



Army Combat Fitness Test



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Initial Operation Capability

During the initial operation capability (IOC) period, fiscal year 2020 (FY20); regulations, policy, and doctrine for the current Army Physical Fitness Test (APFT) remain in place. ACFT-related policy and regulations will be developed in advance of full operation capability (FOC) in fiscal year 2021 (FY21). This publication provides training and testing guidance that supersedes previous ACFT-related materials.

Approved for Public Release
Distribution Unlimited



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Foreword

Soldiers face a dynamic, competitive, and lethal operational environment that has evolved in recent years, one in which our adversaries will employ a mix of traditional, unconventional, and hybrid strategies. Our Army's physical readiness program must evolve to keep pace with the demands of modern war. Our physical fitness tests must evolve as well.

Based on results of years of scientific study, the Secretary and Chief of Staff of the Army have directed the implementation of the Army Combat Fitness Test (ACFT). The six-event test was developed to better predict a Soldier's readiness for the demands of the modern battlefield. Just as the Occupational Physical Assessment Test validates that recruits are ready to train, the ACFT validates that the Soldier is prepared for combat.

The ACFT initial operation capability (IOC) is the first doctrinal product of the Holistic Health and Fitness (H2F) System — a system of training and testing that optimizes and validates performance readiness across a Soldier's career. H2F includes mental, spiritual, nutrition, and sleep readiness taught in military education and in the unit by unit-owned performance experts. It includes much broader physical training options and modalities, many of which are described in this publication. Other ACFT testing and training resources are available to Soldiers on the Army's ACFT website at www.army.mil/acft. The desired end states of ACFT implementation and the H2F System are an increase in physical readiness and an evolution of the Army's fitness culture.

The Army Vision says that the physical lethality and mental toughness of the American Soldier are keys to the success of our Army in ground combat. The ACFT will strengthen our fitness culture, our Soldiers' fitness for battle, and our Army's readiness for war.

A handwritten signature in black ink, appearing to read 'L. Hibbard', written in a cursive style.

MG LONNIE HIBBARD
COMMANDER
CENTER FOR INITIAL MILITARY TRAINING



ARMY COMBAT FITNESS TEST

Initial Operational Capability (IOC) (Oct 2019 to Oct 2020)

EVENT 1 : 3 Repetition Maximum Deadlift



- **Deadlift the maximum weight possible three times**
- Fitness Components: muscular strength, balance, and flexibility
- Application to Common Soldier Tasks: lifting heavy loads from the ground, extracting a casualty
- Top three PRT activities: Sumo Squat, Alternate Staggered Squat Jump, Forward Lunge
- 60 and 100 point scores: 140 and 340 lbs

EVENT 2 : Standing Power Throw

- **Throw a 10lb medicine ball backward and overhead for distance**
- Fitness Component: explosive power, balance, and flexibility
- Application to Common Soldier Tasks: lifting Soldiers up, throwing a grenade, and jumping across and over obstacles
- Top three PRT activities: Power Jump, Overhead Push Press, Tuck Jump
- 60 and 100 point scores: 4.5 and 12.5 meters



EVENT 3 : Hand Release Push-Up (HRP) - Arm Extension



- **Complete as many Arm Extension HRP's as possible in two minutes**
- Fitness Component: muscular endurance
- Application to Common Soldier Tasks: moving obstacles, hand-to-hand combat; pushing loads and vehicles, getting to and from the ground
- Top three PRT activities: Supine Chest Press, Incline Bench Press, 8-Count Push-up
- 60 and 100 point scores: 10 and 60 reps

EVENT 4 : Sprint-Drag-Carry

- **Conduct 5 x 50 meter shuttles for time- sprint, drag, lateral carry and sprint**
- Fitness Component: agility, anaerobic endurance, muscular endurance and muscular strength
- Application to Common Soldier Tasks: moving quickly under load, extracting a casualty, moving supplies
- Top three PRT activities: Straight-Leg Deadlift, Bent Over Row, 300M Shuttle Run
- 60 and 100 point scores: 3:00 and 1:33 minutes



EVENT 5 : Leg Tuck



- **Complete as many leg tucks as possible**
- Fitness Component: muscular strength and endurance
- Application to Common Soldier Tasks: surmounting obstacles and walls, load carriage or move under load, rope traverse and rope climb
- Top three PRT activities: Bent Leg Raise, Leg Tuck and Twist, Alternating Grip Pull-up
- 60 and 100 point scores: 1 and 20 reps

EVENT 6 : 2 Mile Run

- **Run two miles for time on a measured, generally flat outdoor course**
- Fitness Component: aerobic endurance
- Application to Common Soldier Tasks: dismounted movement, ruck march, infiltration / movement to contact
- Top three PRT activities: Sprint Intervals (30:60s, 60:120s), Release Run, Hill Repeats
- 60 and 100 point scores: 21:00 and 13:30 minutes



For Top Three PRT Activities see:
 Field Manual 7-22, Army Physical Readiness Training, OCT 2012
 Army Physical Readiness Training application available for iOS and Android devices
 ACFT Implementation is directed by HDA EXORD 219-18
<https://www.army.mil/acft/>

STA 07-08-005 10/2019

Figure 1. Graphic Training Aid (GTA) 07-08-005

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The Secretary of the Army has determined that the publication of this periodical is necessary in the transaction of the public business as required by law of the Department.

Unless otherwise stated, whenever the masculine or feminine gender is used, both are intended.

Note: Any publications (other than CALL publications) referenced in this product, such as ARs, ADPs, ADRPs, ATPs, FMs, and TMs, must be obtained through your pinpoint distribution system.

Preface

This publication supplements the Army's physical testing doctrine for the initial operation capability (IOC) period, Fiscal Year (FY20), 01 October 2019 to 30 September 2020. This publication comprises the physical test for the Army's Holistic Health and Fitness (H2F) System. The Army Combat Fitness Test (ACFT) is the means to validate a Soldier and unit's physical readiness training; it shows how effective this training is in preparing Soldiers for the combat tasks they have to perform.

The principal audience is leaders at all organizational levels. All leaders are trainers. Leaders include officers, warrant officers, noncommissioned officers, and those Army civilians in leadership positions. Trainers and educators throughout the Army will also use this publication.

This publication is derived from Department of Defense (DOD) Directive (DODD) 1308.1, DOD Physical Fitness and Body Fat Program (30 June 2004), and DOD Instruction 1308.3, DOD Physical Fitness and Body Fat Programs Procedures (05 November 2002). Army Regulation (AR) 350-1, Army Training and Leader Development (15 September 2019), directs the Army's mandatory training requirements. Commanders and staffs will establish training programs consistent with AR 350-1 and Field Manual (FM) 7-22, *Army Physical Readiness Training* (26 October 2012), and in consultation with their H2F teams and master fitness trainers. Training that addresses both the physical and nonphysical aspects of Soldier readiness is considered by senior DOD leadership to be essential to mission success.

The proponent for this publication is the U.S. Army Center for Initial Military Training (CIMT), Training and Doctrine Command (TRADOC). Submit comments and recommendations for improvement of this publication on Department of the Army (DA) Form 2028, Recommended Changes to Publications and Blank Forms (01 June 2018). To contact CIMT:

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The input received during the IOC period will inform the development of regulations and policies that support Army physical training and testing. During the IOC period, this publication applies to the Regular Army, Army National Guard (ARNG)/Army National Guard of the U.S. (ARNGUS), and the U.S. Army Reserve (USAR).

Introduction

This publication supplements the Army's doctrine for the physical testing of Soldiers. It presents a summary of exercise and equipment options and performance optimization techniques.

Chapter 1, Test Standards, covers test administration, event standards, grading, scoring, equipment requirements, and the modified Army Combat Fitness Test (ACFT MOD).

Chapter 2, Drills and Exercises, contains the Preparation and Recovery Drills and a selection of "top three" exercises from other drills that support ACFT-specific training. Video support is available online at www.army.mil/acft. Accessing these videos online allows Soldiers to quickly understand and perform the exercises safely, wherever they train.

Appendix A, ACFT Testing Equipment and Field Standards, provides the standards and specifications for the ACFT. ACFT field standards are being developed by the U.S. Army Corps of Engineers to meet the requirements for unit and individual testing.

CHAPTER 1

Test Standards

Army Combat Fitness Test (ACFT) standards are important for the safety of the Soldier and readiness of the Army. Soldiers and graders must know the test standards and how to perform them in order to be successful on the ACFT. This chapter directs the standards for the six events of the ACFT and the standards for the three alternate assessments used in the modified ACFT (ACFT MOD) for Soldiers on permanent profile.

ADMINISTRATION

SUPERVISION

The ACFT consists of the 3 Repetition Maximum Deadlift (MDL), Standing Power Throw (SPT), Hand-Release Push-Up (HRP), Sprint-Drag-Carry (SDC), Leg Tuck (LTK), and 2-Mile Run (2MR).

The intent of the ACFT is to accurately reflect Soldier combat performance capability linked to Warrior Tasks and Battle Drills (WTBDs) and Common Soldier Tasks (CSTs). Soldier combat readiness is the ability to meet the physical demands of any combat or duty position in order to accomplish the mission. The ACFT predicts Soldier performance of WTBDs. The test events have a high correlation with these physically demanding tasks. The ACFT assesses all components of physical readiness required to build movement lethality: muscular strength, muscular endurance, aerobic endurance, explosive power, and anaerobic endurance, as well as speed, agility, flexibility, balance, and coordination.

An ACFT-focused program will train all aspects of fitness, including mental toughness. Just as Soldiers have to carefully dose their stamina across different moments in combat, so too will Soldiers have to plan their pacing strategy to avoid under-performing on one of the later events in the ACFT. For example, Soldiers accustomed to relatively fast run times on the Army Physical Fitness Test (APFT) will have to think and train differently to match these times on the ACFT.

The ACFT tests a Soldier's ability to move under fatigue — his/her ability to concentrate and keep going to sustain lethality. Soldiers not accustomed to moving heavy weights will be more likely to fatigue and demonstrate improper form on the MDL, SPT, HRP, SDC, or LTK. Movement lethality degrades with fatigue. Soldiers must be tenacious in order to maintain lethality.

The success of any physical fitness testing program depends on obtaining valid and accurate test results. Therefore, the ACFT must be administered to standard in order to accurately evaluate individual Soldier and unit physical readiness. Supervision of the ACFT is necessary to ensure the objectives of the physical fitness program are met. Proper supervision provides standardization in the following:

- Test preparation
- Control of performance factors
- Training of test personnel to increase awareness and enforcement of event standards
- Test scoring

PREPARATION

Preparation for the ACFT will be directed at securing the most accurate evaluation of personnel participating in the test. Preparatory requirements include the following:

- Selecting and training event supervisors, graders, timers, demonstrators, and support personnel
- Equipment inventory
- Securing the test site

PLANNING

The commander ensures that testing is consistent with regard to events, scoring, uniform, equipment, and facilities. Testing will be planned to permit each Soldier to perform at his/her maximal level and should ensure the following:

- Soldiers have been properly trained for the events using physical training programs described in doctrine.
- Soldiers know the events and have been briefed before the test on the correct performance of the events.
- Soldiers are not tested when fatigued, ill, or on temporary profile for a physically limiting condition.
- Soldiers do not participate in fatiguing duties before taking the test.
- Weather and environmental conditions do not inhibit physical performance.

- The uniform is appropriate for those conditions.
- Deliberate risk assessment is completed and approved.

DUTIES

ACFT personnel must be familiar with all aspects of administration of the ACFT. Supervision of Soldiers and laying out the test area are essential duties. Each test will have an officer in charge (OIC) or noncommissioned officer in charge (NCOIC), and one grader for every four Soldiers tested. Individual Soldiers are not authorized to self-administer the ACFT for record test purposes.

Three Soldiers are required to administer the ACFT to one Soldier: the OIC or NCOIC and two graders. The OIC or NCOIC will provide event timing as well as supervise the test. The two graders will combine to demonstrate, administer events, and measure distance, time, weight, and repetitions. If the OIC or NCOIC only has one grader available, the OIC or NCOIC may serve as the second grader. For example, timing the HRP, SDC, LTK, and 2MR; scoring the SPT; and observing the 25-meter line in the SDC.

The OIC and the NCOIC are responsible for the administration of the ACFT. On the test day, the OIC or the NCOIC briefs Soldiers on the purpose and organization of the test. The OIC or NCOIC explains test administration, reminding Soldiers about their scorecard, the scoring standards, and test sequence. Responsibilities include the following:

- Administration and conduct of the test
- Procurement of all necessary equipment and supplies
- Arrangement and layout of the test area
- Training of event graders, demonstrators, and support personnel
- Ensuring tests are administered in accordance with this publication and events are explained, demonstrated, and scored according to standard
- Reporting results of the test

Each lane will have a grader. Event graders are responsible for scoring events to standard. The graders count the correct number of repetitions out loud, time events, measure distance, and correct event performances. When Soldiers complete their ACFT events, the grader records the correct number of completed repetitions, distance, or time on the ACFT initial operation capability (IOC) scorecard. After the grader has entered the Soldier's 2MR time on the ACFT IOC scorecard, he/she converts the raw scores for all the events into point scores for each event, enters the total on the ACFT IOC scorecard, and initials each event. The grader confirms the scores with the tested Soldier, who also signs the ACFT IOC scorecard to confirm its accuracy. The grader then returns all ACFT IOC scorecards to the OIC or the NCOIC. Responsibilities include the following:

- Receiving training conducted by the OIC or NCOIC.
- Administering one or more test events.
- Ensuring necessary equipment is on hand for each lane.
- Scoring events to standard.
- Controlling two adjacent lanes during the SPT and SDC to assure Soldier and scorer safety, and eliminate interference between lanes.
- Serving as the scorer for the SPT distance measurement. The scorer will also confirm correct foot and hand touch at the 25-meter turn line during the SDC.
- Recording the correct number of repetitions, distance, weight, and times in the raw score block on ACFT IOC scorecard.
- Addressing and resolving questions on scoring discrepancies and informing the OIC or NCOIC.
- Recording initials and signatures on the ACFT IOC scorecard.

Demonstrators are responsible for demonstrating the events to standard. Responsibilities include:

- Assisting the OIC or NCOIC by demonstrating events to standard before the test begins.
- Receiving training conducted by the OIC or NCOIC to ensure demonstration of test events are to standard.

When OICs, NCOICs, or graders time events, they will use the following event-specific timing standards:

Hand-Release Push-Up

The OIC or NCOIC begins the HRP with the command, “GET SET.” On the command, “GO,” time starts on both the timer and back-up timer’s watches. The timer indicates time remaining at one minute (with the command, “ONE MINUTE REMAINING”), 30 seconds (with the command, “30 SECONDS REMAINING”), and counts down the remaining 10 seconds (with the command, “10 SECONDS, 9, 8, 7, 6, 5, 4, 3, 2, 1, STOP”). This pattern is repeated as a new group of Soldiers moves forward to perform the event.

Sprint-Drag-Carry

The OIC or NCOIC begins the SDC with the command, “GET SET.” On the command, “GO,” the time is started for each Soldier by the grader for that Soldier’s lane. Once the first Soldiers in all lanes have completed the event, the next Soldiers assume the starting position. The NCOIC sends the next group with the command, “GET SET, GO,” and lane graders mark the time. This pattern is repeated until all Soldiers have completed the event.

Leg Tuck

After the OIC or NCOIC has given the command, “GET SET,” and the first Soldier has assumed the starting position and is ready to begin the event, the grader gives the command, “GO.” The NCOIC starts the two-minute clock. The NCOIC ensures that two minutes has elapsed before the second Soldier starts his/her attempt. This ensures the last Soldier to complete the SDC gets adequate recovery before beginning the LTK.

2-Mile Run

The OIC or NCOIC begins the 2MR with the command, “GET SET.” The 2MR time starts on both the NCOIC and grader’s stop watches on the command, “GO.” As Soldiers near the finish line, the timer calls out time in minutes and seconds (for example, “FOURTEEN-FIFTY-EIGHT, FOURTEEN-FIFTY-NINE, FIFTEEN MINUTES, FIFTEEN-O-ONE”). Graders record each of their Soldiers’ times on the ACFT IOC scorecard.

Support personnel assist in preventing unsafe acts to ensure smooth operation of the ACFT. The use of support personnel depends on local policy and unit standard operating procedures (SOPs). Medical support on-site is not required unless specified by local policy. The OIC and/or the NCOIC will have a plan for medical support (if required).

TEST SITE

Each unit will have a designated ACFT test site and a designated ACFT grader team. A 16-lane site will provide the capacity to test 64 Soldiers every 90 minutes or less.

The OIC and NCOIC will select an outdoor grass or artificial turf test site that is flat and free of debris. The test site will include the start and finish point for the 2MR. When test events are conducted indoors, the surface must be artificial turf only. Wood and rubberized surfaces are not permitted as they impact the speed of the SDC. Concrete, hard-top, gravel, and dirt surfaces are not recommended for testing. They may be used for training and demonstrations, but they increase the risk of injury to Soldiers during maximal effort testing. They also cause undue wear on equipment. A test site will have the following:

- A test area measuring 30 by 50 meters on grass or artificial turf (16 lanes, each 25 by 3 meters)
- A site free of any significant hazards
- A briefing area for the reading of test instructions
- An area to conduct the Preparation Drill and Recovery Drill
- A soft, flat area for field-based events

Sound judgment must be used in the selection of the run course: A generally flat, measured running course with a solid, improved surface that is not more than a three-percent uphill grade and has no overall decline (start and finish must be at the same altitude). When environmental conditions prohibit outdoor testing, an indoor track may be used for the 2MR. There is no requirement to survey run courses; however, selected test sites should be free of significant hazards such as traffic, slippery road surfaces, and areas where heavy air pollution is present.

