



# HITT

## HIGH INTENSITY TACTICAL TRAINING

### WHAT IS HITT?

The High Intensity Tactical Training (HITT) program’s primary purpose is to enhance operational fitness levels and optimize combat readiness and resiliency for the active duty United States Marine. This comprehensive strength and conditioning program takes into consideration the physical demands of operational related activities in order to optimize physical performance while in combat. By implementing the latest cutting edge training methods and fundamental scientific principles, the HITT program focuses on enhancing athleticism for today’s tactical athlete – The United States Marine.



### HOW IS HITT DIFFERENT?

The physical demands required to perform operational tasks for the US Marine Corps are specific in nature and require the highest levels of physical fitness. A tactical athlete’s physical fitness should include endurance, speed, strength, agility, and power in order to be successful in task specific situations. With functional training as the main focus in the HITT program, specific emphasis is dedicated towards proper periodization of training as it relates to resiliency. Programs can be designed and customized with regards to

specificity in three phases: Pre-Deployment, Deployment and Post-Deployment.

Performance Training Phases for a Marine											
Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
Pre-Deployment Period			Deployment Period						Post-Deployment Period		
Strengthen			Mitigate						Reintegrate/ Strengthen		

# COMBAT FIT. COMBAT READY.




# COMPONENTS OF THE HITT PROGRAM

The USMC High Intensity Tactical Training (HITT) program is a comprehensive combat-specific strength and conditioning program that is essential to a Marine's physical development, combat readiness and resiliency. Program emphasis is on key components with relation to superior speed, power, strength endurance and overall combat readiness while reducing the likelihood of injury and ensuring that all Marines are physically prepared for real-time combat / tactical situations while in theatre.

There are 4 unified components of functional based combat performance enhancement within the HITT program:

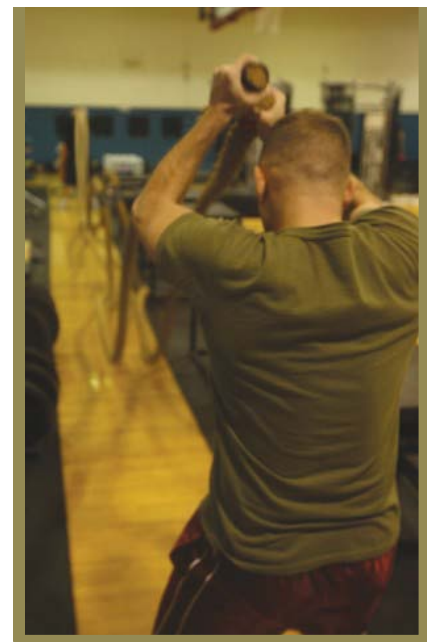
1. **ACTIVE DYNAMIC WARM-UP**
2. **STRENGTH AND POWER**
3. **SPEED AND AGILITY**
4. **FLEXIBILITY AND CORE STABILITY**

