



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
2ND BATTALION, 35TH INFANTRY REGIMENT
3RD BRIGADE COMBAT TEAM
25TH INFANTRY DIVISION
SCHOFIELD BARRACKS, HAWAII 96857-6000



APVG-TZB-CDR

1 November 2010

MEMORANDUM FOR RECORD

SUBJECT: 2-35IN "Cacti" Fitness Policy and Guidance.

1. References:

- a. Training Circular 3-22.20, Army Physical Readiness Training, March 2010.
- b. Building the Soldier Athlete, October 2009.
- c. Ranger Athlete Warrior Manual, January 2008.
- d. United States Army Physical Readiness Training: Rationale and Evaluation of the Physical Training Doctrine, 2009

2. Purpose. To outline my philosophy and establish policy for physical readiness training (PRT) for all Soldiers assigned 2nd Battalion, 35th Infantry Regiment "Cacti".

3. Philosophy.

a. The individual Soldier is the Battalion's most lethal weapon. It has long been recognized that the ability of Soldiers to fight and win depends largely on their physical condition. The demands of combat place a premium on endurance, strength, and mobility skills. Our physical training programs and assessments will be designed to build and measure our Soldiers' effectiveness in all three areas, not simply to score well on the APFT. The absolute essentials for all unit PRT programs are small unit leader education, structured, well-balanced training schedules, initial integration for new Soldiers, and injury prevention and rehabilitation programs that return injured Soldiers to their teams as quickly as possible. The old adage that you are only as strong as your weakest link is the key; we simply cannot afford to have a weak link. The enemy and the terrain we face do not care whether we are special operators or regular Army Soldiers, they will demand the same from either. We must think and act like elite tactical athletes.

b. Our Philosophy is centered around the Soldier Athlete concept and unit commanders will design their physical training programs based on the Soldier Athlete concept. The goal of building Soldier Athletes is to design programs that focuses on developing the following five traits; aerobic and anaerobic endurance, mobility, strength, and flexibility to increase our Soldiers' overall physical conditioning. These five traits form the three pillars of PRT: Endurance, Strength, and Mobility. Programs focused on building Soldier Athletes obtain a higher level of performance, reduce injuries, and increase exercise variety and enjoyment. Units will apply these principles to develop battle-focused physical training, with combat equipment into their programs. The end state for all leaders is to build highly physically fit units so they are successful in the harshest of forward operating environments and accomplish their mission essential tasks.

c. APFT. Conditioning for combat readiness is the focus of all physical fitness training. The intent of the APFT in the Army Physical Fitness Program is to provide a periodic assessment of the unit's fitness program. Commanders must design unit programs to take the base level fitness defined by the

Army Physical Fitness Test (APFT) and raise it to meet or exceed mission- related physical performance requirements.

However, Soldiers are still required to meet the required standard for their age group. Units that establish higher standards should do so based on unit METL tasks requiring soldiers to be more than minimally fit. **Preparing for the APFT will not form the foundation of a unit or individual's fitness program. It is of secondary importance to conditioning to meet mission-related physical requirements.**

4. Policy.

- a. General Physical Training Guidelines. Cacti Soldiers will conduct PRT when in garrison.

Normal PRT hours for the 25th ID are from 0630-0800 daily. During this time, all Soldiers are expected to conduct physical training in accordance with Soldier Athlete concept. If Soldiers' duties prevent them from conducting PRT during these hours, they are expected to conduct PT at least once a day at another time for a minimum of one hour and fifteen minutes. Organized sports, while a great supplement to a well-balanced training plan, will not be conducted during the day's primary PRT hours, between 0630-0800. When conducting field training or ranges, unit commanders should program at least three days into the training schedule per week for field PT in accordance with Soldiers Athlete concept in order to maintain current fitness levels. **Unit will not schedule activities, events and/or appointments prior to 0900.**