EQUIPMENT

Specifications for ACFT equipment are described in Appendix A of this publication. The following are the minimum equipment requirements for a single lane and 16-lane set of ACFT equipment:

3 Repetition Maximum Deadlift

- Single lane:
 - 1 x hexagon bar weighing 60 pounds (lbs)
 - 2 x barbell collars
- To equip a single lane with the minimum weight (the 140-lb lane):
 - 2 x 35-lb bumper plates
 - 2 x 5-lb bumper plates
- To equip a single lane with the maximum weight (the 340-lb lane):
 - 6 x 45-lb bumper plates
 - 2 x 5-lb bumper plates
- To equip 16 lanes for the MDL using the plate arrangement in Table 1-1 requires 4,050 lbs:
 - 52 x 45-lb bumper plates
 - 12 x 35-lb bumper plates
 - 4 x 25-lb bumper plates
 - 10 x 15-lb bumper plates
 - 12 x 5-lb bumper plates

Table 1-1. Standard plate arrangement for 16 lanes*

Plates (lbs)	Hex Bar + Plates (lbs)	Weight Level (lbs)
$2 \times 35 + 2 \times 5 = 80$	$80 + 60 =$	140
$2 \times 45 + 2 \times 5 = 100$	$100 + 60 =$	160
$2 \times 45 + 2 \times 15 = 120$	$120 + 60 =$	180
$2 \times 45 + 2 \times 25 = 140$	$140 + 60 =$	200
$4 \times 35 = 150$	$150 + 60 =$	210
$2 \times 45 + 2 \times 35 = 160$	$160 + 60 =$	220
$4 \times 45 = 180$	$180 + 60 =$	240
$4 \times 45 + 2 \times 5 = 190$	$190 + 60 =$	260
$4 \times 45 + 2 \times 15 + 2 \times 5 = 220$	$220 + 60 =$	280
$4 \times 45 + 4 \times 15 = 240$	$240 + 60 =$	300
$4 \times 45 + 2 \times 35 + 2 \times 5 = 260$	$260 + 60 =$	320
$6 \times 45 + 2 \times 5 = 280$	$280 + 60 =$	340
$6 \times 45 + 2 \times 15 = 300$	$300 + 60 =$	360
$6 \times 45 + 2 \times 25 = 320$	$320 + 60 =$	380
$6 \times 45 + 2 \times 35 = 340$	$340 + 60 =$	400
$8 \times 45 = 360$	$360 + 60 =$	420
*The plate arrangement will change if the weight of the bar is above or below 60 lbs.		

Standing Power Throw

- Single lane:
 - 1 x 10-lb medicine ball
 - 1 x 25-meter measuring tape (also used for the SDC)
 - 1 x measuring stick
 - 12 x field cones (also used for the SDC) to mark the start and finish lines and the 5-meter points in each lane
 - 1 x hand towel
- 16-Lane set:
 - 16 x 10-lb medicine ball
 - 8 x 25-meter measuring tapes (also used for the SDC), placed between two lanes

- 8 x measuring sticks
- 110 x field cones (also used for the SDC)
- 16 x hand towels

Hand-Release Push-Up

- Single lane:
 - 1 x stopwatch (also used for the SDC, LTK and 2MR)
- 16-Lane set:
 - 16 x stopwatches (also used for the SDC, LTK, and 2MR)

Sprint-Drag-Carry

- Single lane
 - 1 x nylon sled and pull strap
 - 2 x 45-lb bumper plates
 - 2 x 40-lb kettlebells
- 16-Lane set:
 - 16 x nylon sleds and pull straps
 - 32 x 45-lb bumper plates
 - 32 x 40-lb kettlebells

Leg Tuck

- Single lane:
 - 1 x pull-up bar or climbing pod
- 16-Lane set has 16 x pull-up bars or 1 x climbing pod with the following dimensions and features:
 - 8 x 5-foot (ft) wide climbing bars at 7.5 ft off the ground with step ups at 1.5 ft and 2 ft off the ground
 - 8 x 5-ft wide climbing bars at 8.0 ft off the ground with step ups at 1.5 ft and 2 ft off the ground

2-Mile Run

- 2 to 17 x stopwatches (one for the OIC or NCOIC and one for each grader)

EVENTS

PROTOCOLS

The six events of the ACFT will be completed in order on the same day during a test period not to exceed 90 minutes, to include the Preparation Drill and MDL preparation. This time limit applies to all ACFT scenarios to include Soldiers tested taking the ACFT MOD, as well as Soldiers tested individually or in pairs. The test period is defined as the period of time that elapses from the start of the Preparation Drill to the finish of the 2MR (from the first Bend and Reach to the 21-minute point of the 2MR) or the finish of the 25 minutes allowed for completion of the ACFT MOD.

Soldiers must attempt all six events or all the events of the ACFT MOD. They cannot stop if they fail an event prior to completing all the events. This ensures best effort, and gives commanders an opportunity to redirect training and build tenacity.

Soldiers will rotate as groups of four through each lane. Fewer than four Soldiers per lane are authorized. Each event will have a common start, directed by the OIC or NCOIC. Once every Soldier in the formation has completed the event, the next event will start. The first five test events proceed in this fashion. After the LTK, there will be a programmed rest of 10 minutes that starts when the last Soldier completes the LTK.

Except for 10 minutes of rest after the LTK, there is no programmed rest between events, nor a required amount of rest per Soldier. The exception is when one or two Soldiers are being tested. In those cases, and for the first four events only, five minutes of rest will be programmed between the first four events. The 10-minute rest after the LTK remains the same for all scenarios.

There are no test event restarts. Incorrectly performed repetitions will not be counted. The grader records and initials the correctly completed number of repetitions, distance, and times. Soldiers sign their scorecard before leaving the test site, acknowledging they concur with the scores recorded by their grader. Questions will be resolved by the OIC or NCOIC within the 90-minute time limit for execution of the ACFT. Video recording of the test for training purposes is permitted, but it will not to be used to adjudicate event scores. A video cannot substitute for direct observation by a properly trained grader.

Any piece of clothing not prescribed as a component of the Army Physical Fitness Uniform (APFU) is not permitted for wear during the ACFT. Neither are devices or equipment that offer any potential for unfair advantage during testing. The wearing of the following items are not authorized: nasal strips, back braces, elastic bandages, or limb braces. Biometric measuring devices such as watches, heart-rate monitors, step counters, and fitness trackers are permitted. The wearing and carrying of other electronic devices is not permitted. These devices include electronic music players and cell phones. Army Regulation (AR) 670-1, Wear and Appearance of Army Uniforms and Insignia (25 May 2017), specifies the components of the APFU. In order to protect the hands, Soldiers may choose to use gloves that conform to AR 670-1 for any event, at any time of year, in any climate.

The Preparation Drill is a dynamic warm-up that properly prepares the body for more intense activity such as the ACFT. The principal instructor for the Preparation Drill will not be one of the Soldiers who is about to be tested. Soldiers who are about to take the ACFT will conduct the exercises in the Preparation Drill to their own tolerance, avoiding fatigue. After the Preparation Drill and other preparation activities are completed, the first event will begin. Upon completion of all ACFT events, the Recovery Drill will be conducted as either a collective or individual activity.

3 Repetition Maximum Deadlift

The MDL is the first ACFT event. A 10-minute warm-up for the MDL event should follow the same warm-up pattern used by the Soldier when training for the event. To improve performance, Soldiers should know their goal weight for the test and should have lifted that weight in training. They should be confident they can lift their goal while maintaining energy for the subsequent ACFT events. The following are the recommended MDL preparation sets:

1. Eight to 10 repetitions at 25-percent goal weight or with empty bar (rest two minutes)
2. Six repetitions at 40-percent goal weight (rest three minutes)
3. Four repetitions at 50-percent goal weight (rest four minutes)
4. Optional: One repetition at 80-percent goal weight (rest until MDL event starts)

After completing the 10-minute MDL preparation, Soldiers will arrange themselves in a stack behind the weight they intend to lift. The weight on the MDL bars will be arranged by graders so that there is an even distribution of Soldiers in each lane, and generally no more than five Soldiers in any one lane. Soldiers may assist graders with changing weight plates.

Once the Soldiers are aligned in their stacks:

1. The NCOIC will sound, “GRADERS READY.”
2. After a visual signal from the graders indicating they are prepared to score the MDL, the NCOIC will begin the event with the command, “THE MDL STARTS NOW.”
3. The first Soldier in every lane will step forward.
4. The grader will give the Soldier the command, “GET SET. GO.”
5. The Soldier will perform the MDL.
6. As they complete the MDL, Soldiers will be directed by the OIC, NCOIC, or other graders to a lane for the SPT.
7. Repeat steps 3 through 5 until all Soldiers have completed the event.

Standing Power Throw

Soldiers will be arranged by the OIC or NCOIC to fill each lane starting with lane one. The Soldier who achieved the lowest weight on the MDL will be the first Soldier in the SPT lane. Soldiers will maintain this order for the rest of the next four events. If only one or two Soldiers are being tested, they will be given the programmed five-minute rest period. Once all tested Soldiers are arranged in stacks of four across the lanes, the SPT will begin.

Graders in adjacent lanes will work together to grade the event. One grader moves down the lane to measure or score the throw (the scorer), while the other grader remains at the start line to control the tested Soldiers and make sure only one Soldier is throwing at a time. The last Soldier in the stack assists the scorer with retrieving the ball and rolling it back to the start line after each throw. The NCOIC will start the event with a common start for all Soldiers:

1. The first Soldier in the stack will move to the start line, grasp the ball, and clean off excess moisture and debris.
2. The NCOIC will sound, “GRADERS READY.”
3. After a visual signal from the graders indicating they are prepared to score the SPT, the NCOIC will begin the event with the command, “GO.”
4. In the two lanes they control, graders direct one throw at a time, alternating between Soldiers until each one has completed two throws.

5. After completing their two throws, as a signal to the NCOIC, Soldiers place the ball on the ground centered in their lane behind the start line and stand fast. If a Soldier faults on both throws, he/she is allowed a third attempt.

6. When all lanes are complete (all medicine balls are on the ground), the NCOIC will sound off with, "NEXT SOLDIER, MOVE FORWARD."

7. The Soldier who just tested will move onto the lane and replace the ball retriever; the ball retriever will move to the back of the stack.

8. The next Soldier in line will move to the start line, pick up the ball, and clean off excess moisture and debris.

9. Repeat steps 2 through 8 until all Soldiers have completed the event.

Hand-Release Push-Up

The HRP begins after the SPT, or after the programmed five-minute rest period for the SPT, if only one or two Soldiers are being tested. The first Soldier in the lane steps forward and assumes the HRP starting position on the ground behind the lane start line:

1. The NCOIC will sound, "GRADERS READY."

2. After a visual signal from the graders indicating they are prepared to score the HRP, the NCOIC will begin the event with the command, "GET SET, GO."

3. The first Soldier in every lane will begin performing the HRP.

4. The NCOIC will count down the time to two minutes and give the command, "STOP."

5. Graders will count the number of correctly completed repetitions.

6. Soldiers will return to the back of their stack and the next Soldiers will step forward to test.

7. Repeat steps 1 through 6 until all Soldiers have completed the event.

Sprint-Drag-Carry

The SDC begins after the last Soldier has completed the HRP or after the programmed five-minute rest period, if only one or two Soldiers are being tested. The first Soldier in the lane steps forward and assumes the HRP starting position on the ground behind the lane start line:

1. The NCOIC will sound, “GRADERS READY.”
2. After a visual signal from the graders indicating they are prepared to time the SDC, the NCOIC will begin the event with the command, “GET SET, GO.”
3. The first Soldier in every lane will begin performing the SDC and the graders will start their own stopwatch to time their Soldiers.
4. Graders position themselves to observe violations, but will not accompany Soldiers up and down the lanes. Similar to the SPT, one grader will move to the end of the lane to ensure Soldiers touch and cross the turn-around line properly. The other grader records the times of two Soldiers as they cross the finish line using one or two stopwatches.
5. After completing their turn, Soldiers will return to the back of their stack.
6. The NCOIC gives the command, “NEXT SOLDIER, MOVE FORWARD.”
7. The next Soldier will move forward to adjust the SDC equipment before assuming the HRP starting position.
8. Repeat steps 1 through 7 until all Soldiers have completed the event.

Leg Tuck

The LTK begins after the last Soldier has completed the SDC or after the programmed five-minute rest period if only one or two Soldiers are being tested. The grader inspects the bar and removes any excess moisture:

1. The NCOIC gives the command, “GRADERS READY.”
2. After a visual signal from the graders indicating they are prepared to grade the LTK, the NCOIC gives the command, “GET SET.”
3. The first Soldier in the lane assumes the LTK starting position.

4. The grader, seeing the Soldier is ready, gives the Soldier the command, “GO.” A grader-initiated start avoids having one Soldier hanging from the bar, while waiting for Soldiers in other lanes to assume the starting position.
5. Upon hearing the first command of, “GO,” the OIC or NCOIC starts the two-minute clock. The full, two-minute time for the first Soldier ensures proper rest for those Soldiers who just finished the SDC.
6. For the first Soldier, the grader counts the number of repetitions.
7. After the OIC or NCOIC announces the two minutes has elapsed and the first Soldier has completed his/her attempt, the grader calls, “NEXT SOLDIER, GET READY.”
8. The second Soldier assumes the LTK starting position.
9. The grader gives the Soldier the command, “GO,” and begins counting the number of repetitions.
10. The third and fourth Soldiers begin the event when the previous Soldier in the lane has finished their attempt.

2-Mile Run

The OIC or NCOIC will enforce a 10-minute rest period after the LTK. The 10-minute rest period starts when the last Soldier completes the LTK. During this time, graders issue numbers or vests to their Soldiers and Soldiers move to the 2MR start line. The 2MR starts at the end of the 10 minutes:

1. At the end of the 10 minutes, the NCOIC gives the command, “GET SET, GO,” and starts the clock.
2. If the run is conducted on a track, graders record the number of completed laps for each of their Soldiers.
3. The NCOIC announces the elapsed time as Soldiers cross the finish line.
4. Graders enter the time on the scorecard and ensure that Soldiers sign their cards after the 2MR is complete.

INSTRUCTIONS

Before completing the Preparation Drill, the following instructions are read aloud to all Soldiers taking the ACFT at the test site:

You are about to take the Army Combat Fitness Test or ACFT, a test that will measure your upper and lower body muscular endurance, muscular strength, aerobic and anaerobic endurance, and explosive power. The results of this test will give you and your commanders an indication of your state of physical readiness and will act as a guide in determining your physical training needs. After selecting a lane with your preferred weight for the MDL event, you may be assigned to a different lane for the next events. You will rest and recover while other Soldiers complete their turns. After the last Soldier completes the LTK event, there will be a 10-minute recovery period for all tested Soldiers before the start of the 2MR. Soldiers testing on their own or in pairs will have recovery periods between events equivalent to those who tested in groups. Do the best you can on each of the events.

Army Combat Fitness Test Initial Operation Capability Scorecard

Scorecards will be handed out at this time. The OIC or NCOIC instructs the Soldiers to fill in the appropriate spaces with the required personal data. The following instructions are read aloud to all Soldiers taking the ACFT:

In the appropriate spaces, print in ink the personal information required on the scorecard.

Note: The preceding remark is omitted if scorecards were issued prior to arrival at the test site.

Soldiers are then given time to complete the required information. Next, the OIC or the NCOIC explains procedures for scorecard use during testing.

The following instructions are read aloud to all Soldiers taking the ACFT:

You are to carry this card with you to the first event — the MDL — and give it to the grader. The MDL grader will record your MDL weight and return the card to you to take to the SPT lane grader. The SPT lane grader will maintain control of the card for the duration of the ACFT. The grader will record your raw score and scaled score, initial the card, and return it to you after completing the ACFT. You must sign the scorecard before departing the test area in order to show your agreement with your score.

To maintain control, encourage cohesion, and improve awareness of event standards, the OIC or NCOIC or the event supervisors will conclude with the following statement:

You will continue to observe the ACFT test area and follow instructions from the OIC or NCOIC throughout the test. During the events, you may conduct your choice of preparation activities. During the test, you may observe all events and offer appropriate verbal motivation to test takers. It is your responsibility to complete proper preparation and know the event standards prior to taking the ACFT. What are your questions about the event standards?

Scorecard and Scoring Scale

In order to pass the ACFT, all Soldiers must attain a score of at least 60 points on each event and an overall score of at least 360 points. The maximum score a Soldier can attain on the ACFT is 600 points. There is no extended scoring scale.

ACFT results will be recorded on the ACFT IOC scorecard (see Figure 1-1 on page 22). One scorecard will be maintained for each Soldier. The scorecard will be kept in a central location in the unit and will accompany the individual military personnel records jacket at the time of permanent change of station.

