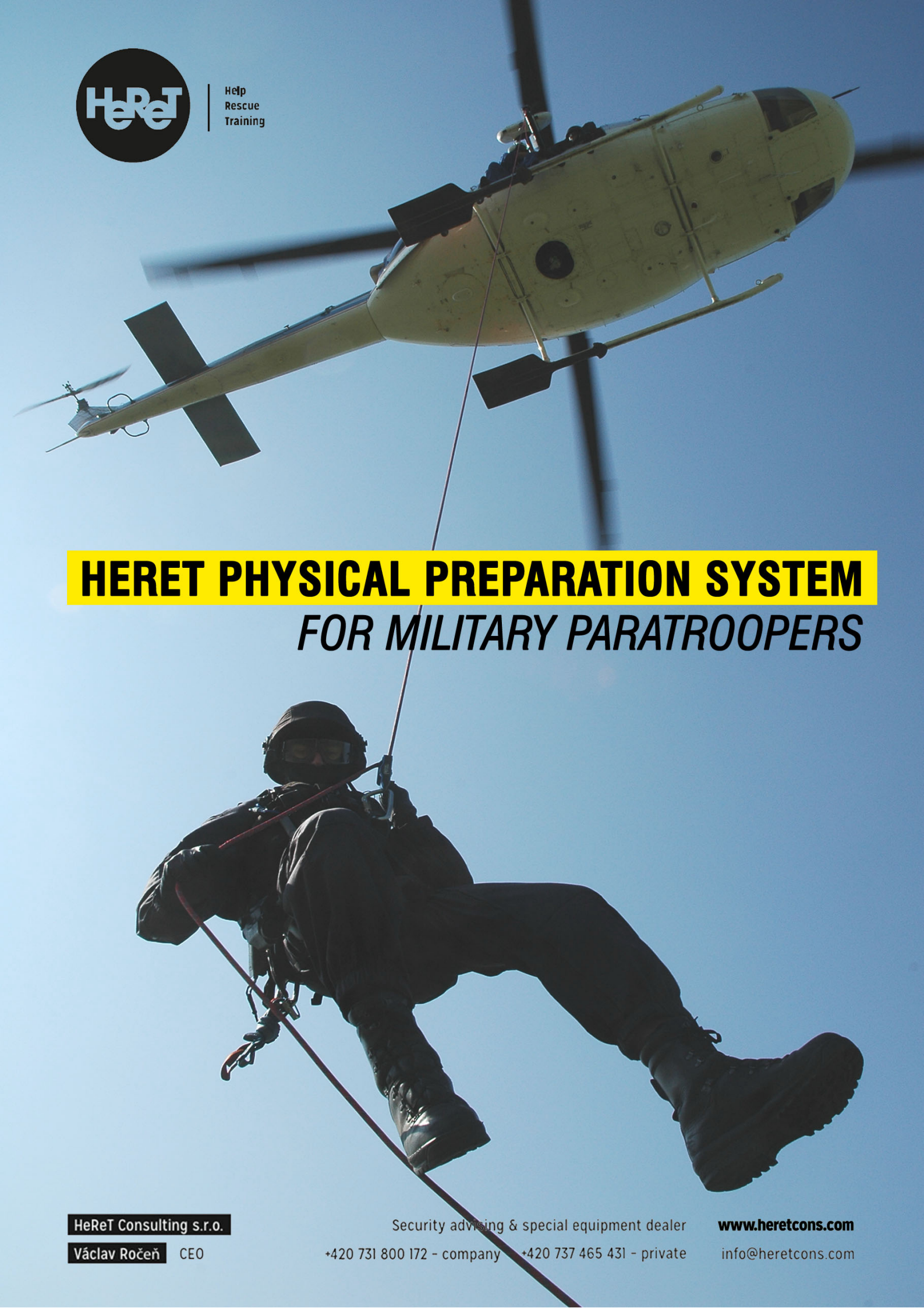




Help
Rescue
Training



HERET PHYSICAL PREPARATION SYSTEM *FOR MILITARY PARATROOPERS*

HeReT Consulting s.r.o.