- b. **Required Components of Physical Readiness Training Sessions.** All PRT sessions will consist of the following three required components:

- (1) **Movement Preparation** (10 minutes). Conducting movement preparation is critical in preventing injuries and obtaining maximal performance from our Soldiers. This phase safely brings the cardiovascular system from rest to exercise levels, loosens the major joints and muscle groups, and primes the nervous system.
- (2) **Main Exercise Session.** The main exercise session should focus on one of the **three pillars** of PRT: **endurance, strength, and mobility skills.** These pillars are designed to relate directly to our combat mission. Aerobic endurance is the Soldier's ability to move long distances, such as conducting a dismounted infiltration or exfiltration from a mission. Anaerobic endurance can be related to sprinting to cover during a fire fight. Strength is the Soldier's ability to move weight; anything from a very heavy weight a few times to fairly low weight many times, such as climbing an obstacle or carrying a casualty. The third pillar, mobility skills, is the Soldier's ability to move laterally, stop quickly, change direction, and jump without injury, used when conducting IMT and navigating obstacles. Finding the **balance between these three pillars is a leader responsibility** based upon the assessed current level of fitness in the unit, and the unit's combat mission. However, all Soldiers must have a solid foundation in each of these areas regardless of combat mission.
- (3) **Recovery** (10 minutes). The objectives of recovery are to safely decrease heart and respiratory rates, gradually lower body temperature, improve functional flexibility; replace nutrients, and rest enough so that the body is ready for subsequent PRT or missions. Unit PRT sessions should focus on the first three objectives of recovery, while Leaders will be required to teach the last two and it is a Soldiers responsibility to execute.

c. Special Populations.

- (1) New Soldier Integration. Reception and integration of new Soldiers is a critical component of building effective units, and this is particularly important in the area of physical fitness.

Commanders must first understand that newly arrived Soldiers will not be acclimatized to the tropical weather here in Hawaii, and may not even be at the same level of physical fitness as the rest of the unit. All newly arrived Cacti Soldiers will be put into unit bridging programs no lower than company level that allow them to acclimatize to the conditions, conduct biomechanical and basic physical fitness assessments to establish baseline capabilities and training strategies, and teach them how to properly and safely use our fitness equipment.

- (2) Soldier Rehabilitation. The goal of PRT for Soldiers on a temporary profile is to maintain fitness and recover from injury as quickly as possible. Soldiers on permanent profiles should focus on maintaining fitness while keeping the injured body part as functional as possible. A balance between executing a challenging exercise program and protecting the Soldier's healing process is required to achieve these fitness goals. Commanders will establish Warrior Rehabilitation programs no lower than company level to ensure Soldiers on profile receive proper rehabilitation, tailored exercise programs, and proper supervision in order to facilitate rapid return of the Soldier to full duty status and improve unit readiness. Additionally, unit commanders must understand that Soldiers returning to their units following recovery from an injury will not be at the same fitness levels as the other Soldiers in the unit, and should establish bridging programs that reintegrate recovering Soldiers safely and effectively.
- (3) Pregnant Soldiers. All pregnant Soldiers will enroll in the Pregnant Soldier Physical Fitness Training program. Moderate exercise during pregnancy and postpartum promotes a faster return to physical fitness levels and full duty status. Commanders will ensure Soldiers are medically cleared for this program throughout the term of the pregnancy. Commanders will assign an NCO to ensure pregnant Soldiers attend training and serve as a unit liaison with the instructors and program coordinators.

5. Goals and Incentives. All Cacti Soldiers must think of themselves as well-rounded, elite, tactical athletes, and set high personal goals for their fitness training. All units will conduct the Cacti Enduring Fitness Assessment (enclosure 1) Quarterly in order to identify strengths and weaknesses. Cacti Fitness Assessment consist of the following:

1. 300m shuttle (anaerobic endurance)
2. Beep test (aerobic endurance)
3. Dead lift max reps (lower body muscular strength)
4. Push Press for reps (upper body muscular strength)
5. Sit and reach (flexibility)
6. Illinois Drill (mobility)

Squads and sections that have 100% of their Soldiers attaining the Battalion goal will be awarded Commander's Coins of Excellence, and companies that have 75% of their Soldiers meeting the division goal will be awarded the Soldier Athlete Warrior streamer to be displayed on their company guidon.