Soldiers who fail to achieve the minimum passing score on any event are considered test failures. Soldiers must not start the test if they are ill or injured, or on a temporary profile that limits them physically. If a Soldier starts the test, he/she is acknowledging they are ready to test and understand the test standards. If a Soldier becomes ill or injured during the ACFT and fails to achieve the minimum passing score, he/she is considered a test failure.

CENTER FOR ARMY LESSONS LEARNED

The ACFT IOC scorecard will be used to record demographic information and scores on all events for a tested individual. Height and weight information is not required for a valid scorecard or ACFT. After the 2MR, the Soldier will initial the scorecard after verifying agreement with each recorded event score. The grader will convert the raw scores to point scores and total the points. See Figures 1-1 and 1-2 for a blank ACFT IOC scorecard and scoring table.

ARMY COMBAT FITNESS SCORECARD				NAME: LAST, FIRST, MI:			
For use of this form, see ACFT IOC, OCT 2019.				GENDER : MALE / FEMALE			
				UNIT/LOCATION:			
TEST ONE				TEST ONE			
DATE	GRADE	MOS	AGE	DATE	GRADE	MOS	AGE
HEIGHT (inches)		WEIGHT: _____ LBS		HEIGHT (inches)		WEIGHT: _____ LBS	
		BODY COMPOSITION				BODY COMPOSITION	
		GO NO GO				GO NO GO	
3 REPETITION MAXIMUM DEADLIFT: weight lifted - circle heaviest (lbs)				3 REPETITION MAXIMUM DEADLIFT: weight lifted - circle heaviest (lbs)			
1ST ATTEMPT	2ND ATTEMPT	POINTS	GRADER INITIALS	1ST ATTEMPT	2ND ATTEMPT	POINTS	GRADER INITIALS
STANDING POWER THROW: distance thrown - circle longest (meters: centimeters)				STANDING POWER THROW: distance thrown - circle longest (meters: centimeters)			
1ST THROW	2ND THROW	POINTS	GRADER INITIALS	1ST THROW	2ND THROW	POINTS	GRADER INITIALS
HAND RELEASE PUSH-UP: number of correctly performed repetitions				HAND RELEASE PUSH-UP: number of correctly performed repetitions			
REPETITIONS		POINTS	GRADER INITIALS	REPETITIONS		POINTS	GRADER INITIALS
SPRINT-DRAG-CARRY: overall event time (minutes: seconds)				SPRINT-DRAG-CARRY: overall event time (minutes: seconds)			
TIME	POINTS	GRADER INITIALS		TIME	POINTS	GRADER INITIALS	
LEG TUCK: number of correctly performed repetitions				LEG TUCK: number of correctly performed repetitions			
REPETITIONS		POINTS	GRADER INITIALS	REPETITIONS		POINTS	GRADER INITIALS
TWO-MILE RUN: overall event time (minutes:seconds)				TWO-MILE RUN: overall event time (minutes:seconds)			
TIME	POINTS	GRADER INITIALS		TIME	POINTS	GRADER INITIALS	
5K ROW / 1K SWIM / 15K BIKE (circle one): overall time to reach required distance				5K ROW / 1K SWIM / 15K BIKE (circle one): overall time to reach required distance			
TIME	PASS / FAIL	GRADER INITIALS		TIME	PASS / FAIL	GRADER INITIALS	
Soldier Signature: _____			TOTAL POINTS	Soldier Signature: _____			TOTAL POINTS
OIG/COIC Last, First, MI		OIG/COIC Signature / Rank:		OIG/COIC Last, First, MI		OIG/COIC Signature / Rank:	

Figure 1-1. ACFT IOC scorecard

ARMY COMBAT FITNESS TEST

Points	MDL	SPT	HRP	SDC	LTK	2MR		Points	MDL	SPT	HRP	SDC	LTK	2MR
100	340	12.5	60	1:33	20	13:30	-	50	130	4.3	8	3:10		21:18
99		12.4	59	1:36		13:39		49						21:19
98		12.2	58	1:39	19	13:48		48				3:11		21:21
97	330	12.1	57	1:41		13:57		47						21:23
96		11.9	56	1:43	18	14:06		46				3:12		21:25
95		11.8	55	1:45		14:15		45	4.2	7				21:27
94	320	11.6	54	1:46	17	14:24		44				3:13		21:28
93		11.5	53	1:47		14:33		43						21:30
92	310	11.3	52	1:48	16	14:42		42				3:14		21:32
91		11.2	51	1:49		14:51		41						21:34
90	300	11.0	50	1:50	15	15:00		40	120	4.1	6	3:15		21:36
89		10.9	49	1:51		15:09		39						21:37
88	290	10.7	48	1:52	14	15:18		38				3:16		21:39
87		10.6	47	1:53		15:27		37						21:41
86	280	10.4	46	1:54	13	15:36		36				3:17		21:43
85		10.3	45	1:55		15:45		35	4.0	5				21:45
84	270	10.1	44	1:56	12	15:54		34				3:18		21:46
83		10.0	43	1:57		16:03		33						21:48
82	260	9.8	42	1:58	11	16:12		32				3:19		21:50
81		9.7	41	1:59		16:21		31						21:52
80	250	9.5	40	2:00	10	16:30		30	110	3.9	4	3:20		21:54
79		9.4	39	2:01		16:39		29						21:55
78	240	9.2	38	2:02	9	16:48		28				3:21		21:57
77		9.1	37	2:03		16:57		27						21:59
76	230	8.9	36	2:04	8	17:06		26				3:22		22:01
75		8.8	35	2:05		17:15		25	3.8	3				22:03
74	220	8.6	34	2:06	7	17:24		24				3:23		22:04
73		8.5	33	2:07		17:33		23						22:06
72	210	8.3	32	2:08	6	17:42		22				3:24		22:08
71		8.2	31	2:09		17:51		21						22:10
70	200	8.0	30	2:10	5	18:00	HVY	20	100	3.7	2	3:25		22:12
69		7.8	28	2:14		18:12		19						22:13
68	190	7.5	26	2:18	4	18:24		18				3:26		22:15
67		7.1	24	2:22		18:36		17						22:17
66		6.8	22	2:26		18:48		16				3:27		22:19
65	180	6.5	20	2:30	3	19:00	SIG	15	3.6	1				22:21
64	170	6.2	18	2:35		19:24		14				3:28		22:22
63	160	5.8	16	2:40		19:48		13						22:24
62	150	5.4	14	2:45	2	20:12		12				3:29		22:26
61		4.9	12	2:50		20:36		11						22:28
60	140	4.5	10	3:00	1	21:00	MOD	10	90	3.5		3:30		22:30
59				3:01		21:01		9						22:31
58				3:02		21:03		8				3:31		22:33
57				3:03		21:05		7						22:35
56				3:04		21:07		6				3:32		22:37
55		4.4	9	3:05		21:09		5	3.4					22:39
54				3:06		21:10		4				3:33		22:40
53				3:07		21:12		3						22:42
52				3:08		21:14		2				3:34		22:44
51				3:09		21:16		1						22:46
50	130	4.3	8	3:10		21:18		0	80	3.3	0	3:35	0	22:48

Figure 1-2. ACFT IOC scoring scale

STANDARDS

3 Repetition Maximum Dead Lift



Figure 1-3. MDL



Figure 1-4. MDL

The MDL is a muscular strength test that mimics movements required to safely and effectively lift heavy loads from the ground. For example, the MDL is a strong predictor of a Soldier's ability to lift and carry a casualty on a litter and to lift and move personnel and equipment. This test event requires well-conditioned back and leg muscles that assist Soldiers in load carriage and in avoiding injuries to the upper and lower back.

It is important to understand the difference between an attempt and a repetition. A successful MDL attempt is the three repetitions completed to standard. The MDL consists of the following three parts:

- **Preparatory phase.** On the command, “GET SET,” the Soldier steps inside the hex bar, with feet shoulder-width apart. The Soldier locates the midpoint of the hex-bar handles. The Soldier bends at the knees and hips, reaches down, and grasps the center of the handles using a closed grip. The arms are fully extended, back flat, head in line with the spine or slightly extended, and heels in contact with the ground. Each repetition will begin from this position.
- **Upward movement.** On the command, “GO,” the Soldier lifts the bar by straightening the hips and knees in order to reach the straddle stance. The hips should not rise before or above the shoulders. The back should remain straight, not rounded out or flexed. The feet will remain in the same position. The Soldier and the weight must remain balanced and controlled throughout the movement.
- **Downward movement.** After reaching the straddle stance position, the Soldier lowers the bar back to the ground under control while maintaining a straight back. The bar must be placed on the ground and not dropped. The weight plates must touch the ground to complete a repetition.

The Soldier will execute three repetitions with the same weight. If the Soldier fails on the first attempt, he/she will be allowed to attempt a lower weight of their choosing. If the Soldier completes a successful attempt, he/she may attempt a heavier weight. To save time in adjusting the hex bar weight, Soldiers may move to a lane that already has a hex bar with their new target weight.

If the Soldier makes an unsafe movement on the first repetition, the grader will inform the Soldier of the error and tell the Soldier to stop. After being told of their error, the Soldier will be allowed to resume the attempt from the beginning. A safety stop is used on the first repetition of an attempt to prevent repeated movements that might cause injury to the Soldier. This safety stop during the first repetition will not count for record. If the Soldier makes the same or another safety stop on the second or third repetition, the grader will stop them again, explain their error, and record a failed attempt.

If a safety stop happens on the second or third repetition, the attempt will be terminated and counted as a failed attempt. In this case, the Soldier may make a second attempt at the same weight or move to a lighter weight of his/her choosing. The following are MDL safety stops:

- Allowing one or both knees to move together during any part of the movement (see Figure 1-5).
- Moving the hips above the shoulders to initiate the upward movement (see Figure 1-6).
- Letting the back or shoulders round out during any part of the movement (see Figure 1-6).
- Losing balance during any part of the movement, to include stepping forwards or backwards from the starting position. If the Soldier loses balance during the first repetition, he/she will be safety stopped. If the Soldier loses balance on the second or third repetition, the attempt will be terminated and counted as a failed attempt.



Figure 1-5. Knees moving closer together

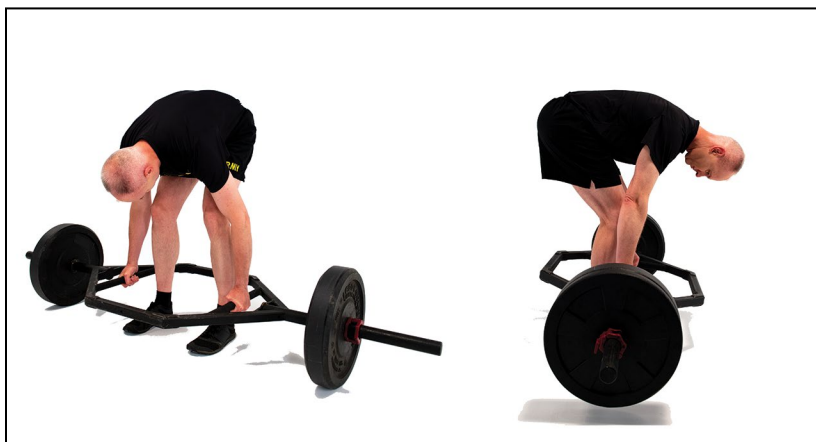


Figure 1-6. Rounding of the spine and hips moving above the shoulders

An MDL attempt will be terminated if during any of the three repetitions, the Soldier:

- Drops the bar to the ground.
- Removes hands from the bar between repetitions when the bar is on the ground. However, adjusting the grip while maintaining contact with the bar is authorized.
- Fails to touch the bar to the ground between repetitions (see Figure 1-7).
- Does not perform a continuous movement by resting on the ground.
- Resting means there is an obvious lack of effort to move from the ground.
- Is called for a safety stop on the second or third repetition of an attempt.



Figure 1-7. Touching the plates to the ground versus not touching the ground

If the Soldier completes three repetitions to standard, the grader will record the weight and ask the Soldier if he or she would like to attempt a higher weight. The Soldier is allowed one attempt at a higher weight. The weight of the heaviest successful attempt is the raw score circled on the ACFT IOC scorecard.

The following instructions will be available to Soldiers prior to the test:

3 Repetition Maximum Deadlift

You must step inside the hex bar with feet shoulder width apart and locate the midpoint of the hex-bar handles. On the command, “GET SET,” you will bend at the knees and hips, reach down, and grasp the center of the handles using a closed grip. Arms will be fully extended, back flat, head in line with the spinal column, and heels in contact with the ground. All repetitions will begin from this position. On the command, “GO,” you will stand up and lift the bar by straightening the hips and knees. After completing the movement up, you will lower the bar to the floor under control while maintaining a flat back. You must not rest on the ground. A successful attempt is three repetitions to standard. If you fail to perform a successful attempt, you will be allowed one re-attempt at the same weight or a lower weight of your choosing. If you complete three correct repetitions on your first attempt, you will be given the option to attempt a higher weight of your choosing to increase your score. The amount of weight successfully attempted will be your raw score.

Standing Power Throw



Figure 1-8. SPT

The SPT is a backward overhead throw for distance that measures explosive power. Tasks that require powerful movements include jumping across a ditch, executing a buddy drag, throwing equipment over an obstacle, throwing a hand grenade, assisting a buddy climb up a wall, loading equipment, and employing progressive levels of force in hand-to-hand contact.

The SPT consists of two phases:

- **Preparatory phase.** The Soldier faces away from the throw line, grasps the medicine ball (10 lbs) with both hands at hip level, and stands with heels at (but not on or over) the start line. To avoid having the ball slip, the Soldier grasps firmly and as far around the sides of the ball as possible. The Soldier may grasp under the ball. The Soldier may make several preparatory movements, bending at the trunk, knees, and hips while lowering the ball almost to the ground.
- **Throwing phase.** After the preparatory phase, the Soldier will move quickly and powerfully to throw the ball backwards and overhead. The Soldier must be stationary prior to a throw — no hopping, stepping, or running to initiate the throw. The Soldier may jump to exert more power during the throw with one or both feet leaving the ground. If the Soldier falls or steps onto or beyond the start line, the repetition will be recorded as a zero.

The Soldier will perform two throws alternating with the Soldier in an adjacent lane. The longest throw will count for record. The Soldier will use maximal effort to throw the ball backwards and overhead as far as possible. The grader will observe the Soldier's feet to make sure they do not touch the start line before or during the throw. The throw is complete when the ball lands. The ball may land outside of the Soldier's lane. If the Soldier loses balance and steps across the line or falls after the ball lands, the throw will not count.

The scorer will mark the point where the ball lands and read off the measurement to the nearest decimeter. The measurement is taken from the center of the ball's landing point perpendicular to the tape measure. The scorer announces the score (for example, "10 METERS AND 50 CENTIMETERS" or "TEN POINT FIVE") and the grader writes the score on the scorecard. The longer of the two throws will count as the Soldier's raw score.

If the Soldier faults, that throw will be recorded as a zero. Faults include:

- Stepping on the start line or into the lane during the throw.
- Falling to the ground.

During the IOC period (fiscal year 2020 [FY20]), in the highly unlikely event a Soldier faults on both throw attempts, he/she will be given one more attempt to score a record throw. This will be recorded as the second throw or double fault on the scorecard. The score for a fault on the first throw will be recorded as a zero.

The following instructions will be available to Soldiers prior to the test:

Standing Power Throw

You will face away from the throw line and grasp a 10-lb medicine ball with both hands. Stand with the heels at — not on or over — the start line. To avoid having the ball slip, grasp firmly and as far around the sides or beneath the ball as possible. You may make several preparatory movements by bending at the trunk, knees, and hips while lowering the ball toward the ground. Attempt to throw the ball as far as possible. Your feet must be stationary and on the ground prior to the throw. You may jump during the throwing movement to exert more power into the throw, but you must not fall, cross beyond, or touch the throw line with your foot. If you do, the throw will not count. The longer of the two attempts will be the one used for your record score.

Hand-Release Push-Up



Figure 1-9. HRP



Figure 1-10. HRP

The HRP is a two-minute, timed event that measures upper body muscular endurance and has high correlation with the repetitive and sustained pushing used in combat tasks. It is a test of a Soldier's ability to push an opponent away during hand-to-hand contact, push a vehicle when it is stuck, and push up from the ground during evade and maneuver. It also engages upper back muscles used when reaching out from the prone position, taking cover, or low crawling. When conducted to standard, the HRP provides a safe, equipment-free test of large muscle groups in the shoulders, trunk, hips, and legs.

On the command, "GET SET," the Soldier will assume the prone position with hands flat on the ground beneath the shoulders. The chest and front of the hips and thighs will be on the ground. The toes will be touching the ground, and feet will be together or up to a boot's width apart as measured by the grader. The ankles will be flexed. The head does not have to be on the ground.

With the hands placed flat on the ground, the index fingers will be inside the outer edge of the shoulders. The hands will return to this position to complete each repetition. The feet will remain on the ground throughout the event. They cannot be more than a boot's width apart. The HRP consists of four movements:

- **Movement 1.** On the command, "GO," the Soldier will push the whole body up from the ground as a single unit to fully extend the elbows and move to the up position (front leaning rest).
- **Movement 2.** After reaching the up position, the Soldier will bend the elbows to lower the body to the ground. The chest, hips, and thighs will touch the ground as a single unit. The head or face does not have to contact the ground.
- **Movement 3.** The hand release: Without moving the head, body, or legs, the Soldier will immediately move both arms out to the side, straightening the elbows into the T-position. The arms and hands may touch or slide along the ground during this movement.
- **Movement 4.** The Soldier will make an immediate movement to place his/her hands back on the ground to return to the starting position to complete the repetition.