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Contents

1. Company Profile.....	1
2. Description of HeReT Physical Preparation System.....	2
3. Benefits of HeReT Physical Preparation System	3
4. Six methods of building excellent conditioning level.....	4
5. Evaluation criteria	5
6. Evaluation grading.....	5
7. Phase 1 - Basic physical preparation	6
8. Phase 2 - Specific physical preparation.....	9
9. Phase 3 - Application & combination of physical preparation with Combat activities.....	12
10. HeReT Toolbox of the Physical Preparation	15
11. HeReT Exercise library of the Physical Preparation.....	16

1. Company Profile

In terms of any particular interests of our customer the HeReT Consulting Ltd. quickly finds a solution and in practice will fulfill its motto - Help, Rescue, and Training.

During the last year, the company has designed two important projects of training centers, which have been received very positively by customers.

The company also performs consulting services in all aspects of army, police and special unit's activities. In this context, we note that one of the important activities of the company is working out security analysis, especially for the Middle East and the North Africa. The output of each of these analyzes are safety recommendations, including the provision of security services. Other important service that company can arrange for customers is to propose and ensure the protection of people, buildings and industrial complexes, including significant authorities, pipelines and refineries. It is also possible to design and help to ensure security of institutions such as prisons.

The concept of supply of special materials means supply all materials including weapons and ammunition for the army, police, rescue and fire

brigades except materials, weapons and ammunition prohibited by European Union, more precisely by Czech authorities.

The company HeReT Consulting Ltd. was established three years ago and is successfully engaged in the provision of services and materials for army, police, rescue and fire brigades. The concept of the provision of services especially means design and delivery of training centers as well as the implementation of training.

The company is authorized to deliver this material, weapons and ammunition to all destinations, except destinations prohibited by European Union, if you like by Czech authorities.

The company is based especially on knowledge and lifelong experience of the company founder – Mr. Václav Rocen, CEO.

Mr. Václav Rocen has long experience in special anti-terrorist unit and has a legal background. HeReT Consulting Ltd., as a provider of special services and goods, considers any action for any customer to be totally confidential and is always ready to sign and fully comply with NCND agreement. This is the reason for the non-specific references, but there is possible to state, that company currently solves several security and training projects in the Middle East and the North Africa.

2. Description of HeReT Physical Preparation System

"Be more prepared than the challenges you face"

HeReT Physical Preparation System (PPS) is built in a way to enable soldier to easily re-use the skills learnt during the PP phase into his daily activities. PPS was heavily inspired by the system TacFit and similar others. Drills and exercises are designed to improve and strengthen necessary skills for combat application. Every techniques and exercise is built in a way to easily apply into combat drills (phase 3 of the system). Physical preparation phases consist of three phases (see below). System combines physical exercise with effective military drills (obstacle courses, etc.) to establish clear connection between building of conditioning level and combat skills.

The Physical Preparation combines various High Intensive Interval Trainings (HIIT) to improve skills necessary for military duty. System is using six systems of HIIT training that are designed in a way to improve and strengthen the body and mind of the soldier.



3. Benefits of HeReT Physical Preparation System

- Proved ZERO training-related injuries
- Development of strength, power, metabolic conditioning, dynamic body movement and mobility with specific focus on joint health, active recovery and injury prevention.
- Significant improvement of conditioning level
- Whole Workout in less than 30 minutes
- Wide range of High Intensive Workouts with bodyweight as well as with many conditioning tools
- Provides military instructors with objective trails of justification for graduation or declination of students during the exam.
- Allow to regress in case the performance of the student is not meeting acceptance criteria to setup less challenging exercises.
- Allow to progress in case the performance of the student is excellent and allows setup more challenging exercises.
- Specifically tailored training protocols tapping into the energy system of hostile encounters as job enablers for the aspirants of the special units' entry exams.
- 6 different methods to improve stress resilience in fight situations