6. Cacti Soldier Athlete Committee and Cacti Master Fitness Trainer. The Cacti Soldier Athlete Committee will consist of one representative per company that is Cacti Master Fitness Trainer certified through ATAC, Crossfit Oahu, and RPTLC. They will be responsible for Collecting feedback on Cacti Fitness program, develop recommendations for ways to improve, Share ideas and information on fitness concepts that are effective and those that are ineffective, Distribute information on upcoming Cacti Fitness training, provide physical training guidance to unit leaders within their organizations and Conduct BN/CO/PLT level LPDs on fitness topics. Each Platoon will have two Cacti Master Fitness Trainers in order to serve the same functions mention above at the Platoon and Company level.

APVG-TZB-CDR
SUBJECT: 2-35IN "Cacti" Physical Training Policy and Guidance

7. POC for this memorandum is CPT Derek Price at 655-6411 or derek.price@us.army.mil



COLIN P. TULEY
LTC, IN
Commanding

Enclosure 1: Cacti Enduring Fitness Assessment

CACTI ENDURING FITNESS ASSESSMENT

Cacti Enduring Fitness Assessment (CEFA)

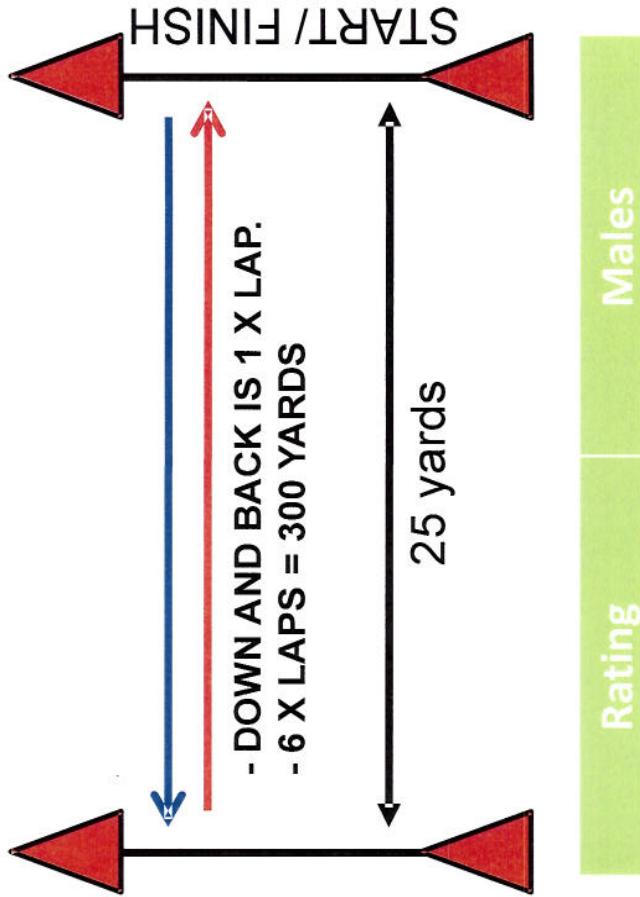
Task: Perform a seven(7) event physical fitness assessment testing anaerobic and aerobic endurance, upper and lower body muscular strength, core strength, agility, and flexibility

Purpose: Identify areas of comprehensive physical fitness that require improvement