A repetition will not count if the Soldier makes a movement error during any of the repetitions. The following are HRP errors:

- Failing to maintain a straight body alignment from the head to the ankles throughout the repetition to include extending the neck or arching the back to keep the chest off the ground.

- Failing to fully extend the elbows in the up position (front leaning rest).
- Failing to bring the hands back to the starting position to complete the repetition.
- Failing to keep the feet within a boot's width apart.

The HRP event will be terminated if the Soldier:

- Deviates from the straight body alignment while in the front leaning rest (bending or flexing at the shoulder, hips, or knees).
- Lifts a foot or hand from the ground. Termination for lifting a hand applies when the Soldier is in the front leaning rest position, not when they are on the ground. Termination for lifting a foot applies in both positions, throughout the repetition.
- Places a knee on the ground from the front leaning rest position.
- Fails to make a continuous effort to raise up from the ground.
- Repeats movement 3 (the hand release) before raising up from the ground.

During the HRP, graders kneel or sit so that they can check the position and alignment of the Soldier's hands, chest, body, and feet. The following are additional instructions to the Soldier:

- You should not wear glasses while performing the HRP event.
- You must make a continuous effort. Resting on the ground will terminate the event. The score achieved prior to resting will be the recorded score for the event.
- You must not "snake" off the ground. Your body must move as one unit.
- Your feet must remain within a boot's width apart.
- You must fully extend your elbows in the up position.
- You must correct a movement error immediately.
- You may perform the exercise from your knuckles — hands in a fist — and switch back and forth to a standard hand position as needed. If your hand is in a fist, it must be inside the outside edge of the shoulder in the starting position.

The number of correct repetitions completed in two minutes will be recorded as the raw score on the ACFT IOC scorecard.

The following instructions will be available to Soldiers prior to the test:

Hand-Release Push-Up

On the command, “GET SET,” you will assume the prone position with hands flat on the ground beneath your shoulders. Your chest and the front of your hips and thighs will be on the ground. Toes will be touching the ground, and feet will be together or up to a boot’s width apart as measured by the grader’s boot. Your ankles will be flexed. Your head does not have to be on the ground. With the hands placed flat on the ground, your index fingers will be inside the outer edge of your shoulders. Your feet will remain on the ground throughout the event. On the command, “GO,” you will push the whole body up from the ground as a single unit to fully extend the elbows, moving into the front leaning rest position. You will maintain the same straight body alignment from the top of the head to the ankles. This straight position will be maintained for the duration of the event. Bending or flexing the knees, hips, trunk, or neck during a repetition will cause that repetition to not count. The front leaning rest is the only authorized rest position. If you move from the straight position the event will be terminated. After you reach the up position, your elbows will bend again to lower your body to the ground. Your chest, hips, and thighs will touch the ground. Your head or face does not have to contact the ground. After reaching the ground as a single unit, without moving the head, body, or legs, you will immediately move both arms out to the side, straightening the elbows into the T-position. You will then immediately return your hands to the starting position to complete one repetition. You cannot pause or rest on the ground. If you place a knee on the ground or lift a hand or foot when in the up position, the event will be terminated. You have two minutes to complete as many correct repetitions as possible.

Sprint-Drag-Carry

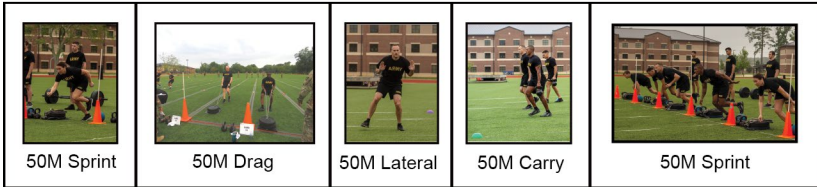


Figure 1-11. SDC

The SDC is a timed, 250-meter shuttle event that measures anaerobic capacity as well as muscular endurance and muscular strength. These components of fitness are needed to accomplish high-intensity tasks for relatively brief periods of time from a few seconds to a minute. This physical capacity contributes to a Soldier's ability to react rapidly to direct and indirect fire, build a hasty fighting position, extract a casualty from a vehicle, and carry them to safety.

On the command, "GET SET," assume the prone position with the top of the head behind the start line, ready to complete five, 50-meter shuttles in the following order:

- **Sprint.** On the command, "GO," move as quickly as possible from the prone position, sprint 25 meters and touch the 25-meter line with the foot and hand, turn, and sprint back to the start. If the Soldier fails to touch the 25-meter line with the hand and foot, the grader will call them back to do so.
- **Drag.** Grasp each strap handle on the 90-lb sled and pull the sled backwards until the back (entire) of the sled crosses the 25-meter line. Turn the sled and continue pulling backward until the sled has crossed the start line. If the Soldier fails to cross the 25-meter line, the grader will call them back to do so.
- **Lateral.** Perform the lateral (either to the right or left) for 25 meters, touching the 25-meter line with a foot and hand, and perform the lateral in the opposite direction back to the start line. The Soldier's feet must not cross and must remain parallel to each other and perpendicular to the direction of travel. If the Soldier fails to touch the 25-meter line with the hand and foot, the grader will call them back to do so.

- **Carry.** Grasp the handles of the two 40-lb kettlebells and sprint for 25 meters, touch the 25-meter line with the foot only, and return back to the start line. After crossing the start line, place the kettlebells on the ground without dropping them. If the Soldier fails to touch the 25-meter line with the foot, the grader will call them back to do so. If the Soldier drops the kettlebells at the start line, the grader will call the Soldier back to replace them under control.
- **Sprint.** Turn and sprint 25 meters, touch the 25-meter line with foot and hand, turn, and sprint back to the start line. If the Soldier fails to touch the 25-meter line with the hand and foot, the grader will call them back to do so.

The grader records the Soldier's time as he/she crosses the start line on the ACFT IOC scorecard.

The following instructions will be available to Soldiers prior to the test:

Sprint-Drag-Carry

You must assume the prone position with hands on the ground beneath your shoulders and with the top of your head behind the start line, ready to complete five consecutive and continuous 50-meter shuttles. For the first shuttle, on the command, "GO," stand up and sprint 25 meters before touching the 25-meter line with your foot and hand, turning at the line and sprinting back to the start. If you fail to touch properly, the scorer will call you back before allowing you to continue. For the second shuttle, grasp each pull-strap handle to pull the sled backwards until the whole sled crosses the 25-meter line. If you fail to cross the line with the sled, the scorer will call you back before allowing you to continue. Turn and drag the sled back to the start line. For the third shuttle, you will perform the lateral for 25 meters, touching the line with the foot and hand before performing the lateral back to the start line. The lateral will be performed to the left in one direction and to the right in the other direction. For the fourth shuttle, grasp the handles of the two 40-lb kettlebells and run 25 meters, touching the line with the foot before returning back to the start line. Place the kettlebells on the ground without dropping them. For the fifth shuttle, sprint 25 meters to the line, touching with the foot and hand, before turning and sprinting back to the start line to complete the event.

Leg Tuck



Figure 1-12. LTK

The LTK tests a Soldier's grip, shoulder, core, and hip flexor strength. It is a muscular strength and endurance event with high occupational relevance to Soldiers. LTK movements assist Soldiers in all climbing tasks and in surmounting obstacles such as a vertical wall, climbing onto a shelf, or along or up a rope or low crawling. This test event requires well-conditioned abdominal and hip flexor muscles that will assist Soldiers in load carriage and in avoiding injuries to the upper and lower back. Like the MDL, the LTK has the following three parts:

- **Preparatory phase.** On the command, "GET SET," the Soldier assumes a straight-arm hang on the bar, with feet off the ground, knees bent if necessary. The grip is the alternating grip, with hands no more than a fist's width apart, as measured by the grader. The body is positioned perpendicular to the bar. The Soldier's elbows, body, and legs are straight. Legs and feet are not crossed. Feet cannot contact the ground or the climbing bar.

- **Upward movement.** On the command, “GO,” the Soldier will flex at the elbows, knees, hips, and waist to bring the knees up. The elbows must flex. They cannot remain fully extended or straight. The right and left knees or front of the thighs must touch the right and left elbows respectively so they touch or are in contact with the elbows at the same time. Contacting the upper arm in the triceps muscle region does not count. The grader must observe both knees in contact with both elbows for the Soldier to receive credit for the repetition.
- **Downward movement.** The Soldier will return under control to the straight-arm hang position to complete the repetition. If the elbows remain bent, that repetition will not count. Deliberate, active swinging of the trunk and legs to assist with the exercise is not permitted. Small, inconsequential or passive movement of the body and twisting of the trunk is permitted. The Soldier may rest in the down position.
- The event will end when the Soldier voluntarily stops or drops from the bar. Using the ground or post to rest or push from between repetitions will also terminate the event.

LTK errors that will cause a repetition to not be counted are:

- Failure to touch both knees or thighs to the elbows at the same time.
- Failure to flex both elbows during the upward movement.
- Failure to straighten both elbows to complete a repetition.
- Active swinging of the legs and trunk to assist with the upward movement.
- Crossing the feet and ankles.
- Dropping from the bar prior to returning to the straight-arm hang position.

The number of successfully completed repetitions will count as the raw score on the ACFT IOC scorecard.

The following instructions will be available to Soldiers prior to the test:

Leg Tuck

You will assume a straight-arm hang on the bar with feet off the ground and uncrossed. You must use the alternating grip, with the dominant hand closest to the head. Your body will be perpendicular to the bar. Your elbows will be straight. Your feet cannot contact the ground or the pull-up/climbing bar during the event. On the command, "GO," you will flex at the elbows, knees, hips, and waist to raise your knees. Your elbows must flex. They cannot remain fully extended or straight. The right and left knees or thighs must touch the right and left elbows respectively. Your grader must observe both of the knees or the front of the thighs contacting both elbows. You will return under control to the straight-arm hang position to complete each repetition. If your elbows remain bent in the straight-arm hang position, that repetition will not count. You do not have to be completely still in the straight-arm hang position, but deliberate, active swinging of the trunk and legs to assist with the upward movement is not permitted. Small, inconsequential or passive movement of the body and twisting of the trunk is permitted. Your grader may assist with controlling these movements if they become excessive. You may rest in the straight-arm hang position. The event will be terminated when you voluntarily stop by dropping from the bar or if you use the ground to rest or push up from to complete a repetition.

2-Mile Run



Figure 1-13. 2MR

The 2MR is a test of aerobic endurance. It applies to common Soldier tasks such as dismounted movement, ruck marching, and infiltration. It can be completed on an indoor or outdoor track, or other course as described above. It is not to be conducted on unimproved terrain. The event commences no more than five minutes after the completion of the LTK event. The start and finish line will be at the same location as the test site for the other events.

On the command, “GO,” the clock will start and the Soldier will begin running at his or her own pace, completing the 2-mile distance without receiving any physical help. The Soldier may walk or pause but cannot be picked up, pulled, or pushed in any way. The Soldier may be paced by another Soldier. Verbal encouragement is permitted. If the Soldier leaves the run course at any time or at any point before completing the 2-mile distance, the event will be terminated.

The time taken as the Soldier crosses the finish line at the 2-mile point will be recorded on the ACFT IOC scorecard.

The following instructions will be available to Soldiers prior to taking the test:

2-Mile Run

Prior to starting the ACFT event, you will already know the 2-mile course including the start and finish points, turn around points, or number of laps. On the command, “GO,” the clock will start and you will begin running at your own pace, completing the 2-mile distance without receiving any physical help. You may walk or pause, but you cannot be picked up, pulled, or pushed in any way. You may pace another Soldier or be paced by another Soldier. Verbal encouragement is permitted. Leaving the course at any time or at any point during the event will cause the event to be terminated. Your time will be recorded as you cross the finish line at the 2-mile point.

MODIFIED ARMY COMBAT FITNESS TEST

The ACFT MOD provides commanders information on the risk they are taking by deploying Soldiers who cannot complete the full, six-event ACFT. When a permanently profiled Soldier achieves minimum ACFT MOD scores, these scores tell the commander the Soldier is able to perform the critical physical tasks required to protect himself/herself and others in combat (move under direct fire, react to indirect fire while dismounted, construct an individual fighting position, transport a casualty, and infiltrate and exfiltrate from a combat environment). The aspirational nature and full operation capability (FOC) scoring scales of the ACFT MOD will give commanders far more information about the physical readiness of profiled Soldiers than pass/fail events.

Soldiers who are on a temporary profile for a musculoskeletal injury will complete rehabilitation and reconditioning and come off the profile before taking a record ACFT. They may practice and train for the ACFT while on profile. From day one of their injury, their rehabilitation and reconditioning should focus on a rapid return to baseline performance of their physical-demand tasks. The ACFT validates their ability to perform these tasks. Rehabilitation and reconditioning will incorporate modified physical readiness training and testing drills and exercises. Soldiers with temporary physical profiles must be ready take a regular six-event ACFT after completing rehabilitation and reconditioning.

During the IOC period (FY20), the commander's comments section on the permanent profile Department of the Army (DA) Form 3349, Physical Profile (01 SEP 2010), must clearly indicate which of the ACFT events the Soldier can and cannot take. Example comments include the following:

- May do all six standard ACFT events.
- May do the three ACFT MOD events (MDL, SDC, and an alternate aerobic assessment).
- May do four, five, or six-event ACFT MOD, including an alternate aerobic assessment.
- During the IOC period, may do a single alternate aerobic assessment. (The results will be used to inform FOC requirements.)

The ACFT MOD for permanently profiled, deployable Soldiers consists of a minimum of three events. The ACFT MOD events are conducted and completed with other Soldiers in the unit as the whole unit takes the ACFT together. Soldiers are required to take all the events they are not profiled against. For example, they could take four events if they are profiled against the SPT and LTK, or they could take five events if they are profiled against the HRP. It is possible for a permanently profiled Soldier to take six events with the only difference from a regular ACFT being the different event from the 2MR. At a minimum, permanently profiled Soldiers must pass the following:

- MDL with a minimum raw score of 140 lbs, for a scaled score of 60 points
- SDC with a minimum time of three minutes, for a scaled score of 60 points
- During IOC, either a 5,000-meter row or 15,000-meter bike, or a 1,000-meter swim with a minimum time of 25 minutes for each, for a scaled score of 60 points

Those Soldiers who are profiled will be in the last or fourth position in the lane for every event, taking only those events allowed by their profile. Those Soldiers who are only taking one event (the row, bike, or swim) will support other Soldiers taking the test until their event starts. If they are taking the row or bike, they will use on-site test equipment and begin their alternate assessments 10 minutes after their last event. If they are taking the swim event, they will move from the test site to the pool in order to complete their ACFT in 90 minutes.

The ACFT MOD scores will be the same as standard ACFT scores, except for the alternate assessments, which are not scored in the IOC period (FY20). These events are pass/fail during IOC.

STANDARDS

Modified aerobic events assess the aerobic and muscular endurance of Soldiers with permanent medical profiles who cannot perform the 2MR. The profiled Soldier must complete the modified event in a time equal to or less than 25 minutes in order to receive a pass for the ACFT MOD event. The Soldier must receive a minimum passing score in the alternate event taken to pass the test. The following are the ACFT MOD events:

- 5,000-meter row
- 15,000-meter bike
- 1,000-meter swim

Row

The row requires a stationary rowing machine. The machine must have mechanically adjustable resistance and must be available for training and testing. The seat, handles, and foot straps must be adjustable to accommodate Soldiers of different sizes. It must have an odometer. The machine must be calibrated prior to test administration.

The event supervisor will allow each Soldier a short warm-up period and an opportunity to adjust resistance and seat position. The supervisor will read the following instructions aloud and answer questions:

5,000-Meter Row Event

The 5,000-meter row measures your level of aerobic fitness. On the command, "GO," the clock will start and you will begin rowing at your own pace. You must complete the 5,000-meter distance. You will be scored on your time. To pass, you must complete 5,000 meters in 25 minutes. What are your questions about this event?

When the timer gives the command, "GET SET," the Soldiers will position themselves to begin the event. Time begins when the timer gives the command, "GO." The timer will call out times in minutes and seconds as Soldiers near the test distance or the required 25-minute time. The timer calls out the time remaining every 30 seconds for the last two minutes of the allowable time and every second during the last 10 seconds leading up to the 25-minute mark.

The scorer must observe the Soldier throughout the event. The scorer will have to observe the odometer as the distance approaches 5,000 meters. The scorer records the time in the time block to complete 5,000 meters and records the point score.

Bike

The bike event requires a stationary cycle ergometer. The ergometer must be available for training and testing. The seat and handlebars must be adjustable to accommodate Soldiers of different sizes. It must have an odometer. The cycle ergometer must be calibrated prior to test administration. The process for setting the distance on the odometer will be similar to that used on the rowing machine.

