



APPENDIX K

USMC Physical Fitness Procedures



USMC Physical Fitness Procedures

A. Background. On 10 May 02, new Physical Fitness Procedures were established, and are outlined in a new Marine Corps Order (MCO P6100.12), Marine Corps Physical Fitness Test and Body Composition Program Manual. A brief outline of the general concept is provided in this appendix; however, for detailed guidance (such as conduct of the PFT, taking body measurements, training programs, and PFT failure actions), Marines should consult their training section and the MCO.

1. Reserve SMCR Marines are required to conduct an annual PFT for score. Reserve Marines on Active Duty (ADSW, AT, ADT, AR) orders for 30 days or more, can conduct their annual PFT with that unit. All scores are good for two years (for cutting score purposes only), if training does not permit testing.
2. Every Marine must be physically fit, regardless of age, grade, or duty assignment. Fitness is essential to the day-to-day effectiveness and combat readiness of the Marine Corps. Furthermore, physical fitness is an indispensable aspect of leadership. The habits of self-discipline required to gain and maintain a high level of physical fitness are inherent to the Marine Corps way of life and must be a part of the character of every Marine. Marines who are not physically fit can be a detriment to the readiness and combat efficiency of their unit. Accordingly, every Marine will engage in an effective Physical Conditioning Program (PCP) on a continuing basis.

B. Responsibility. In order to maintain continuity of standards, the procedures in the MCO P1600.12 will be used for developing and administering the COs conditioning, testing, and remedial programs, and to clarify Body Composition Program (BCP) policies (**formerly known as the Weight Control Program**). It is the responsibility of COs to provide a fair evaluation of Marines' physical fitness and body composition through the procedures outlined in this Manual. When necessary, an Appropriately Credentialed Health Care Provider (ACHCP) will be required to conduct a thorough physical evaluation. This evaluation will include at a minimum, a Body Composition Evaluation and a determination of whether or not the weight and body fat gain is due to an underlying cause or associated disease.

1. Purpose. While units are responsible for testing their Marines for combat fitness and readiness as it pertains to their unit's mission, the PFT provides an instrument

that measures the collective level of physical fitness Marine Corps wide. It is a measurement of general fitness, vice combat readiness, and unit/MOS capability.

2. The PFT consists of three events: male Marines will perform dead-hang pull-ups, abdominal crunches, and a 3.0 mile run; and female Marines will complete the flexed-arm hang, abdominal crunches, and a 3.0 mile run. These events are designed to test the strength and stamina of the upper body, midsection, and lower body, as well as the efficiency of the cardiovascular system.
3. PFT Performance Requirements. To successfully pass the PFT, Marines must complete the minimum acceptable performance requirements in each event and achieve an overall combined score for their age group as shown in Tables K-1 and K-2. Marines must be made aware that the minimum performance (points) in each event alone, will not total the points required for a passing score. Additional points must be earned in at least one event in order to achieve a 3rd Class PFT or better, per age group.

Minimum Acceptable Performance Requirements for PFT Events						
Age	Pull-Ups/ Flexed-Arm Hang	Abdominal Crunches	3.0 Mile Run (min)	Total Points	MIN Score	Additional Points Needed
17-26	3/15(SEC)	50	28(m) 31(f)	105	135	30
27-39	3/15(SEC)	45	29(m) 32(f)	94	110	16
40-45	3/15(SEC)	45	30(m) 33(f)	88	88	0
46+	3/15(SEC)	40	33(m) 36(f)	65	65	0

Table K-1. USMC Acceptable Performance Standards.

Minimum PFT Classification Scores				
PFT Class	AGE GROUPS			
	17-26	27-39	40-45	46+
1st	225	200	175	150
2nd	175	150	125	100
3rd	135	110	88	65

Table K-2. USMC Minimum PFT Scores.