4. Six methods of building excellent conditioning level

1. 20/10x8 + 60

- **Description** - 8 sets of 20 seconds exercises / 10 seconds rest per exercise with 60 seconds rest between exercises
- For **benchmark** needs score the lowest of the 8 sets pre exercise. Total for score.
- **Benefit** – Burst-Recover-Burst metabolic conditioning. Maximizing recovery in shortest time possible

2. 4/1x4

- **Description** - 4 stations of 4 minutes of continuous exercise followed by 60 seconds of rest between exercises.
- For **benchmark** needs add total reps per exercises and divide by 4 for score.
- **Benefit** – Maximizes repeated effort and implements burst recovery from 20/10*8 method.

3. EMOTM

- **Description** – circuit to be achieved within 60 seconds and rest period determined by remaining time left in minute.
- For **benchmark** needs score total rounds where entire circuit was completed in 60 seconds.
- **Benefit** – development of speed and metabolic conditioning

4. AMRAP

- **Description** – maximum number of circuits to be achieved within 20 minutes. No scheduled recovery, it is up to student.
- For **benchmark** needs score the total rounds achieved.
- **Benefit** – development of strength-endurance training

5. [90/30x5]*2

- **Description** – 5 stations of 90 seconds of continuous exercise and followed by 30 seconds of rest. Perform each exercise once before 2nd round.
- For **benchmark** needs score the lowest set of the two rounds. Add totals.
- **Benefit** – it is compressed version of 4/1*4. Repeated effort burst-recovery over duration. It further develops strength endurance and metabolic conditioning.

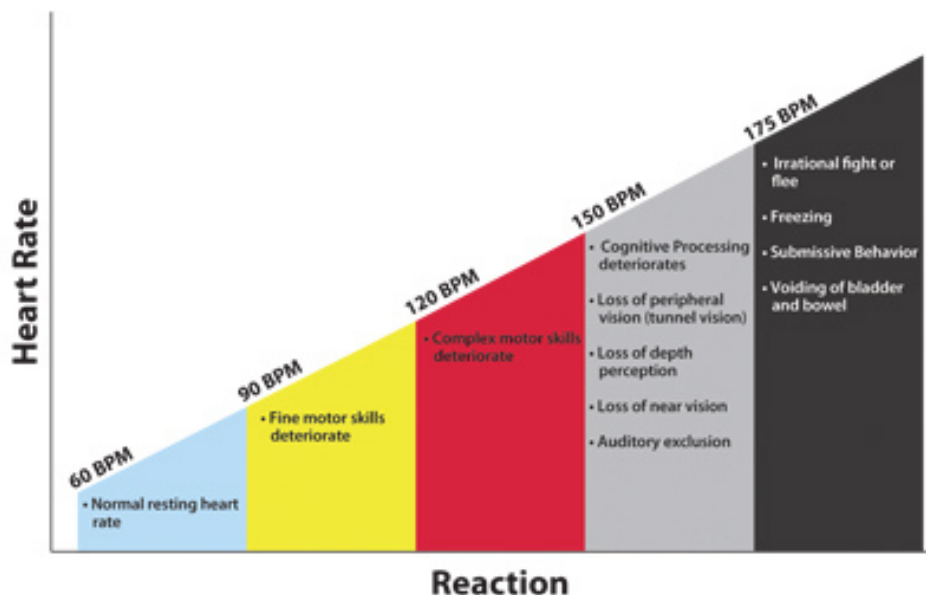
6. AFAP-T

- **Description** – complete the set volume of repetitions as fast as possible.
- For **benchmark** needs score the finish time.
- **Benefit** – Maximizes recovery time during repeated effort without reducing speed or tempo over duration. Develop strength endurance and metabolic conditioning.