The event supervisor will allow each Soldier a short warm-up period and an opportunity to adjust handlebar and seat height. The supervisor will read the following instructions aloud and answer questions:

15,000-Meter Bike Event

The 15,000-meter bike measures your level of aerobic fitness. On the command, “GO,” the clock will start and you will begin pedaling at your own pace. You must complete the 15,000-meter distance in 25 minutes or less. You will be scored on your time. What are your questions about this event?

When the timer gives the command, “GET SET,” the Soldiers will position themselves to begin the event. Time begins when the timer gives the command, “GO.” The timer will call out times in minutes and seconds as Soldiers near the end of the test distance or the required 25-minute time. The timer calls out the time remaining every 30 seconds for the last two minutes of the allowable time and every second during the last 10 seconds.

The scorer must observe the Soldier throughout the event. The scorer will have to observe the odometer as the distance approaches 15,000 meters. The scorer records the time in the time block to complete 15,000 meters and records the point score.

Swim

The swim event requires a swimming pool with a 25-meter lane and minimum depth of 1 meter. The event requires one event supervisor, one scorer for every three Soldiers, one timer, one back-up timer, and support personnel to ensure proper control and safety. The event supervisor will not be an event scorer.

The event supervisor will read the following instructions aloud and answer questions. He/she will also allow each Soldier a short warm-up period in the pool in order to acclimate:

1,000-Meter Swim Event

The 1,000-meter swim measures your level of aerobic fitness. You will begin in the water; no diving is allowed. At the start, your body must be in contact with the wall of the pool. On the command, "GO," the clock will start. You should then begin swimming at your own pace, using any stroke or combination of strokes you wish. You must swim (state the number) laps to complete this distance. You must touch the wall of the pool at each end of the pool as you turn. Any type of turn is authorized. You must complete the 1,000-meter distance in 25 minutes. You will be scored on time. Walking on the bottom to recuperate is authorized. Swimming goggles, swim caps, and civilian swimming attire are permitted, but no other equipment is authorized. What are your questions about this event?

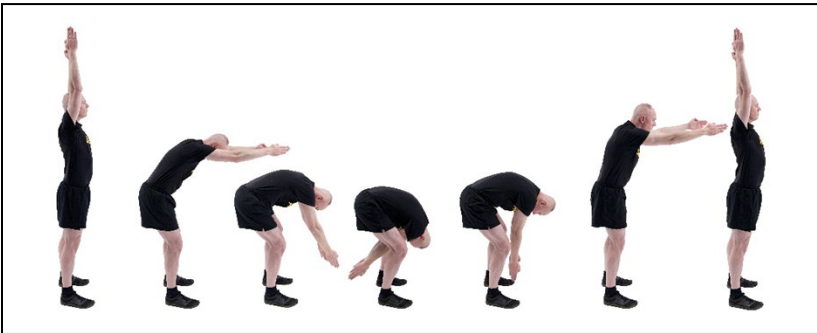
When the timer gives the command, "GET SET," the Soldiers position themselves in the water holding onto the wall ready to begin the event. When the timer gives the command, "GO," time starts and the tested Soldier begins swimming. The timer calls out times in minutes and seconds as Soldiers near the finish or the required 25-minute time. Time is recorded by the scorer when the Soldier touches the end of the pool or crosses a predetermined line that establishes the 1,000-meter mark.

Scorers must observe the Soldiers assigned to them. They must ensure each Soldier touches the bulkhead (wall) at every turn. The scorer records the time in the time block and the points in the points block. The 1,000-meter swim is entered in the alternate event block. If the pool length is measured in yards, the scorer can convert the exact distance to meters. To convert meters to yards, multiply the number of meters by 1.094 (1,000 meters is equivalent to 1,094 yards).

CHAPTER 2

Drills and Exercises

The Army Combat Fitness Test (ACFT) validates that Soldiers have properly trained for combat. The physical training exercises highlighted in this chapter support ACFT event performance. Preparation and recovery drills are included. Exercises are standardized so that no matter where they train, Soldiers can quickly understand the exercises and perform them safely. All of the exercises derive from drills in current Army doctrine such as the Strength Training Drill, Conditioning Drill 3, and Four for the Core. Soldiers are encouraged to perform the whole drill whenever possible. Exercise modifications are included so that Soldiers can train with and without equipment. Modifications should be guided by the principles of precision, progression, and integration described in Field Manual (FM) 7-22, *Army Physical Readiness Training* (26 OCT 2012).

PREPARATION DRILL**1. BEND AND REACH****Figure 2-1. Bend and Reach**

The Bend and Reach is the first exercise in the Preparation Drill. By flexing the trunk, hips, and knees, and extending the shoulders, the Bend and Reach prepares the Soldier for more vigorous activity such as squatting, rolling, and climbing. The following is a breakdown of the movement as it would be conducted in formation at a slow cadence:

- The starting position for the Bend and Reach is the straddle stance: Arms overhead, elbows fully extended, palms facing inward, and fingers and thumbs extended and joined.

- On count 1, move from the starting position into a partial squat with the heels remaining on the ground. Round the spine to allow the arms to reach as far as possible between the legs. The neck flexes to tuck the chin and head, and to allow the Soldier to look to the rear.
- On count 2, return to the starting position.
- On count 3, repeat count 1.
- On count 4, return to the starting position.

2. REAR LUNGE



Figure 2-2. Rear Lunge

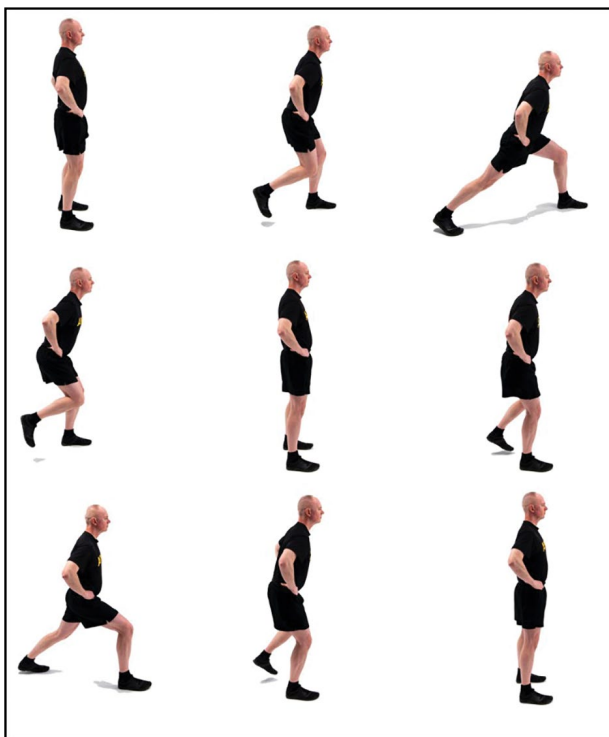


Figure 2-3. Rear Lunge

The Rear Lunge is the second exercise in the Preparation Drill. This exercise promotes flexibility, strength, and balance in the hip and leg. It prepares the Soldier for taking cover and assuming kneeling firing positions. The following is a breakdown of the movement as it would be conducted in formation at a slow cadence:

- The starting position for the Rear Lunge is the straddle stance with hands on hips.
- On count 1, keeping hands on hips, take an exaggerated step backwards with the left leg, touching down with the ball of the foot placed directly back from the starting position. The heel should be off the ground, and a stretch should be felt in the front of the left hip and thigh. If not, allow the body to continue to lower to increase flexibility.
- On count 2, return to the starting position, maintaining the same distance between the feet as used in the straddle stance.
- On count 3, repeat count 1 with the right leg.
- On count 4, return to the starting position.

3. HIGH JUMPER

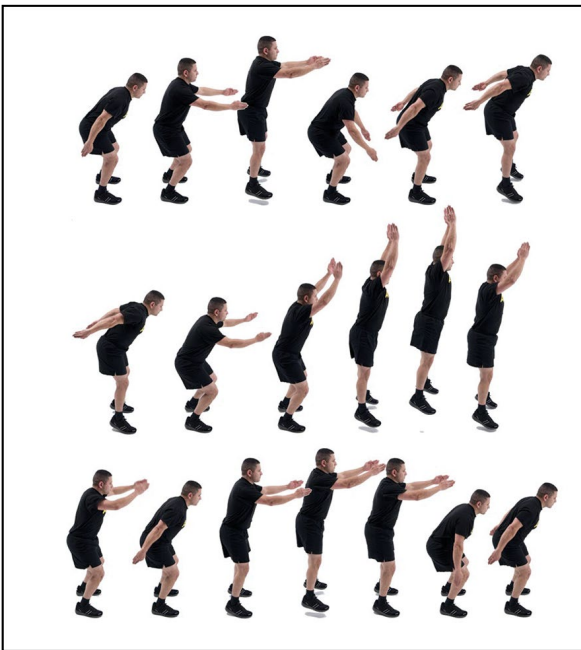


Figure 2-4. High Jumper

The High Jumper is the third exercise in the Preparation Drill. This exercise promotes correct jumping, landing, balance, and coordination, and prepares the Soldier to build explosive strength. The following is a breakdown of the movement which is conducted at a moderate cadence:

- The starting position for the High Jumper is the forward leaning stance with palms facing inwards, fingers and thumbs extended and joined.
- On count 1, swing the arms forward until they are parallel to the ground. At the same time, jump a few inches vertically.
- On count 2, land softly on the balls of the feet and return to the starting position. Maintain the same distance between the feet as there was during the forward leaning stance.
- On count 3, swing the arms vigorously forward and overhead to unweight the upper body. At the same time, jump forcefully straight up from the ground.
- On count 4, land softly on the balls of the feet and return to the starting position.

4. ROWER



Figure 2-5. Rower

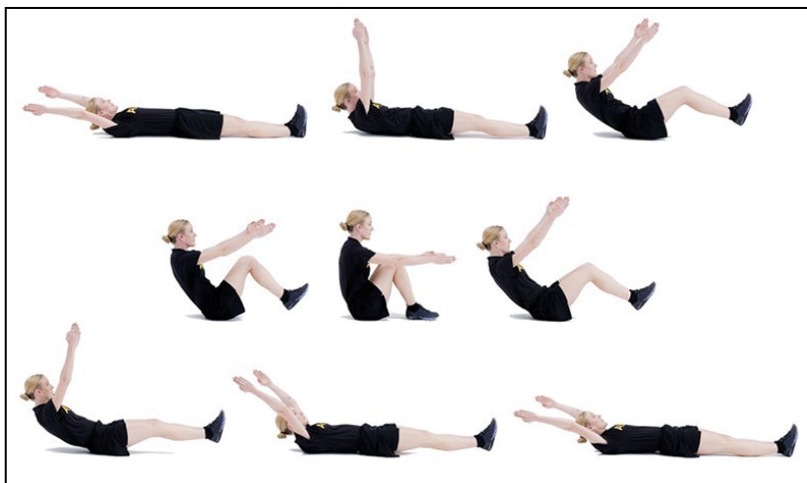


Figure 2-6. Rower

The Rower is the fourth exercise in the Preparation Drill. This exercise improves abdominal strength and total body coordination. It prepares the Soldier to move from supine to seated positions and exercises in conditioning and climbing drills. The following is a breakdown of the movement, which is conducted at a slow cadence:

- The starting position for the Rower is the supine position with arms overhead, feet together, and pointing up. The head is one to two inches off the ground to work muscles in the front of the neck. Arms are overhead with hands at shoulder width, palms facing inward, and fingers and thumbs extended and joined.
- On count 1, sit up while bending at the hip and knees, and swinging arms forward until they are parallel to the ground. At the end of this count, the feet are flat on the ground with knees positioned between the arms. The arms are parallel to the ground.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1.
- On count 4, return to the starting position.
- Perform 5 to 10 repetitions.

5. SQUAT BENDER

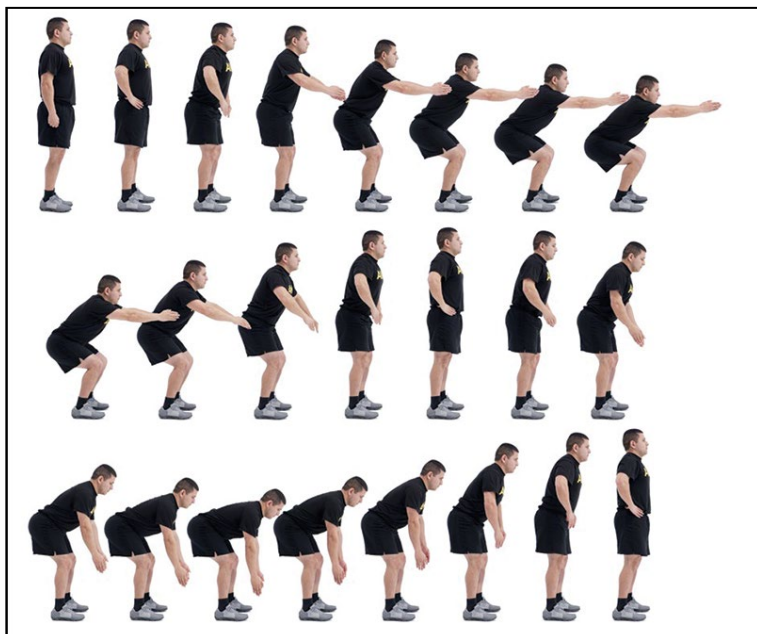


Figure 2-7. Squat Bender

The Squat Bender is the fifth exercise in the Preparation Drill. This exercise develops strength, endurance, and flexibility in the lower back and thigh muscles. It prepares Soldiers to use proper lifting technique in more vigorous training and testing events that require heavy lifts. The following is a breakdown of the movement, which is conducted at a slow cadence:

- On count 1, squat while leaning slightly forward from the waist, keeping the head up and moving both arms to a position in front of the body and parallel to the ground. Palms face inwards.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, with the knees slightly bent, bend forward at the waist. Maintain the head in alignment with the spine and keep the spine straight. Reach toward the ground until a stretch is felt in the back of the thighs.
- On count 4, return to the starting position.
- Perform 5 to 10 repetitions.

6. WINDMILL



Figure 2-8. Windmill



Figure 2-9. Windmill

The Windmill is the sixth exercise in the Preparation Drill. This exercise develops the ability to safely bend and simultaneously rotate the trunk. It requires flexibility in the spine and coordination of the shoulder girdle. It prepares Soldiers to use proper movement technique in more vigorous training, testing, and combat tasks. The following is a breakdown of the movement, which is conducted at a slow cadence:

- The starting position for the Windmill is the straddle stance with arms straight out to the side. Fingers and thumbs are extended and joined.
- On count 1, bend the hips and knees while rotating the trunk to the left. Reach down to touch the outside of the left foot with the right hand and look to the rear. The left arm is pulled rearward to maintain alignment across the shoulders with the right arm.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1, this time to the right.
- On count 4, return to the starting position.
- Perform 5 to 10 repetitions.

7. FORWARD LUNGE



Figure 2-10. Forward Lunge

The Forward Lunge is the seventh exercise in the Preparation Drill. This exercise develops balance and leg strength. It prepares Soldiers to use proper movement technique to perform lifts such as a litter carry. The following is a breakdown of the movement which is conducted at a slow cadence:

- The starting position for the Forward Lunge is the straddle stance with hands on hips.
- On count 1, take a step forward with the left leg until the left heel is 3 to 6 inches ahead of the right foot. At the same time, bend at the hips and knees to lunge forward, keeping the back straight. Do not look down and do not bring the feet closer together.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1, this time stepping forward with the right foot.

8. PRONE ROW

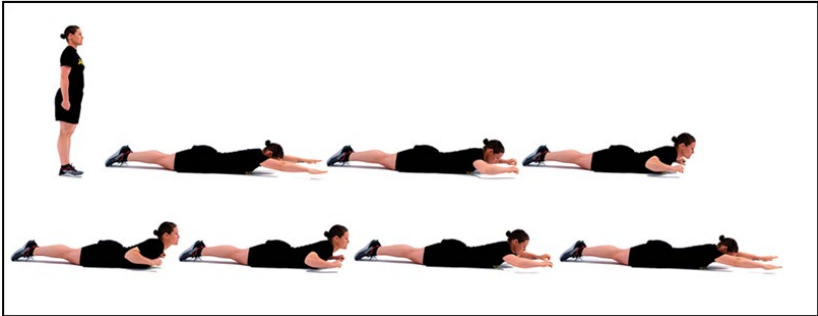


Figure 2-11. Prone Row

The Prone Row is the eighth exercise in the Preparation Drill. This exercise develops the strength of the neck, upper back, and shoulders. It prepares Soldiers to fire from the prone position and to tolerate the weight of the helmet and body armor across the shoulders and neck. The following is a breakdown of the movement, which is conducted at a slow cadence:

- The starting position for the Prone Row is the prone position with arms overhead, palms down, fingers and thumbs extended and joined. Arms are lifted 1 to 2 inches from the ground and toes are pointed to the rear.
- On count 1, raise the head and chest slightly while lifting the arms and pulling them rearward. Hands are made into fists as they move toward the shoulders.
- Feet stay together and on the ground. Arms and hands are off the ground.
- On count 2, reverse the movement performed in count 1 to return to the starting position. Arms and hands remain off the ground.
- On count 3, repeat count 1.