Soldier Athlete	Task	Type	Purpose	Functionality
E n d u	300 yard shuttle (25yd)	Anaerobic Endurance	Measures Soldier's ability to move in short increments, continually at maximal effort.	The 300 yd shuttle in 25 yd increment more closely resembles the short, sustained maximal movements that occur during combat such as running from position to position directing left and right limits, or treating and moving casualties
B eep Test n c e	(20yd)	Aerobic Endurance	Measures Soldier's ability to move at sub-maximal levels and allows leaders to estimate VO2max. Therefore results are the most tangible among other tests.	Test allows us to estimate VO2max, a BN fitness priority. The movement is akin to an assault element moving to its last cover and concealed position
P ush Press w/ t r e	50% Body Weight	Muscular Strength – Upper	Measures Soldier's upper body strength and muscular endurance with relation to the pushing movement. Conducting this test with body weight maintains a standard regardless of Soldier's size	The tests the Soldier's pushing strength, used while conducting IMT with full kit, loading gear into vehicles, helping Soldiers over obstacles. Using body weight keeps the event relative to Soldiers regardless of their size
D ead Lift w/ t h e	Body Weight	Muscular Strength - Lower	Measures Soldier's total body lift strength and endurance. The lifting movement is typical of movements in combat such as lifting litters	Tests Soldier's lifting ability, used for carrying litters, ammo, and equipment during combat. Using body weight keeps the event relative to Soldiers regardless of their size
I llinois Drill o b i		Agility	Measures Soldier's ability to accelerate and change their body position in order to move around obstacles	Mimics agility required to move in environments with ground obstacles or debris (MOUT or IMT)
S it & Reach		Flexibility	Measures Soldier's flexibility, a component of mobility and a critical factor of overall fitness and health	Flexibility is an important component of Mobility. In combat Soldiers are often required to navigate unconventional obstacles that require a certain degree of flexibility to overcome i.e. hooking your leg over a wall and pulling yourself up

300 Yard Shuttle Test

- **purpose:** this is a test of anaerobic endurance
- **equipment required:** stopwatch, measuring tape, marker cones, a flat grass surface
- **Procedure:**
 - **CONDITIONS:** Given a flat, paved surface with line markings 25 yards apart.
 - **STANDARDS:** Line up in the sprint, crouch, or standup start positions with both feet and hands behind the starting line. The grader will give a preparatory command, "Ready." On the command "GO", run to the opposite end of the course and make a direct turn by placing at least one foot on or over the line, return to the starting line, makes another turn, and continue in this way for six round trips, sprinting past the finish line on the last trip. Do not take a circular path to make any turn. The grader records the total time taken from their command "Go" to completion of the course. Leaders should organize the men so that there is minimal time separating the first and last Soldiers in a group.

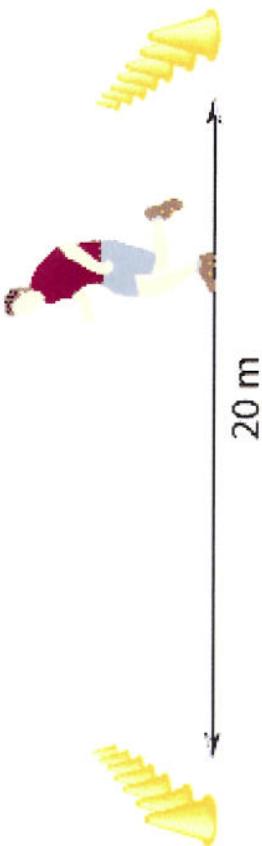


Rating	Males
Excellent	< 57.1
Good	57.1-58.9
Average	58.9-60.3
Fair	60.3-62.4
Poor	> 62.4

Beep Test

- **Purpose:** The 20m multistage fitness test is a commonly used maximal running aerobic fitness test
- **equipment required:** Flat, non-slip surface, marking cones, 20m measuring tape, beep test cd, cd player, recording sheets.
- **procedure:** Wait behind the start line and begin the event at the direction of the audio file/CD. When prompted, run continuously back and forth between the marked points, attempting to touch the line with at least one foot at the recorded beeps. It is not necessary to touch the line with the hands, nor is it necessary for both feet to cross over the line. When Soldier fails to make it to the line on the beep twice in a row the test is terminated. As the levels continue to increase (the recording will announce the levels- ie. Level 9-1, Level 9-2,) the beeps will progressively increase. The score given to the Soldier is the last level he successfully completed. This score can then be used to estimate VO₂ Max, a measure of aerobic fitness.