 <b>Combat HITT</b> MULTI-DIRECTIONAL														
ACTIVE DYNAMIC WARM-UP														
EXERCISES	SETS	TIME	DIST/REPS	REST TIME	EXERCISES	SETS	TIME	DIST/REPS	REST TIME	EXERCISES	SETS	TIME	DIST/REPS	REST TIME
Supine Straight Leg Raise	1	n/a	10 ea	10 sec	Walking Knee Hug	1	n/a	15 yds	10 sec	Scorpions	1	n/a	10 ea	10 sec
Scorpions	1	n/a	10 ea	10 sec	Walking Quad Stretch	1	n/a	15 yds	10 sec	Straight Leg March	1	n/a	15 yds	10 sec
Pirone Superman	1	n/a	10 ea	10 sec	Mountain Climbers	1	n/a	10 ea	10 sec	50% Build-Up	2	n/a	30 yds	10 sec
Donkey Kicks	1	n/a	10 ea	10 sec										
Hip Circles	2	n/a	10 ea	10 sec										
STRENGTH AND POWER														
OLYMPIC LIFTS						PLYOMETRICS								
EXERCISES	SETS	REPS	WEIGHT	REST TIME	EXERCISES	SETS	TIME	DIST/REPS	REST TIME	EXERCISES	SETS	TIME	DIST/REPS	REST TIME
Deadlift	2	15		2 min	Box Jumps	2	30 sec		2 min	Long Jumps	2	30 sec		2 min
Back Squat	2	15		2 min	Vertical Jumps	2	30 sec		2 min	Skater Jumps	2	30 sec		2 min
Front Squat	2	15		2 min	Romanian Deadlift	2	15		2 min	Stair Jumps	2	30 sec	20 yds	2 min
Hang Pull	2	15		2 min	Push Press	2	15		2 min	Hurdle Jumps	2	30 sec		2 min
SPEED AND AGILITY														
LADDER DRILLS						CONE DRILLS								
EXERCISES	SETS	TIME	DISTANCE	REST TIME	EXERCISES	SETS	TIME	DISTANCE	REST TIME	EXERCISES	SETS	TIME	DISTANCE	REST TIME
Lateral Cross-Overs	2	30 sec	n/a	30 sec	Zig-Zag Drill	1	30 sec	n/a	30 sec	W-Drill	1	30 sec	n/a	30 sec
Front/Back Cross-Overs	2	30 sec	n/a	30 sec	T-Drill	1	30 sec	n/a	30 sec	5-10-5 Drill	1	30 sec	n/a	30 sec
Single Leg Lateral Hops	2	30 sec	n/a	30 sec	4 Cone Drill	1	30 sec	n/a	30 sec					
Single Leg Front/Back Hops	2	30 sec	n/a	30 sec										
Single Leg Forward Hops	2	30 sec	n/a	30 sec										
FLEXIBILITY AND CORE STABILITY														
STATIC STRETCHES						CORE STRENGTH								
EXERCISES	SETS	REPS	TIME	REST TIME	EXERCISES	SETS	TIME	DISTANCE	REST TIME	EXERCISES	SETS	TIME	DISTANCE	REST TIME
Glute Stretch	2	n/a	30 sec	n/a	Res Obliq Double Leg Raise	1	30 sec	n/a	n/a	Resisted Supine Kneels	1	30 sec	n/a	n/a
Piriformis Stretch	2	n/a	30 sec	n/a	Resisted Supine Kneels	1	30 sec	n/a	n/a	Suspended V-Up	1	30 sec	n/a	n/a
Hip Flexor Stretch	2	n/a	30 sec	n/a	Resisted Sit-Up	1	30 sec	n/a	n/a	Resisted Sit-Up	1	30 sec	n/a	n/a
Quadricep Stretch	2	n/a	30 sec	n/a	Susp. Supine Plank (Elbows)	1	30 sec	n/a	n/a					
Low Hamstring Stretch	2	n/a	30 sec	n/a										



## DAILY WORKOUTS

Different workout program types with specificity towards a comprehensive approach designed to improve performance of job specific combat readiness balancing physical capacities, strength, power, speed, agility and endurance while reducing the likelihood of injuries and over training syndromes.



## CUSTOMIZABLE WORKOUTS

HITT workouts and programs can be customizable by any combat conditioning leader and fitness specialist and can integrate the ability to view downloadable videos that provide the proper execution of all exercises and movements in the program library.

**COMBAT FIT. COMBAT READY.**





# HITT

## HIGH INTENSITY TACTICAL TRAINING

### **The Marine – A Tactical Athlete**

The Tactical-Combat Athlete is anyone whose operational readiness requires speed, strength, agility, endurance, and quickness. In other words, military personnel are forced to perform in the tactical environment in order to execute their mission/operations. Based on the physical needs and skills required to successfully carry out their job duties it is necessary for these individuals to physically condition and prepare themselves as if they were a professional athlete.

### **Purpose**

The Combat Strength and Conditioning (HITT) program's primary purpose is to enhance operational fitness levels for the active duty US Marine. This comprehensive strength and conditioning program will consider the physical demands of operational related activities in order to optimize physical performance while in combat. By implementing the latest cutting edge training methods and fundamental scientific principles, the HITT program focuses on enhancing athleticism for today's tactical athlete – The United States Marine. This program will be partnered with the Combat Fitness Course (CFC) and the Combat Fitness Test (CFT) in order to maximize performance results.

### **Introduction**

The physical demands required to perform operational tasks for the US Marine Corps are specific in nature and require high levels of physical fitness. A tactical athlete's physical fitness should include endurance, speed, strength, agility, and power in order to be successful in task specific situations. Functional training is the main focus in the HITT program as the demands of these tasks are not unlike those required of an athlete who trains specifically for the movements dictated in their particular sport. Specific metabolic conditioning, strength training, agility, power and plyometrics are effective methods of training the tactical athlete while decreasing the likelihood of injuries.