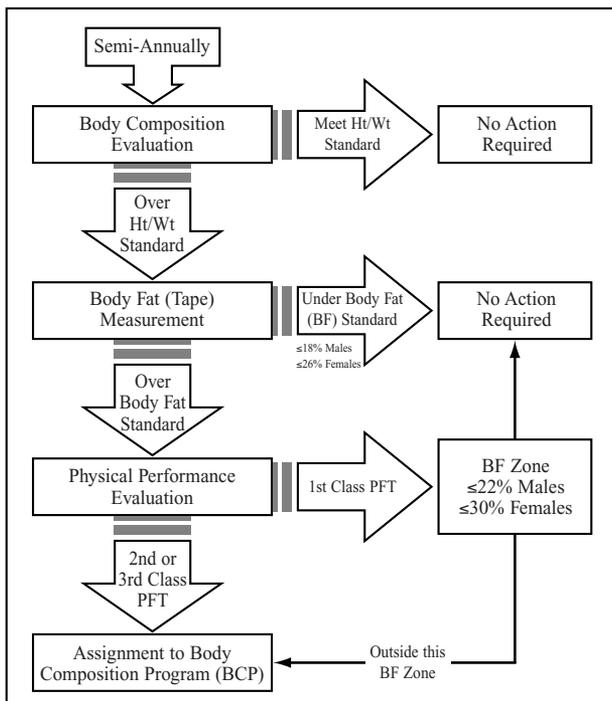
4. Failure to meet the minimum requirements in any event constitutes a failure of the entire test, regardless of the total number of points earned for all three events. Marines may be denied promotion, reenlistment, and/or special schools until they pass a PFT and fulfill all RPCP requirements (see MCO P6100.12). Marines on light or limited duty will complete the two events that they are medically qualified to participate in, and will receive credit for a PPFT.
 - a. Every Marine must maintain the established standards of health and physical fitness. With age, it is not uncommon for the average American to experience a decrease in physical activity, a change in metabolic rate, with unchanged caloric intake. As a result, body fat and weight may increase, having a negative impact on one's health and level of fitness. Medical authorities state that excess body fat can be associated with high blood pressure, high blood cholesterol, diabetes, cancer, cardiovascular disease, and similar health risks. In extreme climates and physically demanding environments, excess weight and body fat can also impede physical performance and stamina, which is of particular importance to the Marine and the mission.
 - b. The PFT is not specifically designed to evaluate a Marine's level of combat fitness; rather, it provides a baseline for potential success in meeting the physical demands of combat. As such, the PFT is an excellent instrument for measuring a Marine's general fitness level, as it relates to upper-body strength and cardio-vascular endurance.
 - c. This Appendix provides an abridged guide for PFT training that both reviews and applies the general principles of strength and conditioning for each of the PFT events. Marines who meet the body fat standards, 18% for males and 26% for females, will be considered within the Marine Corps' body composition standards. Marines who exceed the body fat standards will be further evaluated on criteria set forth below.

C. Physical Performance Evaluation. There is an integral relationship between body composition and physical performance that warrants consideration when evaluating the "total" Marine. For instance, there are Marines who exceed weight and body fat standards, yet perform exceptionally well on the semi-annual PFT and combat fitness tests. These Marines demonstrate both exceptional cardiovascular endurance and upper-body strength, with a body composition that may be identified as slightly

exceeding the standards, but overall could be viewed as maintaining a reasonable body weight. In such cases, the Marine Corps' view on physical fitness as "essential to the day-to-day effectiveness and combat readiness" should be the overriding factor in these circumstances.

1. The Physical Performance Evaluation not only takes body composition and physical fitness performance into consideration; it also takes into account the acknowledged variance in the body fat estimation technique ("taping" method). The Physical Performance Evaluation accommodates for the acknowledged margin of error in body fat estimation and testing, normally a variance of 3 to 4%. In essence, the Physical Performance Evaluation assesses the "total" Marine

Physical Performance Evaluation Flowchart



(e.g., body composition and recent semiannual PFT performance, as well as acknowledges the margin of error in body fat testing).

2. The Physical Performance Evaluation requires a Marine to meet the following criteria:
 - a. Current 1st Class semi-annual (annual for Reserves) PFT score; a previously recorded score will not be considered.
 - b. Body fat estimation does not exceed the standard by more than 4%, (<22% for males, and <30% for females).

NOTE: If a Marine is currently assigned to the BCP, he/she will be given an opportunity to score a 1st Class PFT at the next officially scheduled semiannual PFT. If he/she scores a 1st Class PFT at this time, he/she will be officially removed from the BCP and Remedial Physical Composition Program (RPCP) as reflected in the Physical Performance Evaluation.