5. Evaluation criteria

The system recognizes following subjective and objective evaluation criteria:

- **Heart rate** [HR] – objective criteria. The soldier should always maintain 60-80% of his total HR during all the exercises which was proven to be most effective zone for performance under stress.
- **Technique** – subjective criteria. The soldier has to maintain best technique possible to prevent any injury.
- **Exertion** – subjective criteria. The soldier has to evaluate himself how physically difficult the workout was for him.
- **Discomfort** – subjective criteria. The soldier should perform the exercises with minimum pain in limbs and muscle (please do not mix this up with standard muscle fatigue that is natural result of HIIT exercises)



6. Evaluation grading

Technique

1-2 Very bad
3-4 Bad
5-6 Acceptable
7-8 Good
9-10 Very good

Exertion

1-2 Very easy
3-4 Kind of easy
5-6 Mid difficult
7-8 Very difficult
9-10 Extremely difficult

Discomfort

1-2 Very Comfortable
3-4 Mid Comfortable
5-6 Discomfortable
7-8 Very Discomfortable
9-10 Extremely Discomfortable

7. Phase 1 - Basic physical preparation

Basic PP is about to set up initial level of conditioning and identify weak areas in status quo. Next step is to fix major muscle misbalances and develop entry level in all four areas (endurance, power, speed and flexibility).

TRAINING GOALS

- Strengthen skills necessary for job to be done
- Prepare body and mind for more advanced development

TARGETED SKILLS

- **Endurance**
 - System: High Intensive Interval Training
 - Methods:
 - Time limited run (mid/long)
 - Mid/Long distance march
 - Mountain tracks
 - Swimming
 - Tools:
 - Bodyweight
 - Additional weight (dumbbells, backpack,...)
- **Power** (static vs. ballistic, absolute vs. short term)
 - System:
 - High Intensive Interval Training
 - Complex body power development, static & ballistic power
 - Methods:
 - Obstacle courses
 - Short time limited run
 - Run with additional weight (partner, backpack...)
 - Climbing (ropes, rope nets, walls)
 - Swimming & running in the water
 - Tools:
 - Bodyweight (solo vs. partner's weight)
 - Additional weight (dumbbells, backpack,...)
 - Hammers & tires
 - Sandbags

- **Speed**

- System:
 - High Intensive Interval Training
- Methods:
 - Time limited obstacle courses
 - Short time limited run
 - Time limited swimming & running in the water
- Tools:
 - Bodyweight (solo vs. partner's weight)
 - Additional weight (dumbbells, backpack,...)

- **Flexibility** (incl. development of fine motor skills under stress)

- System:
 - Warm Up + Cool Down exercises
 - Complex body power development
 - Balance development
- Methods:
 - Stretching (static & dynamic)
 - Special Breathing methods
- Tools:
 - Bodyweight only



BENCHMARK EXERCISES

The benchmark takes approx. 25 minutes and consists of 6 exercises to be performed in 8 series. Each one takes 20 seconds of exercise followed by 10 seconds of rest. Between each exercise there is a 60 seconds break to prepare for next one.

- Tactical Lunge
- Plank Pull Knee
- Sit Thru Knee
- Tactical Pushup
- Spinal Rock Basis
- Tripod Vertical

ENTRY & EXIT CRITERIA:

1. **Entry criteria** are result of initial testing to setup baseline for further PP development. As entry criteria is used following benchmark:
2. **Exit criteria** are result of systematic and regular training covered with this phase. It is recommended to use the same evaluation criteria as with entry criteria (benchmark) to be able to evaluate progress via subjective & objective criteria.

Entry criteria

- | | |
|-----------------------|--------------------|
| • Total score | 50 points |
| • Heart rates between | 60-80% of Total HR |
| • Technique minimum | 8 |
| • Exertion maximum | 6 |
| • Discomfort maximum | 4 |

Exit criteria

- | | |
|-----------------------|--------------------|
| • Total score | 60 points |
| • Heart rates between | 60-80% of Total HR |
| • Technique minimum | 8 |
| • Exertion maximum | 6 |
| • Discomfort maximum | 4 |

8. Phase 2 - Specific physical preparation

Specific PP is targeting four basic skills (endurance, power, speed and flexibility) in more depth. The PP is focused more to specific activities in order to closely link PP with military needs and requirements.