9. BENT-LEG BODY TWIST

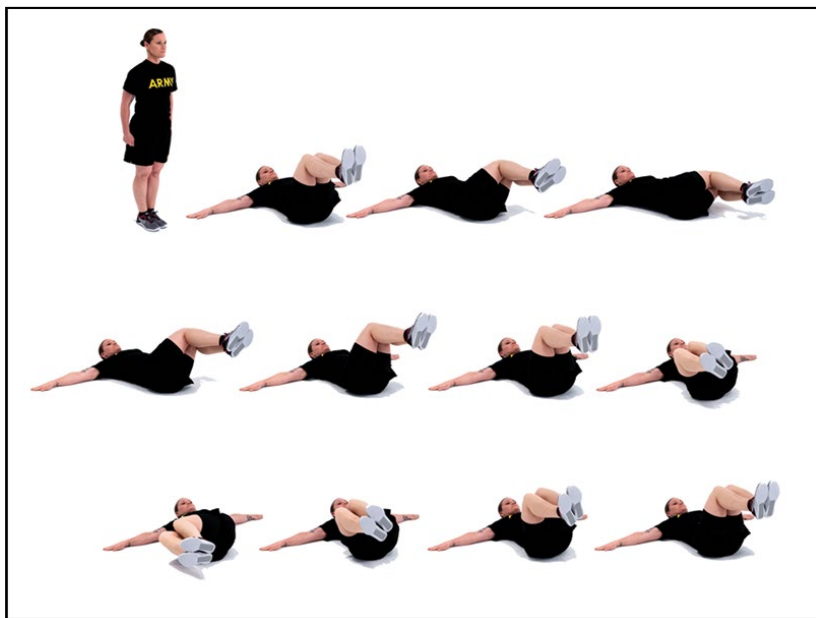


Figure 2-12. Bent-Leg Body Twist

The Bent-Leg Body Twist is the ninth exercise in the Preparation Drill. This exercise strengthens the trunk and hip muscles while promoting control of trunk rotation. It is a safe way to prepare for loaded trunk movements in more vigorous training, testing, and combat tasks. The following is a breakdown of the movement, which is conducted at a slow cadence:

- The starting position for the Bent-Leg Body Twist is the supine position with the hips and knees bent to 90 degrees, arms straight out to the side, with palms on the ground. The knees and feet are together.
- On count 1, rotate the legs to the left while keeping the upper back and arms in place on the ground. The legs drop together toward the ground.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1, this time rotating the legs to the right.
- On count 4, return to the starting position.

10. PUSH-UP

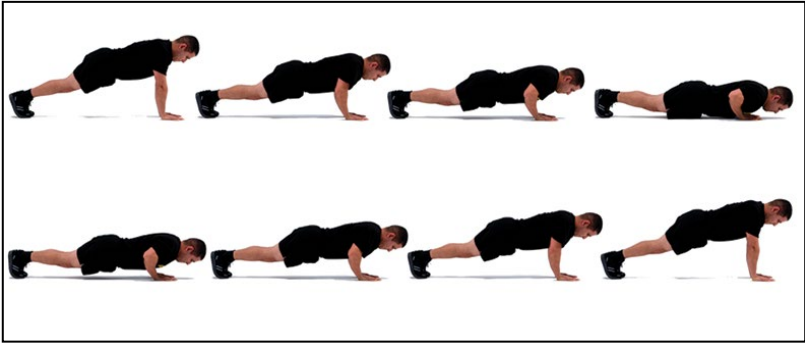


Figure 2-13. Push-Up

The Push-Up is the tenth and final exercise in the Preparation Drill. This exercise strengthens the muscles of the chest, shoulders, arms, and trunk. When conducted to standard, it is a safe way to prepare for more vigorous pushing motions required in training, testing, and combat tasks. The following is a breakdown of the movement, which is conducted at a moderate cadence:

- The starting position for the Push-Up is the front leaning rest. Hands are directly beneath the shoulders with fingers spread open. Feet are together. The body forms a straight line from the top of the head to the heels. This position is maintained throughout the exercise.
- On count 1, bend the elbows, lowering the body until the upper arms are parallel to the ground.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1.

3 REPETITION MAXIMUM DEADLIFT

1. SUMO SQUAT

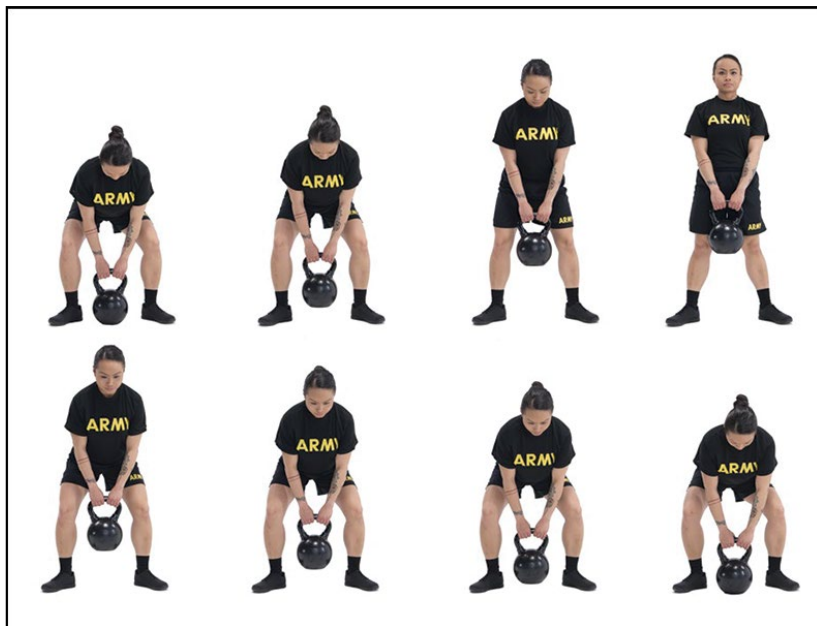


Figure 2-14. Sumo Squat

The Sumo Squat is the first exercise in the Strength Training Circuit. The starting position for the Sumo Squat is the straddle stance with the feet slightly wider than the shoulders and the toes pointing outward. Hold a single kettlebell with both hands in front of the body, palms pronated to the face the body. The following is a breakdown of the exercise as it would be conducted for one minute at station 1 of the Strength Training Circuit. The cadence is always slow:

- On count 1, squat while leaning slightly forward from the waist with the head up. Move downward until the upper legs are parallel to the ground.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1.
- On count 4, return to the starting position.

- Complete one minute of repetitions, stopping to rest if necessary, or adjusting the weight and range of movement to match the required performance.



Figure 2-15. Sumo Squat modified

2. ALTERNATE STAGGERED SQUAT JUMP

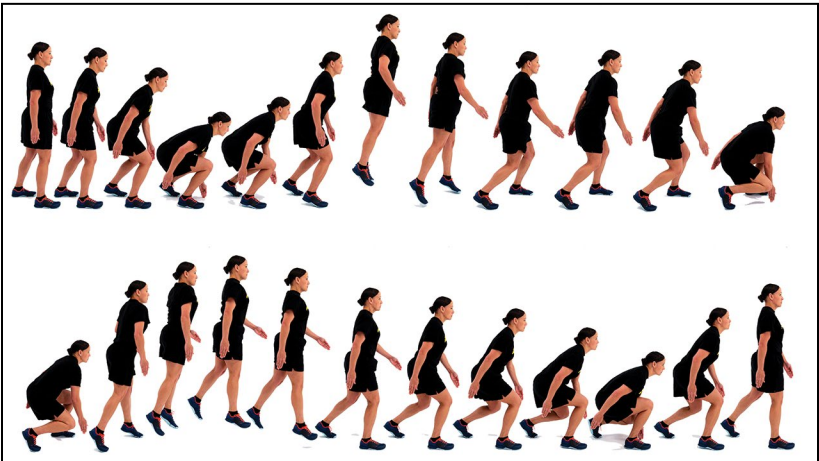


Figure 2-16. Alternate Staggered Squat Jump

The Alternate Staggered Squat Jump is the tenth and final exercise in the Conditioning Drill 3. Occurring at the end of Conditioning Drill 3, and, therefore, at the end of most Physical Readiness Training sessions. This exercise requires advanced levels of movement skill and anaerobic endurance. Ten repetitions of this exercise, following on from its predecessor Conditioning Drill 3 exercises, will be a true test of a Soldier's grit. The following is a breakdown of the exercise as it would be conducted in a formation at slow cadence:

- The starting position for the Alternate Staggered Squat Jump is the staggered stance with left leg back and arms at the sides. The trunk is flexed slightly forward.
- On count 1, squat and touch the ground between the legs with the fingertips of the left hand. Jump forcefully into the air, switching legs in mid-air to land with the right leg back and arms at the sides.
- On count 2, squat and touch the ground between the legs with the fingertips of the right hand. Jump forcefully into the air, switching legs in mid-air to land with the left leg back and arms at the sides.
- On count 3, repeat count 1.
- On count 4, repeat count 2.
- After the final repetition, return to turn to the starting position.

3. STRAIGHT-LEG DEADLIFT

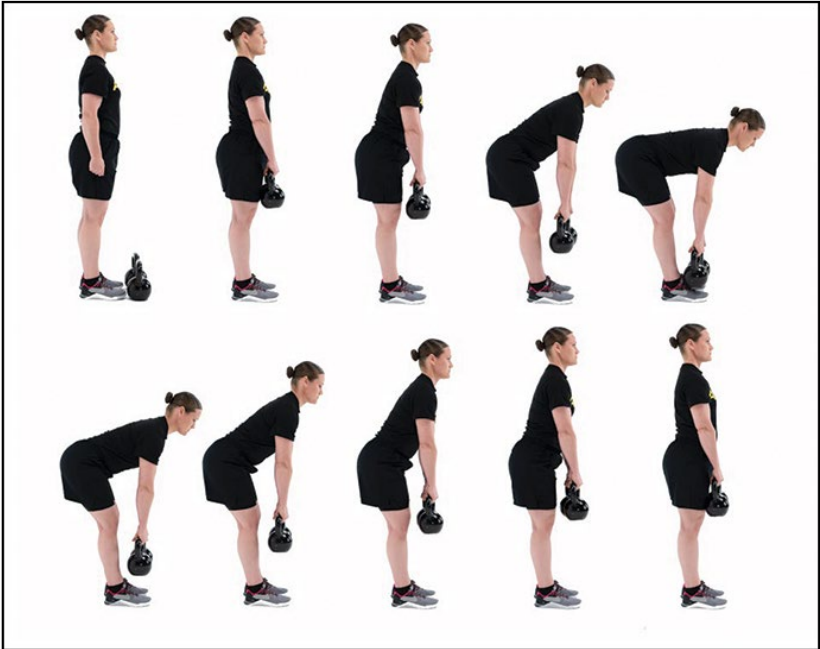


Figure 2-17. Straight-Leg Deadlift

The Straight Leg Dead Lift is the second exercise in the Strength Training Circuit. The following is a breakdown of the exercise as it would be conducted for one minute at station 2 of the Strength Training Circuit. The cadence is always slow:

- The starting position for the Straight Leg Dead Lift is the straddle stance. Hold the kettlebells in front of the legs using a pronated grip. Keep the knees slightly flexed — not locked — and in the same flexed position throughout the exercise.
- On count 1, flex forward from the waist, keeping the head in line with the spine to avoid extending the neck. While keeping the back straight, move down until the back is parallel to the ground. Slightly adjust knee flexion to increase the engagement of the hamstring muscles in the back of the thigh.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1.

- Complete one minute of repetitions, stopping to rest if necessary, or adjusting the weight and range of movement to match the required performance.



Figure 2-18. Straight-Leg Deadlift modified

4. FORWARD LUNGE

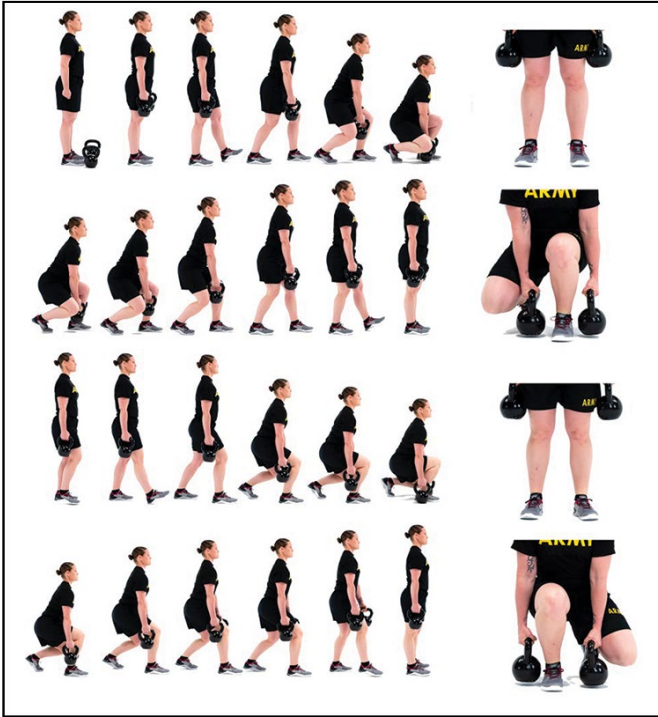


Figure 2-19. Forward Lunge

The Forward Lunge is the third exercise in the Strength Training Circuit. The following is a breakdown of the exercise as it would be conducted for one minute at station 3 of the Strength Training Circuit:

- The starting position for the Forward Lunge is the straddle stance. Hold the kettlebells at the sides using a neutral grip.
- On count 1, step forward with the left leg as in the Forward Lunge, allowing the left knee to bend until the left thigh is parallel to the ground. Lean slightly forward from the waist and bring the kettlebells to the left and right sides of the forward leg.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1, stepping forward with the right leg.
- On count 4, return to the starting position.

- Complete one minute of repetitions, stopping to rest if necessary, or adjusting the weight and range of movement to match the required performance.



Figure 2-20. Forward Lunge modified



Figure 2-21. Forward Lunge modified



Figure 2-22. Forward Lunge modified

STANDING POWER THROW

1. POWER JUMP



Figure 2-23. Power Jump

The Power Jump is the first exercise in Conditioning Drill 1. This exercise reinforces correct jumping and landing skill, requires good balance and coordination, and develops explosive strength to move off the ground. The following is a breakdown of the movement, which is conducted at a moderate cadence:

- The starting position for the Power Jump is the straddle stance with hands on hips.
- On count 1, squat with the heels flat while rounding spine forward and reaching to the ground. Place palms on the ground. Gaze remains forward.
- On count 2, jump forcefully from the ground, swinging the arms up and overhead to unweight the body and increase the height of the jump. Palms face inward.
- On count 3, return to the count 1 position after landing softly, with feet directed forward and shoulder-width apart.
- On count 4, return to the starting position.



Figure 2-24. Power Jump modified

2. OVERHEAD PUSH-PRESS

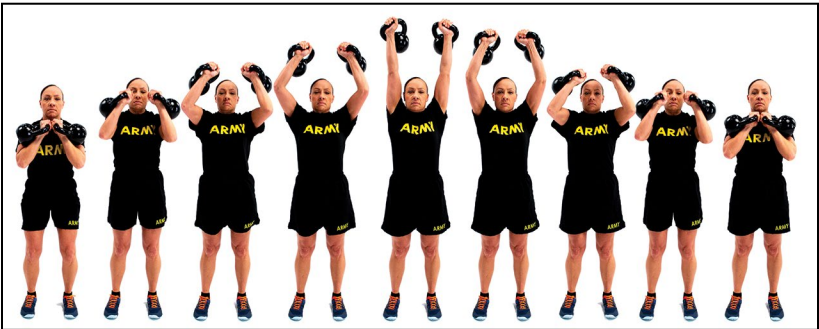


Figure 2-25. Overhead Push-Press

The Overhead Push Press is the eighth exercise in the Strength Training Circuit. This exercise strengthens the Soldier's triceps and shoulder muscle endurance. This improves the Soldier's skill in moving heavier weight overhead to build muscular power and strength. The following is a breakdown of the exercise as it would be conducted for one minute at station 8 of the Strength Training Circuit:

- The starting position for the Overhead Push Press is the straddle stance. Hold the kettlebells at the collar bones in the Rack Position using a closed neutral grip (palms will be facing each other).
- On the command of "begin," slightly flex the hips and knees into a mini-squat before quickly and forcefully extending the elbows to push the weights overhead. At the top of the movement, the kettlebells will be above the shoulders.
- Continue to look straight ahead throughout the movement.
- Slightly flex the hips and knees into a mini-squat before returning the weight to the starting position. This squat helps to absorb the impact of the weight's descent.
- Continue the exercise at own pace for one minute. Increase or decrease the kettlebell weight if necessary, continuing only if the exercise can be completed to standard.



Figure 2-26. Overhead Push-Press modified

3. TUCK JUMP



Figure 2-27. Tuck Jump

The Tuck Jump is the fifth exercise in Conditioning Drill 3. This exercise develops explosive strength in the legs. The following is the exercise as it would be conducted in a formation at slow cadence:

- The starting position for the Tuck Jump is the straddle stance with arms at the sides.
- On count 1, perform a half squat while driving the arms rearward. Jump up from this position pulling both feet under the hips and tucking the knees to the chest. Wrap the arms around the front of the knees before landing softly on the balls of the feet.
- On count 2, stand up into the starting position
- On count 3, repeat count 1.
- On count 4, repeat count 2.
- The cadence is slow to allow proper preparation for and recovery from the explosive jumps on counts 1 and 3.
- Build up to 10 correctly performed repetitions.