3. Physical Performance Evaluation examples:
 - a. Example 1: A male Marine, who exceeds his maximum allowable weight, is measured at 21% body fat, and scores a current 1st Class PFT has met the Physical Performance Evaluation criteria and would not be assigned to the BCP.
 - b. Example 2: A male Marine, who exceeds his maximum allowable weight, scores a current 1st Class PFT, but is measured at 24% body fat, does not meet the Physical Performance Evaluation body fat criteria, and therefore would be assigned to the BCP.
 - c. Example 3: A female Marine who exceeds her maximum allowable weight, is measured at 32% body fat, and scores a current 2nd Class PFT, does not meet the Physical Performance Evaluation body fat and PFT criteria, and therefore would be assigned to the BCP.
4. Again, detailed explanations of the Body Composition Standards are found in the “PFT” order MCO P6100.12. For quick reference, Basic standards are shown in the following tables:

MALES

HEIGHT	Maximum Standard	Minimum Standard
(Inches)	(Pounds)	(Pounds)
58"	132	91
59"	136	94
60"	141	97
61"	146	100
62"	150	104
63"	155	107
64"	160	110
65"	165	114
66"	170	117
67"	176	121
68"	181	125
69"	186	128
70"	192	132
71"	197	136
72"	203	140
73"	208	144
74"	214	148
75"	220	152
76"	226	156
77"	232	160
78"	238	164
79"	244	168
80"	250	173

Max BF%:	18%
-----------------	------------

FEMALES

HEIGHT	Maximum Standard	Minimum Standard
(Inches)	(Pounds)	(Pounds)
58"	120	91
59"	124	94
60"	128	97
61"	132	100
62"	137	104
63"	141	107
64"	146	110
65"	150	114
66"	155	117
67"	160	121
68"	164	125
69"	169	128
70"	174	132
71"	179	136
72"	184	140
73"	189	144
74"	195	148
75"	200	152
76"	205	156
77"	211	160
78"	216	164
79"	222	168
80"	228	173

Max BF%:	26%
-----------------	------------

Table K-3. USMC Height/Weight Standards.

FEMALES

Points	Flexed-Arm Hang	Crunches	3-Mile Run
100	70 sec	100	21:00
99		99	21:10
98	69 sec	98	21:20
97		97	21:30
96	68 sec	96	21:40
95		95	21:50
94	67 sec	94	22:00
93		93	22:10
92	66 sec	92	22:20
91		91	22:30
90	65 sec	90	22:40
89		89	22:50
88	64 sec	88	23:00
87		87	23:10
86	63 sec	86	23:20
85		85	23:30
84	62 sec	84	23:40
83		83	23:50
82	61 sec	82	24:00
81		81	24:10
80	60 sec	80	24:20
79		79	24:30
78	59 sec	78	24:40
77		77	24:50
76	58 sec	76	25:00
75		75	25:10
74	57 sec	74	25:20
73		73	25:30
72	56 sec	72	25:40
71		71	25:50
70	55 sec	70	26:00
69		69	26:10
68	54 sec	68	26:20
67		67	26:30
66	53 sec	66	26:40
65		65	26:50
64	52 sec	64	27:00
63		63	27:10
62	51 sec	62	27:20
61		61	27:30
60	50 sec	60	27:40
59		59	27:50
58	49 sec	58	28:00
57		57	28:10
56	48 sec	56	28:20
55		55	28:30
54	47 sec	54	28:40
53		53	28:50
52	46 sec	52	29:00
51		51	29:10

Points	Flexed-Arm Hang	Crunches	3-Mile Run
50	45 sec	50	29:20
49		49	29:30
48	44 sec	48	29:40
47		47	29:50
46	43 sec	46	30:00
45		45	30:10
44	42 sec	44	30:20
43		43	30:30
42	41 sec	42	30:40
41		41	30:50
40	40 sec	40	31:00
39	39 sec	x	31:10
38	38 sec	x	31:20
37	37 sec	x	31:30
36	36 sec	x	31:40
35	35 sec	x	31:50
34	34 sec	x	32:00
33	33 sec	x	32:10
32	32 sec	x	32:20
31	31 sec	x	32:30
30	30 sec	x	32:40
29	29 sec	x	32:50
28	28 sec	x	33:00
27	27 sec	x	33:10
26	26 sec	x	33:20
25	25 sec	x	33:30
24	24 sec	x	33:40
23	23 sec	x	33:50
22	22 sec	x	34:00
21	21 sec	x	34:10
20	20 sec	x	34:20
19	19 sec	x	34:30
18	18 sec	x	34:40
17	17 sec	x	34:50
16	16 sec	x	35:00
15	15 sec	x	35:10
14	x	x	35:20
13	x	x	35:30
12	x	x	35:40
11	x	x	35:50
10	x	x	36:00
9	x	x	x
8	x	x	x
7	x	x	x
6	x	x	x
5	x	x	x
4	x	x	x
3	x	x	x
2	x	x	x
1	x	x	x

*Round up all values (e.g., 21:01 to 21:09 equals 99 points)