	Male	Female
excellent	> 13	> 12
very good	11 - 13	10 - 12
good	9 - 11	8 - 10
average	7 - 9	6 - 8
poor	5 - 7	4 - 6
very poor	< 5	< 4



Dead Lift

- Purpose: Measures Core and Lower body muscular strength and endurance.
- CONDITIONS: Given a 45-lb Olympic bar loaded with the testers body weight (according to the classes below)
- Standards: Standing behind the bar with foot and hand placement of preference, lift the bar until standing erect. At the top of the lift, the body is perpendicular to the ground, without bend in the hips or knees. The grader states the number of the repetition at this point. If Soldier lowers the weight before achieving the fully erect stance, that repetition does not count. A pause of up to two seconds at the top of the lift is allowed. Soldier then lowers the weight to the ground in a controlled manner. No rest is allowed while the weight is on the ground. Repeat as many repetitions as possible. There is no time limit. The event is terminated when Soldier exceeds the two-second time limit at the top or bottom of the lifts, drops the weight or fails to maintain upward movement once a lift is started (hits a sticking point in the middle of a lift), or fails to maintain form twice. The score is the number of correct repetitions performed.

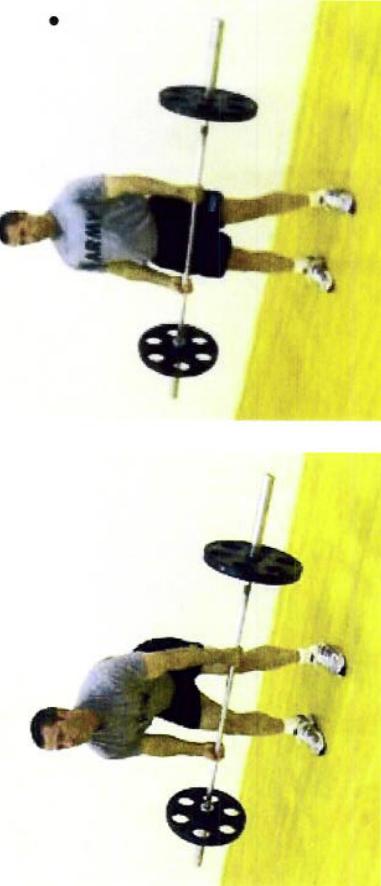
Men		Women		Percentile	REP
Weight	Dead Lift	Weight	Dead Lift	90 ^{th+}	19+
150-185	185lbs	100-115	95lbs	80 th -90 th	14-19
186-205	205lbs	116-135	115lbs	60 th -80 th	12-14
206-225	225lbs	136-155	135lbs	40 th -60 th	10-12
226-255	255lbs	156-175	155lbs	20 th -40 th	7-10
256+	275lbs			very poor	0-20 th
					0-7

Dead Lift



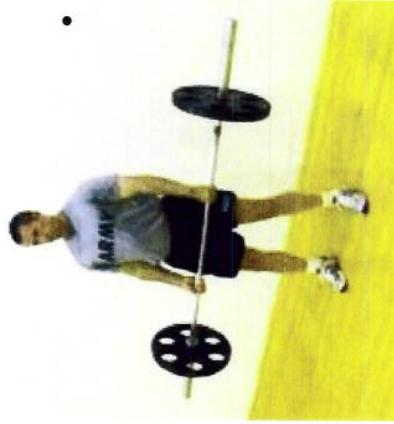
1) START

- Standing behind the bar with foot approximately shoulder width apart, hand placement to the outside of the knees, and grip selection at the preference of the lifter. The head/eyes should be looking straight forward, back in a straight line at a generally 45 degree angle (no bow/arch in the back), knees generally in vertical line with ankle joint, and heels/feet flat on the floor.