TRAINING GOALS

- Bring PP closer to specific military needs and requirements

TARGETED SKILLS

- **Endurance**
 - System: High Intensive Interval Training
 - Methods:
 - Time limited run (mid/long)
 - Mid/Long distance march
 - Mountain tracks
 - Swimming
 - Tools:
 - Bodyweight
 - Additional weight (dumbbells, backpack,...)
- **Power** (static vs. ballistic, absolute vs. short term)
 - System:
 - High Intensive Interval Training
 - Complex body power development, static & ballistic power
 - Methods:
 - Obstacle courses
 - Short time limited run
 - Run with additional weight (partner, backpack...)
 - Climbing (ropes, rope nets, walls)
 - Swimming & running in the water
 - Tools:
 - Bodyweight (solo vs. partner's weight)
 - Additional weight (dumbbells, backpack,...)
 - Hammers & tires
 - Sandbags
- **Speed**
 - System:
 - High Intensive Interval Training
 - Methods:
 - Time limited obstacle courses
 - Short time limited run
 - Time limited swimming & running in the water



- Tools:
 - Bodyweight (solo vs. partner's weight)
 - Additional weight (dumbbells, backpack,...)
 - Jumping Ropes
 - Climbing ropes
 - Various jumps onto/from plyoboxes (various size)
 - Boxing bag
 - Flow drills with knife
- **Flexibility** (incl. development of fine motor skills under stress)
 - System:
 - Orientation in area (air, land, water)
 - Intro into parachute skills
 - Fast reflexes development
 - Methods:
 - Special Breathing methods (4x4)
 - Basic gymnastic exercises (with combination of various jumping exercises)
 - Various climbing exercises (to be defined in separate chapter)
 - Various underwater exercises to get familiar with activities under water (to be defined in separate chapter)
 - Tools:
 - Bodyweight
 - Jumping rope
 - Various exercises with Basketball / Tennis ball (to be defined in separate chapter)
 - Various Ladders (wood, rope, metal, ...)

BENCHMARK EXERCISES

The benchmark takes approx. 25 minutes and consists of 6 exercises to be performed in 8 series. Each one takes 20 seconds of exercise followed by 10 seconds of rest. Between each exercise there is a 60 seconds break to prepare for next one.

- Front Lunge Jump
- Plank Push
- Sit Thru Reach
- Screw Pushup
- Spinal Rock Pike
- Tripod Twist

ENTRY & EXIT CRITERIA

1. **Entry criteria** are result of initial testing to setup baseline for further PP development. As entry criteria is used following benchmark:
2. **Exit criteria** are result of systematic and regular training covered with this phase. It is recommended to use the same evaluation criteria as with entry criteria (benchmark) to be able to evaluate progress via subjective & objective criteria.

Entry criteria

- Total score 50 points
- Heart rates between 60-80% of Total HR
- Technique minimum 8
- Exertion maximum 6
- Discomfort maximum 4

Exit criteria

- Total score 60 points
- Heart rates between 60-80% of Total HR
- Technique minimum 8
- Exertion maximum 6
- Discomfort maximum 4

9. Phase 3 - Application & combination of physical preparation with Combat activities

This phase targets connection of PP with combat drills. All the exercises are done with full tactical gear and weapons that are usually used in combat missions.

TRAINING GOALS

Combine & Apply PP in combat training

TARGETED SKILLS

- **Endurance**
 - System: High Intensive Interval Training
 - Methods:
 - Obstacle courses – physical conditioning combined with combat skills
 - Long distance run and swim circuits combined with rope climbing
 - Conflict scenarios (self-defense)
 - H2H (hand to hand)
 - H2W (hand to weapon)
 - W2W (shooting, knife combat...)
 - Tools:
 - Bodyweight
 - Additional weight (dumbbells, backpack,...)