HAND-RELEASE PUSH-UP

1. SUPINE CHEST PRESS

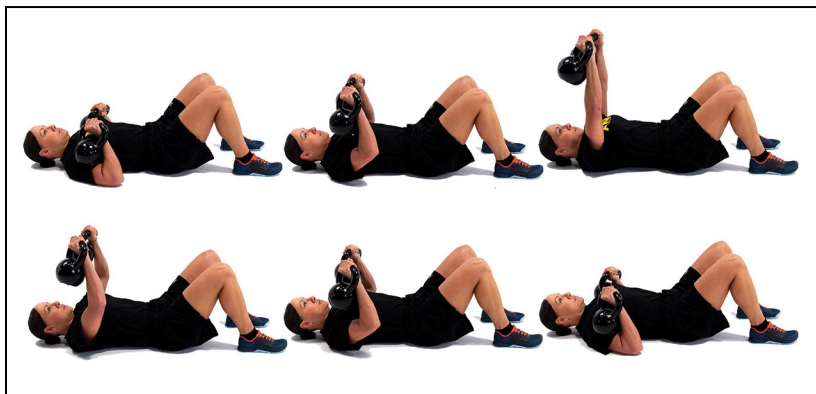


Figure 2-28. Supine Chest Press

The Supine Chest Press is the sixth exercise in the Strength Training Circuit. This exercise strengthens the chest, shoulder, and triceps muscles. It develops the Soldier's ability to push during more vigorous combatives, testing, and combat tasks. The following is a breakdown of the exercise as it would be conducted for one minute at station 6 of the Strength Training Circuit:

- The starting position for the Supine Chest Press is the supine position with knees bent to 90 degrees, feet 8 to 12 inches apart and flat on the ground. The head and upper arms are resting on the ground.
- Holding a kettlebell of the same weight in each hand using a closed partial pronated grip, bend the elbows to allow the kettlebells to rest on the front of the shoulders.
- On the command, "BEGIN," extend the elbows to raise the kettlebells straight up in front of the shoulders, rotating to a fully pronated grip.
- Return to the starting position.
- Continue the exercise at your own pace for one minute. Increase or decrease the kettlebell weight if necessary, continuing only if the Supine Chest Press movement can be completed to standard.



Figure 2-29. Supine Chest Press modified

2. 8-COUNT T PUSH-UP

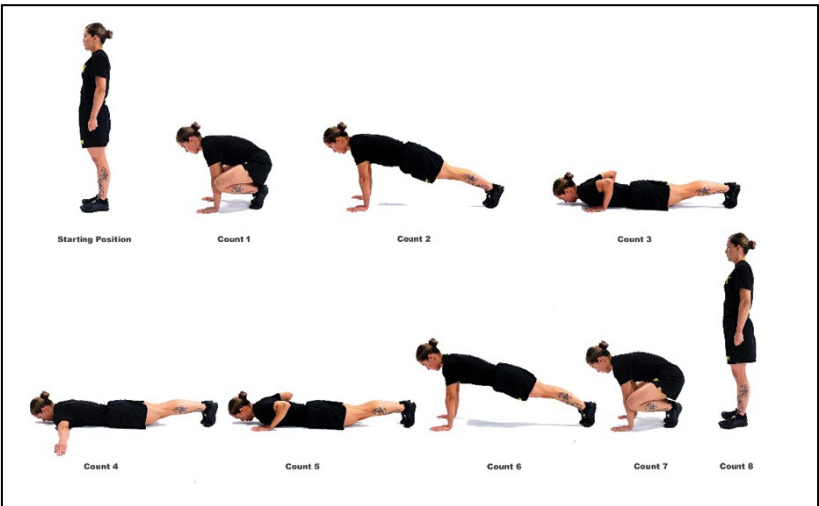


Figure 2-30. 8-Count T Push-Up

The 8-Count T Push-Up is the final exercise in Conditioning Drill 2. This exercise develops total body strength, endurance, and mobility. Releasing the hands from the ground in addition to moving the arms to the T-position, emphasizes full push and reach motions. The following is a breakdown of the movement as it would be conducted in a formation at a moderate cadence:

- The starting position for the 8-Count T Push-Up is the position of attention.
- On count 1, assume the squat position.
- On count 2, thrust the legs backwards in to the front leaning rest position.
- On count 3, bend the elbows lowering the body to the ground.
- On count 4, release the hands from the ground, moving the arms directly out to the side into the T-position, similar to the position used in the T-raise exercise in the shoulder stability drill. Hands may be on or off the ground in the T-position.
- On count 5, position the hands on the ground beneath the shoulders.
- On count 6, perform a push up from the ground into the front leaning rest position. Keep the body in a straight line from the head to the bottom of the heels.
- On count 7, return to the squat position.
- On count 8, return to the starting position which is the position of attention.
- Complete 5 to 10 repetitions.



Figure 2-31. 8-Count T Push-Up modified

3. INCLINE BENCH



Figure 2-32. Incline Bench

The Incline Bench is a free-weight exercise performed to improve upper body muscular strength and endurance. This lift requires trunk and shoulder stability and strength. It can be used to improve training and testing performance that supports a wide range of combat and occupational physical tasks. There are a wide range of modifications in position and equipment for the Incline Bench. The following is a breakdown of the exercise as it would be conducted by an individual Soldier using a straight bar.

- The starting position for the Incline Bench is the supine position on an inclined bench with both feet on the ground and hips, shoulder, and head firmly against the bench. Grasp the barbell with a closed overhand, pronated grip slightly wider than shoulder width. Remove the bar from the supports, placing it over the chest with the elbows fully extended.
- From the starting position, bend both elbows to lower the weight to just above the chest. Press the weight back to the starting position. Do not jerk or shrug the shoulders. Arch the back or allow the hips to rise off the bench during the movement.
- Repeat this movement for the correct number of repetitions and sets required to meet the goal of the free weight session.

The following explains the spotting position for the Incline Bench:

- The spotter stands at the head of the bench in the straddle stance with feet slightly staggered. The spotter grasps the bar with a closed alternating grip in between the lifter's hands. On a signal from the lifter, the spotter assists the lifter with moving the bar from the supports to guide it over the lifter's chest.

- Follow the path of the bar by slightly flexing the knees, hips, and trunk while maintaining a flat back. Keep an alternating grip position close to, but not touching the bar as it is lowered to their chest.
- Reverse this movement until the lifter signals for an assist with returning the bar to the supports.
- If the lifter becomes unstable or begins to fail to control the weight, immediately assist with completing the lift.

4. QUADRAPLEX

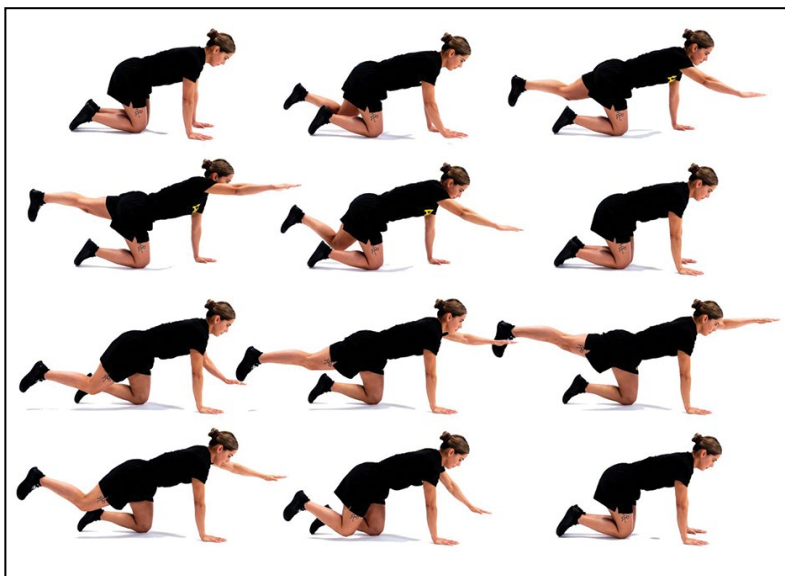


Figure 2-33. Quadraplex

The Quadraplex is the final exercise in Four for the Core. This exercise improves balance, coordination, and strength of core muscles in the posterior chain. The following is a breakdown of the movement, which is performed for a count of 60 seconds:

- The starting position for the Quadraplex is the six-point position with the knees on the ground beneath the hips.
- On the command, “READY, EXERCISE,” raise the left leg and right hand until they are both straight and parallel to the ground.
- The head stays aligned with the spine. Do not let the lower back, shoulder, and trunk sag. Stay tall on the supporting shoulder.

- Hold this position for 60 seconds.
- To rest, return to the starting position for three to five seconds until resuming the effort.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.
- On the command, “CHANGE POSITION, READY, EXERCISE,” repeat the exercise on the right.

SPRINT-DRAG-CARRY

1. STRAIGHT-LEG DEADLIFT

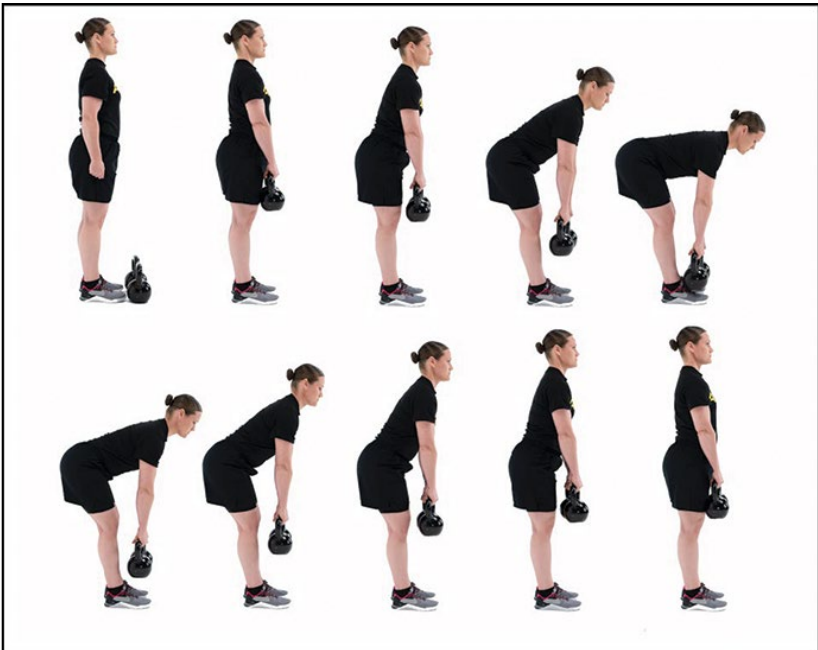


Figure 2-34. Straight-Leg Deadlift

The Straight-Leg Deadlift is the second exercise in the Strength Training Circuit. The following is a breakdown of the exercise as it would be conducted for one minute at station 2 of the Strength Training Circuit. The cadence is always slow:

- The starting position for the Straight-Leg Deadlift is the straddle stance. Hold the kettlebells in front of the legs using a pronated grip. Keep the knees slightly flexed — not locked — and in the same flexed position throughout the exercise.
- On count 1, flex forward from the waist, keeping the head in line with the spine to avoid extending the neck. While keeping the back straight, move down until the back is parallel to the ground. Slightly adjust knee flexion to increase the engagement of the hamstring muscles in the back of the thigh.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1.
- Complete one minute of repetitions, stopping to rest if necessary, or adjusting the weight and range of movement to match the required performance.

2. BENT-OVER ROW

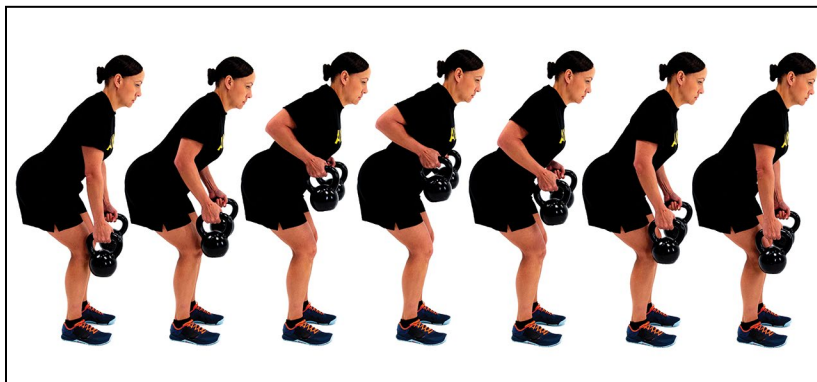


Figure 2-35. Bent-Over Row

The Bent-Over Row is the seventh exercise in the Strength Training Circuit. This exercise strengthens the muscles of the upper back, shoulder girdle, and biceps. A heavier weight will also challenge the muscles in the lower back, gluteal region, and hamstrings. The following is a breakdown of the exercise as it would be conducted for one minute at station 7 of the Strength Training Circuit:

- The starting position for the Bent-Over Row is the forward leaning stance with arms hanging in front of the legs. Hold the kettlebells of equal weight using a closed neutral grip, palms facing each other.
- On the command, “BEGIN,” bend the elbows to pull the kettlebells toward the chest. The legs, torso, and head remain in their starting position.
- Continue the exercise at own pace for one minute. Increase or decrease the kettlebell weight if necessary, continuing only if the exercise can be completed to standard.

3. SHUTTLE SPRINT



Figure 2-36. Shuttle Sprint

The Shuttle Sprint is the third exercise in Military Movement Drill 1. This exercise prepares the Soldier for more vigorous endurance and agility activities. The following is a breakdown of the exercise as it would be conducted by an individual Soldier:

- The starting position is the staggered stance, with the right foot forward. The right heel is even with the toes of the left foot. The head is up looking straight ahead and the knees are slightly bent. The left arm is forward.
- From the starting position, run quickly to the 25-meter turnaround point.
- Turn clockwise while planting the left foot and bending and squatting to touch the ground with the left hand.
- Run quickly back to the starting line and plant the right foot, then turn counterclockwise and touch the ground with the right hand.
- Run back to the 25-meter turnaround, accelerating to maximum speed through the finish.



Figure 2-37. Sprint-Drag-Carry modified



Figure 2-38. Sled Drag modified



Figure 2-39. Sled Drag modified



Figure 2-40. Carry modified

LEG TUCK**1. BENT-LEG RAISE****Figure 2-41. Bent-Leg Raise**

The Bent-Leg Raise is the first exercise in Four for the Core. This exercise improves awareness of spinal control while moving the legs. The hand position under the back — not the pelvis — places heavy emphasis on the strength of the core muscles of the abdomen, not the hip flexor muscles. The following is a breakdown of the movement, which is performed for a count of 60 seconds:

- The starting position for the Bent-Leg Raise is the supine position with knees bent to 90 degrees, feet flat on the ground. Hands are placed under the small of the back — not the pelvis — with palms on the ground. The head is 2 to 4 inches off the ground.
- On the command, “READY, EXERCISE,” raise both feet from the ground until both knees and hips flex to 90 degrees. While concentrating on the amount of pressure placed on the hands from the spine, slowly straighten the legs. Maintain this pressure for up to 60 seconds.
- If the pressure on the hands reduces or the Soldier needs to rest, bring the knees back to the chest for three to five seconds until resuming the effort.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

2. LEG TUCK AND TWIST



Figure 2-42. Leg Tuck and Twist

The Leg Tuck and Twist is the fourth exercise in Conditioning Drill 1. This exercise strengthens the trunk and hip muscle coordination while promoting control of trunk rotation. It is an advanced body weight exercise that prepares for more vigorous training, testing, and combat tasks. The following is a breakdown of the movement, which is conducted at a moderate cadence:

- The starting position for the Leg Tuck and Twist is the supported reclining seated position. Hands are on the ground to the rear of the shoulders, palms down. Legs are straight and kept together with the feet 8 to 12 inches above the ground.
- On count 1, raise the legs while rotating onto the left buttock and drawing the knees toward the left shoulder. Maintain control of the leg movement and trunk position.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1, this time rotating the legs to the right.
- On count 4, return to the starting position.