Table K-4. USMC PFT Scoring - Female

MALES

Points	Pull-ups	Crunches	3-Mile Run
100	20	100	18:00
99		99	18:10
98		98	18:20
97		97	18:30
96		96	18:40
95	19	95	18:50
94		94	19:00
93		93	19:10
92		92	19:20
91		91	19:30
90	18	90	19:40
89		89	19:50
88		88	20:00
87		87	20:10
86		86	20:20
85	17	85	20:30
84		84	20:40
83		83	20:50
82		82	21:00
81		81	21:10
80	16	80	21:20
79		79	21:30
78		78	21:40
77		77	21:50
76		76	22:00
75	15	75	22:10
74		74	22:20
73		73	22:30
72		72	22:40
71		71	22:50
70	14	70	23:00
69		69	23:10
68		68	23:20
67		67	23:30
66		66	23:40
65	13	65	23:50
64		64	24:00
63		63	24:10
62		62	24:20
61		61	24:30
60	12	60	24:40
59		59	24:50
58		58	25:00
57		57	25:10
56		56	25:20
55	11	55	25:30
54		54	25:40
53		53	25:50
52		52	26:00
51		51	26:10

Points	Pull-ups	Crunches	3-Mile Run
50	10	50	26:20
49		49	26:30
48		48	26:40
47		47	26:50
46		46	27:00
45	9	45	27:10
44		44	27:20
43		43	27:30
42		42	27:40
41		41	27:50
40	8	40	28:00
39		x	28:10
38		x	28:20
37		x	28:30
36		x	28:40
35	7	x	28:50
34		x	29:00
33		x	29:10
32		x	29:20
31		x	29:30
30	6	x	29:40
29		x	29:50
28		x	30:00
27		x	30:10
26		x	30:20
25	5	x	30:30
24		x	30:40
23		x	30:50
22		x	31:00
21		x	31:10
20	4	x	31:20
19		x	31:30
18		x	31:40
17		x	31:50
16		x	32:00
15	3	x	32:10
14	x	x	32:20
13	x	x	32:30
12	x	x	32:40
11	x	x	32:50
10	x	x	33:00
9	x	x	x
8	x	x	x
7	x	x	x
6	x	x	x
5	x	x	x
4	x	x	x
3	x	x	x
2	x	x	x
1	x	x	x

*Round up all values (e.g., 18:01 to 18:09 equals 99 points)

Table K-4. USMC PFT Scoring - Male

D. Body Composition Standards. It is every Marine's responsibility to maintain the Marine Corps' body composition standards. If not in adherence with standards, the Marine must take appropriate action to meet them in a timely manner. Paragraph 5 below provides general training guidance.

For a detailed breakdown of the current body composition standards, see Appendix I of MCO P6100.12. The tables show required standards per each half-inch of body height for males and females.

Marines on light or limited duty, whose medical condition precludes them from participating in specific activities, will be expected to participate in conditioning alternatives and dietary adjustments, in order to maintain these standards.

E. General Strength and Conditioning Principles.

1. Specificity. The main benefit of specificity is that specific training develops neuromuscular efficiency. Movement that is more efficient means more repetitions or faster times. This principle states that to become good at a particular movement, you must practice that particular movement. For example, a pistol shooter does not become good at rapid fire by shooting continual precision strings of fire. Specificity states the shooter would be better served by specific training because specific training yields specific gains.
 - a. Pull-up/Flexed Arm Hang. There are many exercises and machines that can enhance upper body strength, but there is no better exercise for improving pull-up or flexed-arm hang performance than the act of doing or practicing them.
 - b. Crunch. The various abdominal strengthening devices (machines) and routines that focus on the mid- to lower abdominal muscles will improve crunch performance in most cases. However, doing or practicing crunches is the best method for improving crunch performance.
 - c. 3.0-Mile Run. Exercise machines such as stair climbers, stationary bicycles, elliptical cross trainers, and rowing machines can enhance a Marine's cardiovascular endurance. They cannot, however replace running as the activity that will best improve running performance.