- **Power** (static vs. ballistic, absolute vs. short term)
 - System:
 - High Intensive Interval Training
 - Complex body power development, static & ballistic power
 - Methods:
 - Obstacle courses
 - Short time limited run
 - Run with additional weight (partner, backpack...)
 - Climbing (ropes, rope nets, walls)
 - Swimming & running in the water
 - Tools:
 - Bodyweight (solo vs. partner's weight)
 - Additional weight (dumbbells, backpack,...)
 - Hammers & tires
 - Sandbags

- **Speed**
 - System:
 - High Intensive Interval Training
 - Methods:
 - Time limited obstacle courses
 - Short time limited run
 - Time limited swimming & running in the water
 - Tools:
 - Bodyweight (solo vs. partner's weight)
 - Additional weight (dumbbells, backpack,...)
 - Jumping Ropes
 - Climbing ropes
 - Various jumps onto/from plyoboxes (various size)
 - Boxing bag
 - Flow drills with knife

- **Flexibility** (incl. development of fine motor skills under stress)
 - System:
 - Orientation in area (air, land, water)
 - Advanced water combat skills + problem solving
 - Advanced parachute skills + problem solving
 - Fast reflexes development
 - Methods:
 - Gymnastic exercises (with combination of various jumping exercises)
 - Various climbing exercises (to be defined in separate chapter)



- Various underwater exercises to get familiar with activities under water (to be defined in separate chapter)
- Obstacle courses
- Tools:
 - Bodyweight + tactical gear + weapons

BENCHMARK EXERCISES

The benchmark takes approx. 25 minutes and consists of 6 exercises to be performed in 8 series. Each one takes 20 seconds of exercise followed by 10 seconds of rest. Between each exercise there is a 60 seconds break to prepare for next one.

- Front Lunge Leap
- Plank Push Squat
- Sit Thru Climb
- Guard Pushup
- Spinal Rock Drop
- Tripod Overhead Twist

ENTRY & EXIT CRITERIA

1. **Entry criteria** are result of initial testing to setup baseline for further PP development. As entry criteria is used following benchmark:
2. **Exit criteria** are result of systematic and regular training covered with this phase. It is recommended to use the same evaluation criteria as with entry criteria (benchmark) to be able to evaluate progress via subjective & objective criteria.

Entry criteria

- Total score 50 points
- Heart rates between 60-80% of Total HR
- Technique minimum 8
- Exertion maximum 6
- Discomfort maximum 4

Exit criteria

- Total score 60 points
- Heart rates between 60-80% of Total HR
- Technique minimum 8
- Exertion maximum 6
- Discomfort maximum 4

10. HeReT Toolbox of the Physical Preparation

The system is based on using of tools that can be found almost everywhere. The advantage if the system is

- minimum costs to get the tools
- multiple usage of the tools
- minimum repair costs
- tools that can be simply re-used as weapons
- tools than can be found everywhere and are completely independent to specific supplier

HeReT Toolbox consists of:

- Additional weights (dumbbells, clubbells, weight vest / backpack, water resistance...)
- non stable tools for balancing
- expanders
- hammers

- tires of various sizes
- stones of different weights
- jumping ropes
- sandbags
- climbing ropes
- special rope sizes (diameter, length)
- medicinballs
- clubbells
- knives, guns, sticks...

11. HeReT Exercise library of the Physical Preparation

The system is based on exercises with increasing complexity as well as possibility to reduce complexity in case the soldier is not able to maintain requested level of technique. The list below consists of exercises that are used within the system to systematically improve all four key skills (endurance, power, speed and flexibility).

- Bodyweight
- Climbing rope
- Rope
- Medicinball
- Clubbell
- Stone
- Sandbag
- Tire
- Expander