### **Components of the HITT Program**

Military physical fitness training often times involves moderate to long distance running to improve endurance. While the body adapts and becomes proficient at using oxygen to perform steady state exercise for a long period of time, most tactical operations demand speed, agility, and strength/power: elements that cannot be trained with endurance exercises alone. Injury Prevention will be a main component of this program as the modalities used will focus on prehabilitative success. When training for endurance, speed, and power, the body responds differently to various stimuli. However, improvements can be made in all three areas simultaneously, if planned properly.

#### ***Strength and Power:***

Muscular strength and power are components of physical fitness that have direct application to operational success. For this reason, resistance training, Olympic lifting and plyometrics help prepare soldiers to carry the weight of their equipment and protective gear without fatiguing, while at the same time, move efficiently with the gear regardless of the task required. Olympic Lifting (OL) and Plyometric training are methods of improving muscular power, to produce a

large amount of force in a short period of time. OL and Plyometric exercises include actions where the movement is very explosive in nature to produce an action.

### ***Speed and Agility:***

The central nervous system is the body's control center and can be trained to respond to a stimulus by performing repetitive activities. Agility is the ability to change the direction of movement rapidly and is a method of training the nervous system to quickly respond to a stimulus. The tactical athlete should train for task specific agility to improve change of direction, movement patterns, and foot speed to reduce the likelihood of injury and improve performance when a situation occurs.

The tactical athlete should train specifically for speed development as it relates to acceleration, top speed sprinting, and deceleration movements. The three components of speed are critical to the effectiveness of combat operational success. With the integration of OL in the HITT program, the ankle, knee and hip joints are moving at a rate that is optimal for military functional training thus speed development is enhanced at a greater rate than not incorporating OL and injury prevention levels are increased.

### ***Injury Prevention and Mobility:***

While there are various intrinsic and extrinsic factors that contribute to sport related injury, a proper active dynamic warm up considerably reduces the chance of injury. As previously mentioned, warm-up activity can lower the viscosity of muscles, tendons, and ligaments resulting in an increased range of motion. This mechanism also plays a significant role in injury prevention. As the viscosity is lowered and the range of motion increased, athletes also experience a decrease in muscle and joint stiffness. This creates an internal environment that assists in reducing the likelihood of non-contact injuries caused by the stresses of sudden and unexpected movements.

### **Learning Tools**

Dartfish Video Analysis will be integrated into the HITT Program in order to deliver proper and standardized movement methodology and terminology to all Combat Fitness Coordinators (CFC's) and Semper Fit staff on each installation. Dartfish is a high growth, video-centric and customer driven company, which develops applications to use video and video enriched content in professional and communities' workflows.

By providing cutting-edge video and enrichment functionalities in easy-to-use applications, Dartfish makes the power of video accessible and will set the standard within our learning tools for the US Marines.

### **Implementation**

Proper implementation of the HITT Program will be critical to the effectiveness of the program. The HITT program will be used during/at unit PT, unstaffed functional fitness areas and all Semper Fit fitness facilities. The functional fitness areas on base installations will be housed with modalities such as TRX systems, Jump Stretch Bands, Vertimax stations Kettlebells and various core training equipment while the OL and primary strength component will be utilized in the Semper Fit facilities. Speed and Agility will be most likely utilized on a field on the base installation and can be conducted by either the unit PT or a Semper Fit staff member. A proper balance between the OL/Strength, Functional Fitness and Speed/Agility component will be critical to the mission of the program.

### **Staffing**

A *Combat Fitness Coordinator (CFC)* located on each base installation is essential to meet the demands of the HITT Program. This individual must attain the knowledge and background in strength and conditioning both from an educational background state as well as a hands-on (experience) state. All CFC's must have as a mandatory requirement the following:

- National Strength and Conditioning Association Certification – CSCS
  - *When available – TSAC (Tactical Strength and Conditioning Certification) from the NSCA*
- United States Weightlifting Association Certification – Level 1 Performance Coach
- At least 3 years as a fitness professional at either a Semper Fit facility, university or private sector
- BS Degree in Exercise Science, Kinesiology, Exercise Physiology or related field
- Dartfish Certified (when available)

The CFC shall lead and coordinate support for the Combat Strength and Conditioning Program as well as ensure that all combat strength and conditioning programs are delivered and/or instructed by Semper Fit staff members who possess a certification that is accredited by the National Commission for Certifying Agencies ( NSCA-CSCS preferred) in order to deliver the most comprehensive Combat Strength and Conditioning Program within the Marine Corps.

### **Conclusion**

The HITT Program is designed to effectively prepare the Marine for day to day operational combat as it relates to endurance, speed, strength, agility, and power in order to be successful in task specific situations while reducing the likelihood of injury.

*Estimated Program Roll-Out Date: 1 December 2011*