2. Overload. The acronym “SAID” stands for “Specific Adaptations to Imposed Demands,” and describes what happens when the muscular and cardiovascular systems are overloaded or “pushed.” When a Marine does an activity to a point of fatigue, muscle systems that have been exerted will become stronger and better able to handle the increased exercise stimulus. Proper rest and nutrition are important cofactors in ensuring the benefits of overloading are realized. It is important for the Marine and the commander to understand that improper overloading could have a detrimental effect on the desired result.
 - a. Pull-up/Flexed-Arm Hang. Routines that require completing set(s) of pull-ups to the point of exhaustion are worthwhile. Form and slowed execution of the pull-up should be maintained in order to facilitate momentary muscular fatigue. Executing pull-ups under weight (e.g., with a pack or flak jacket on) and varying the width of the grip (e.g., narrow to wide grip) are excellent training methods. Training for pull-ups in this manner will help ensure that a Marine will be able to do proper pull-ups in an all-out effort on test day.
 - b. Crunch. Applying the principle of overload in preparing for the crunch requires doing two sets of crunches until momentary muscular fatigue. Tracking the amount of “complete” crunches a Marine can do until the point of fatigue, in a certain time period, will provide excellent feedback on the effectiveness of the overload principle. A second way to train for the crunch event would be for a Marine to do as many crunches as he can, without stopping, until complete muscle failure. Focusing on using the abdominal muscles (keeping them tight throughout the exercise), and executing them in slow motion is an excellent way to intensify the training. Track the number of proper repetitions executed to determine effectiveness.
 - c. 3.0-Mile Run. Interval training done once or twice a week can enhance a Marine’s running performance. Interval training sessions take less time, but require a higher level of intensity to run the shorter distances. The 400-meter and 800-meter courses are the best distances for increasing performance for the 3.0 mile run. If the distance interval training were longer than 800 meters, the Marine would not be able to run at the targeted speed. If the distance is shorter than 400 meters, the Marine cannot reach the targeted level of intensity needed for endurance training.

3. Process. To calculate the time an individual Marine should run the 400/800-meter distances during an interval training session, proceed as follows:
 - a. Determine the most recent 3.0-mile run time.
 - b. Divide that time by 3 (gives a mile-split time for the run).
 - c. Divide the mile-split time by two. Subtract 10-20 seconds. (Gives the time the 800-meter intervals should be run).
 - d. To determine the 400-meter interval time, divide the mile-split time by 4. Then subtract 5-10 seconds. (This is the time the 400-meter intervals should be run.)
4. Calculating rest in between each running exercise is very important. Complete recovery in between the intervals lessens the benefit of overload, but not enough rest is also detrimental. Incomplete recovery in between intervals should be the goal. The work/rest ratio for 800-meter intervals should be 1:1. In other words, active rest in the form of light jogging or walking (not stopping) should be equal to the time that was run. For example if a 4:00 minute interval time was run, then rest should be 4:00 minutes. The work/rest ratio for 400-meter intervals should be 1:2. Using the same type of rest as in 800-meter interval session, a 1 min 40 second 400-meter interval would be followed by a 3 min 20 second rest period.
5. Example (1): A Marine wants to do interval sessions to improve the 22:00 he ran in the last PFT.
 - a. Divide 22:00 by 3. (7:20)
 - b. Divide 7:20 by 2 to determine the pace for an 800-meter split time for a 7:20 mile pace. (3:40)
 - c. Subtract 10-20 seconds to determine the pace for 800-meter intervals. (3:20-3:40)
 - d. The rest between these 800 repeats should be 3:20-3:40.

- e. Determine the pace for a 400-meter interval by dividing 7:20 by 4 to determine the pace for a 400-meter split time for 7:20 mile pace (1:50). Subtract 5-10 seconds to determine pace for 400-meter intervals (1:40-1:45).
 - f. The rest between these 400 repeats should be 3:20-3:30.
6. Example (2): A (beginner's) interval workout:
- a. –Daily 16 Warm-up
 –800-meter jog
 –800-rest-800-rest-400-rest-400
 –800-meter jog
 –Daily 16 Cool-Down
 - b. The total mileage for this workout is 2.5 miles with 1.5 miles being speed-work. Many Marines and recreational runners do intervals that are much too fast for their goal time. Keeping the predetermined goal pace should be the goal for this workout. A Marine should not feel totally exhausted following this training session. As a Marine gets more comfortable with this training, more intervals can be added.
 - c. Interval training should be combined with other types of running, during the weekly training schedule, for the training to be effective. Longer distance runs along with tempo running (faster running but not at race pace), combined with interval running will improve most Marines' 3.0 mile run times.
7. Summary. Specificity and overload are two of the most important strength and conditioning principles. Other principles include:
- a. Regularity—Strength and cardiovascular training should be done 3-4 times a week.
 - b. Variety—Varying training regimes periodically prevents boredom.
 - c. Recovery—Rest is physiologically necessary for growth and repair.

- d. Balance—A good training plan should exercise all major muscle groups, and include warm-up and cool-down phases.
- e. Progression—Ensures that systems are continually challenged.
- f. There are many ways in which Marines can improve their performance on the PFT. Applying the strength and conditioning principles listed above can enhance training to improve not only PFT performance but also to increase a Marine's physical readiness for combat.