2) COUNT 1

- When lifter is ready, he/she will lift the bar off the ground maintaining the same posture from the start position until standing erect. At the top of the lift, the body is perpendicular to the ground, with the ankle, knee, hip and shoulder joints forming a generally straight line without bending at the hips or knees..



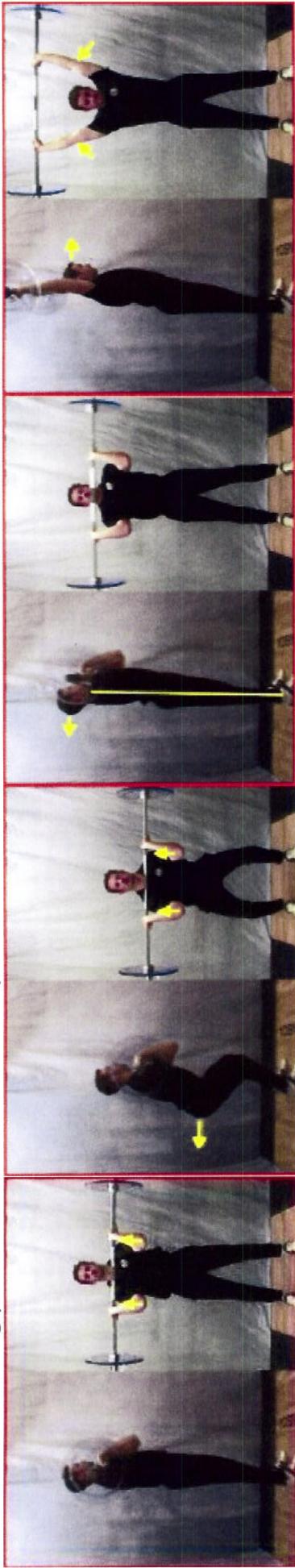
- Upon successful completion of lift, the lifter will return the bar to the ground in a controlled manner utilizing the same posture during completion of the lift.



3) COUNT 2

Push Press

- Purpose: Measures Core and Lower body muscular strength and endurance.
- **CONDITIONS:** Given a 45-lb Olympic bar loaded with half the testers body weight (to the nearest 5lb)
- **Standards:** Grasp barbell from rack or clean barbell from floor with overhand grip, slightly wider than shoulder width. Position bar chest high with torso tight. Retract head back. Dip body by bending knees, hips and ankles slightly. Explosively drive upward with legs, driving barbell up off shoulders, vigorously extending arms overhead. Return to shoulders and repeat Repeat as many repetitions as possible. There is no time limit. The event is terminated when Soldier exceeds the two-second time limit at the top or bottom of the lifts, drops the weight or fails to maintain upward movement once a lift is started (hits a sticking point in the middle of a lift). The score is the number of correct repetitions performed.



Percentile	REP
excellent	90 ^{th+}
very good	80 th -90 th
good	60 th -80 th
average	40 th -60 th
poor	20 th -40 th
very poor	*0-20 th

Illinois Drills

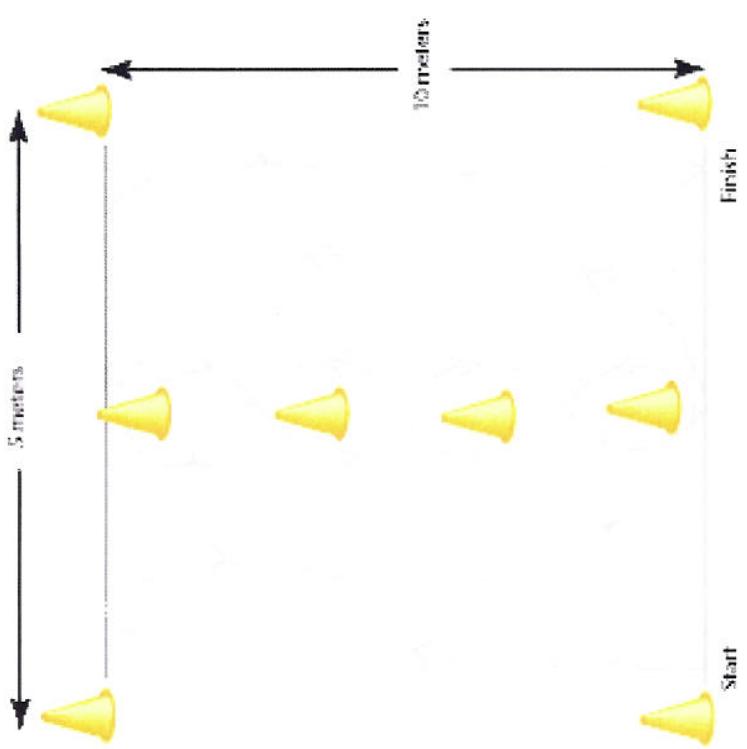
purpose: to test running agility

equipment required: flat non-slip surface, marking cones, stopwatch, measuring tape, timing gates (optional)

procedure:

CONDITIONS: Given a flat, paved surface, with a length of 10 meters and width of 5 meters, four cones marking the outer boundaries and four other cones 3.3 meters apart in the center.

STANDARDS: Begin in the prone position behind the start point, outside the first cone. The grader will give a preparatory command, "Ready." On the command "GO", Soldier jumps to his feet and negotiates the course around the cones to the finish (see the diagram below). If during navigation of the course a cone is bumped enough to move its position, the test must be repeated. The grader records the total time taken from the command of "GO" to when Soldier passes the last cone. Individuals that slip are given one other attempt to improve their score. Individuals that fail to navigate the course properly may repeat the assessment either immediately or after others in the squad have finished.



	Rating	Males	Females
Excellent	< 15.2	< 17.0	
Good	16.1-15.2	17.9-17.0	
Average	18.1-16.2	21.7-18.0	
Fair	18.3-18.2	23.0-21.8	
Poor	> 18.3	> 23.0	

Sit and Reach

- **purpose:** The sit and reach test an important functional measure of hip region flexibility including lower back and back of legs. Generally, lack of flexibility is associated with an increased risk of injury, and specifically lack of flexibility in this region is implicated in lumbar lordosis, forward pelvic tilt and lower back pain.

- **equipment required:** sit and reach box (or alternatively a ruler can be used, and held between the feet)

- **procedure:** After a proper warm-up and stretching, the subject is seated on the ground with the legs fully extended in front of them, feet eight inches apart, toes pointed upwards, and soles of the feet flush with the base of the sit and reach box. If the subject is unable to fully straighten their legs, an assistant may help to help press the legs down by applying pressure above or below the knees. The subject then reaches forward slowly, the fingertips of both hands remaining in contact with the slide at all times. Once the subject has reached their farthest extension point, the position should be held for a "two count".



Percentile Rank	Men			Women		
	in.	cm	in.	cm	in.	cm
99	>23.0	>58	>22.0	>56	>24.0	>61
90	21.75	55	21.0	53	23.75	60
80	20.5	52	19.5	50	22.5	57
70	19.5	50	18.5	47	21.5	55
60	18.5	47	17.5	44	20.5	52
50	17.5	44	16.5	42	20.0	51
40	16.5	42	15.5	39	19.25	49
30	15.5	39	14.5	37	18.25	46
20	14.5	37	13.0	33	17.0	43
10	12.25	31	11.0	28	15.5	39
01	<10.5	<27	<9.25	<23	<14.0	<36