3. ALTERNATING GRIP PULL-UP

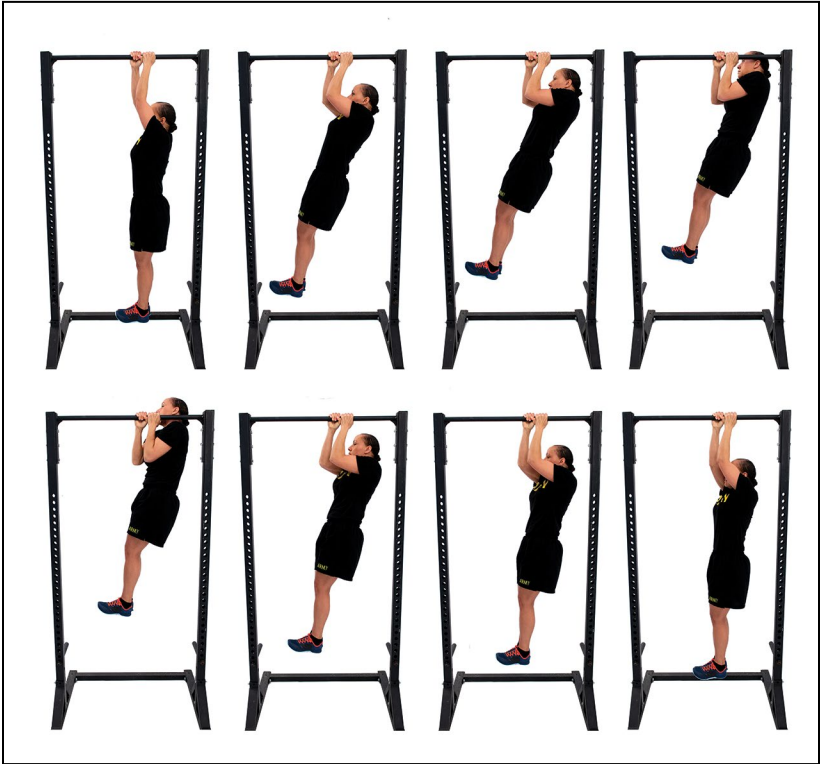


Figure 2-43. Alternating Grip Pull-Up

The Alternating Grip Pull-Up is the final exercise in Climbing Drills 1 and 2. This exercise develops the Soldier's ability to pull-up and hook the legs onto a ledge, rope, or rail. The following is a breakdown of the exercise as it would be conducted in a formation with two spotters to assist:

- The starting position for the Alternating Grip Pull-Up is the straight-arm hang using the closed alternating grip. This positions the Soldier perpendicular to the bar.
- If the Soldier states, "NO SPOTTER NEEDED," the two spotters are not required. Otherwise, the spotters assume staggered stance positions in the front and back of the exerciser.
- The front spotter places palms toward the exerciser at chest height to support the exerciser if their grip fails.

- The rear spotter holds the exerciser's feet against his/her thighs or abdomen to support the movement up. Once the Soldier is up, the rear spotter stops assisting.
- On count 1, flex the elbows, raising the body up so that the head moves to the side of the bar.
- On Count 2, return to the starting position.
- Repeat the exercise five to 10 times.

Spotters may assist in guiding the exerciser to the foot pegs after the command of "DOWN" prior to the command of "DISMOUNT."



Figure 2-44. Leg Tuck modified



Figure 2-45. Leg Tuck modified



Figure 2-46. Pull-Up modified



Figure 2-47. Drag modified

2-MILE RUN

Endurance activities that support performance for the 2-Mile Run (2MR) include 30:60s, 60:120s, 300-meter shuttle run, hill repeats, ability group runs, unit formation runs, release runs, terrain runs, foot marches, and endurance training machines. All of these endurance activities should be preceded by the dynamic warm-up exercises in military movement drills.

1. VERTICAL



Figure 2-48. Vertical

The Vertical is the first exercise in Military Movement Drill 1. This exercise improves single-leg jumping and landing skill in preparation for more vigorous training, testing, and combat activities. The following is a breakdown of the exercise as it would be conducted by an individual Soldier:

- The starting position is the staggered stance with the right foot forward. The right heel is even with the toes of the left foot. The head is up looking straight ahead and the knees are slightly bent. The left arm is forward.
- From the starting position, swing the left thigh up to 90 degrees and the right arm forward before stepping forward with the left foot.
- As the left foot comes to the ground, raise the right thigh to 90 degrees and the left arm forward before stepping forward with the right foot.
- Repeat this motion down a 25-meter course before stopping. Repeat once to return to the start line.

2. LATERAL



Figure 2-49. Lateral

The Lateral is the second exercise in Military Movement Drill 1. This exercise develops the ability to move laterally in preparation for more vigorous training, testing, and combat activities. The following is a breakdown of the exercise as it would be conducted by an individual Soldier:

- The starting position is the straddle stance, with left side facing the direction of movement, slightly crouched with elbows bent to 90 degrees and palms facing forward.
- From the starting position, step out with the lead leg and then bring the trail leg up and toward the lead leg.
- The Soldier always faces the same direction so that for the first 25 meters, he/she is moving to the left and for the second 25 meters is moving to the right.
- As skill improves, the Soldier may increase speed.

3. SHUTTLE SPRINT

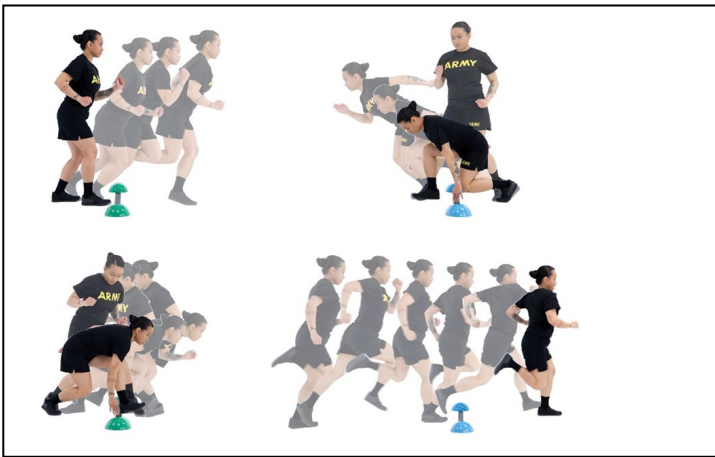


Figure 2-50. Shuttle Sprint

The Shuttle Sprint is the third exercise in Military Movement Drill 1. This exercise prepares the Soldier for more vigorous endurance and agility activities. The following is a breakdown of the exercise as it would be conducted by an individual Soldier:

- The starting position is the staggered stance, with the right foot forward. The right heel is even with the toes of the left foot. The head is up looking straight ahead and the knees are slightly bent. The left arm is forward.
- From the starting position, run quickly to the 25-meter turnaround point.
- Turn clockwise while planting the left foot and bending and squatting to touch the ground with the left hand.
- Run quickly back to the starting line and plant the right foot, then turn counterclockwise and touch the ground with the right hand.
- Run back to the 25-meter turnaround, accelerating to maximum speed through the finish.



Figure 2-51. Shuttle Sprint modified

RECOVERY DRILL

The Recovery Drill includes a wide variety of range of movements that require structural strength, stability, flexibility, and mobility. Positions include seated, standing, prone, and supine positions supported by one or both upper and lower extremities. Movements into and out of these positions can be modified to accommodate Soldiers who are reconditioning from injury, who are deconditioned or who are new to the Army.

1. OVERHEAD ARM PULL

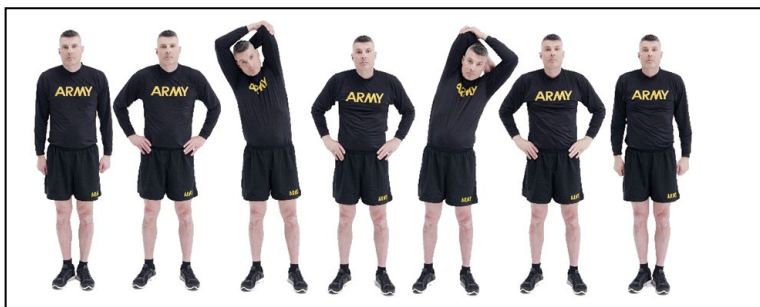


Figure 2-52. Overhead Arm Pull

The Overhead Arm Pull is the first exercise in the Recovery Drill. This exercise develops the flexibility of joints in the arms, shoulders, and trunk. The following is a breakdown of the movement as it would be conducted in a formation:

- The starting position for the Overhead Arm Pull is the straddle stance with hands on hips. When commanded, “READY, STRETCH,” raise the left arm overhead. Grasp above the left elbow with the right hand and pull to the right, leaning the body to the right. A stretch sensation should be felt in the left triceps muscle and flank. Hold this position for 20 to 30 seconds before the command, “STARTING POSITION, MOVE,” is given.
- On the command, “CHANGE POSITION, READY, STRETCH,” repeat the movement on the right side.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

2. REAR LUNGE

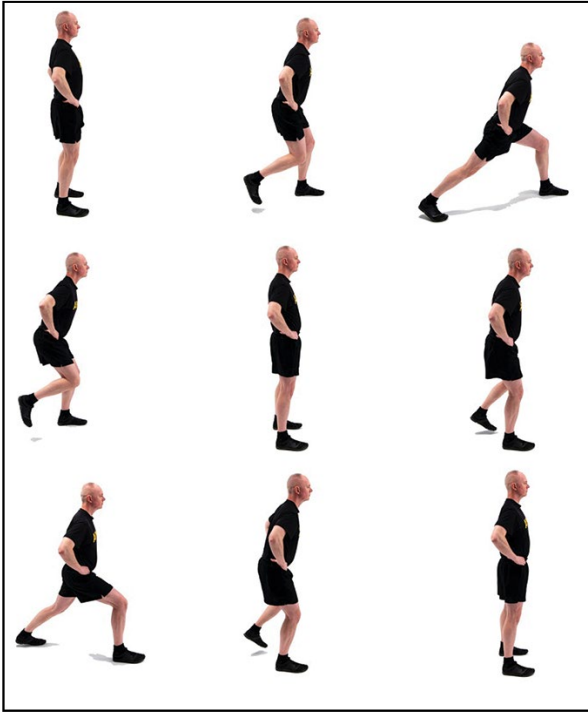


Figure 2-53. Rear Lunge

The Rear Lunge is the second exercise in the Recovery Drill. The following is a breakdown of the movement as it would be conducted in a formation:

- The starting position for the Rear Lunge is the straddle stance with hands on hips.
- On the command, “READY, STRETCH,” take an exaggerated step backward with the left leg, touching down with the ball of the foot directly behind the starting position. This creates a stretch sensation in the front of the left thigh and hip area. The back remains straight and gaze remains forward. Hold the position for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

- On the command, “READY, STRETCH,” take an exaggerated step backward with the right leg, touching down with the ball of the foot directly behind the starting position. This creates a stretch sensation in the front of the right thigh and hip area. The back remains straight and gaze remains forward. Hold the position for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

3. EXTEND AND FLEX



Figure 2-54. Extend and Flex

The Extend and Flex is the third exercise in the Recovery Drill. The following is a breakdown of the movement as it would be conducted in a formation:

- The starting position for the Extend and Flex is the front leaning rest position.
- On the command, “READY, STRETCH,” lower the body toward the ground, sagging in the middle, while keeping the arms straight. The gaze remains straight ahead — do not look up. This creates a stretch sensation in the hip and abdominal muscles. The legs and lower back should be relaxed with toes on the ground and pointing to the rear. Hold the position for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.
- On the command, “CHANGE POSITION, READY, STRETCH,” put body weight back on the balls of the feet to support raising the hips up and off the ground. Straighten the legs and try to touch the ground with the heels. Move the head between the arms and look toward the feet. The back remains straight. Hold the position for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

4. THIGH STRETCH



Figure 2-55. Thigh Stretch

The Thigh Stretch is the fourth exercise in the Recovery Drill. It develops flexibility in the hip and knee joints. The following is a breakdown of the movement as it would be conducted in a formation:

- The starting position for the Thigh Stretch is the seated position with the arms at the sides and palms on the floor.
- On the command, “READY, STRETCH,” roll on the right side and place the right elbow and forearm on the ground directly below the shoulder. The right hand makes a fist with the thumb-side up. Grasp the left ankle and pull toward the left buttock. Push the left thigh further to the rear with the heel of the right foot. Hold this position for 20 to 30 seconds.
- On the command, “CHANGE POSITION, READY, STRETCH,” move back through the starting position before changing sides to stretch the right leg. Hold for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

5. SINGLE LEG OVER

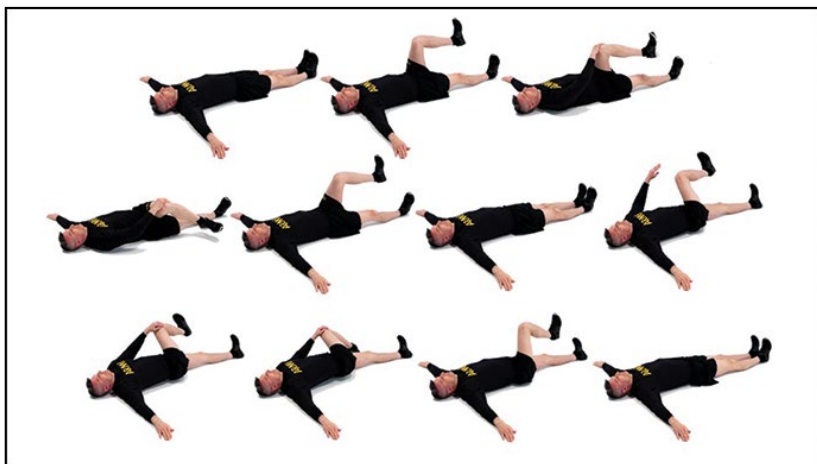


Figure 2-56. Single Leg Over

The Single Leg Over is the fifth exercise in Recovery Drill. This exercise develops flexibility of the hip and lower back. The following is a breakdown of the movement as it would be conducted in a formation for 30 to 60 seconds:

- The starting position for the Single Leg Over is the supine position, with arms straight out to the side on the ground and palms down with fingers and thumbs extended and joined. The feet are together on the ground. The head is on the ground.
- On the command, “READY, STRETCH,” bend the left knee to 90 degrees over the right leg and grasp the outside of the left knee with the right hand pulling toward the right. Keep the left shoulder and arm on the ground. Hold this position for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” assume the starting position.
- On the command, “CHANGE POSITION, READY, STRETCH,” bend the right knee to 90 degrees over the left leg and grasp the outside of the right knee with the left hand pulling toward the left. Keep the right shoulder and arm on the ground. Hold this position for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

6. GROIN STRETCH



Figure 2-57. Groin Stretch

The Groin Stretch is the sixth exercise in the Recovery Drill. This exercise increases flexibility in the hip joint. The following is a breakdown of the movement as it would be conducted in a formation:

- The starting position for the Groin Stretch is the straddle stance with hands on hips.
- On the command, “READY, STRETCH,” take an exaggerated step with the right leg to the right side, bending the right knee into a lateral lunge. The trunk and head continue to face forward. Hold this position or continue into a deeper lunge to stretch the inside of the left thigh for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” assume the starting position.
- On the command, “CHANGE POSITION, READY, STRETCH,” take an exaggerated step to the left, with the left leg bending the left knee into a lateral lunge. The trunk and head continue to face forward. Hold the position or continue into a deeper lunge to stretch the inside of the right thigh for 20 to 30 seconds.
- On count 4, return to the starting position.

7. CALF STRETCH



Figure 2-58. Calf Stretch

The Calf Stretch is the seventh exercise in Recovery Drill. This stretch increases flexibility of the ankle. The following is a breakdown of the movement as it would be conducted in a formation:

- The starting position for the Calf Stretch is the straddle stance with hands on hips.
- On the command, “READY STRETCH,” take a step backward with the left leg, placing the foot flat on the ground 1 to 2 feet behind its starting position. Keeping the left heel on the ground, bend both knees until a stretch is felt in the left Achilles tendon.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.
- On the command, “READY, STRETCH,” repeat the stretch with the right leg. Increase the stretch sensation in the right calf muscle by stepping further back with the right foot and locking the right knee. Keep the right foot pointing forward throughout the stretch. Hold either stretch position for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

8. HAMSTRING STRETCH



Figure 2-59. Hamstring Stretch

The Hamstring Stretch is the final exercise in Recovery Drill. This stretch increases flexibility of the knee and hip. The following is a breakdown of the movement as it would be conducted in a formation:

- The starting position for the Hamstring Stretch is the sitting position, arms at the sides and palms on the floor.
- On the command, “READY STRETCH,” reach forward with both hands toward the feet, grasping the feet, ankle, or lower legs. Keep the knees straight without locking them. Hold this stretch position for 20 to 30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.
- On the command, “READY, STRETCH,” repeat the first stretch position reaching slightly further.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

APPENDIX A

Army Combat Fitness Test Testing Equipment and Field Standards

Army Combat Fitness Test (ACFT) equipment standards are the same across the Army. The sites where the ACFT will be conducted vary depending on the location and climate. This appendix provides the specifications for the ACFT.

ARMY COMBAT FITNESS TEST EQUIPMENT

Specifications for ACFT test equipment must be closely followed for valid record testing. Readily available equipment not specific to ACFT includes the following:

- A measuring pointer to help improve the Standing Power Throw (SPT) measurement, with at least one pointer required for every two lanes tested
- Cones for marking lanes and distance may be required if the test site is not permanently marked
- One stopwatch per lane
- One outdoor timing clock for the 2-Mile Run (2MR)

The following are specifications of the major equipment components for the ACFT:

HEX BAR



Figure A-1. Hex bar

One hex bar is required for each lane.

Specifications

- The hex bar will have no D-handles
- Weight is 60 pounds (lbs) (unloaded). Must be within plus/minus 2 lbs of the 60-lb requirement
- Durable hexagonal frame welded from 1.5-inch square steel tubing (example, 1.5-inch, 80 pipe sleeves)
- 16.4 inches of loadable sleeve length to accommodate four 45-lb bumper plates with a collar on each end of the bar
- Both sets of knurled, parallel handles measure 1.34 inch in diameter and are spaced 25 inches apart.
- The hex bar requires rust proofing. Examples are black oxide bare steel, bright zinc, black zinc chrome, nickel, and phosphorus zinc plate to resist rusting.
- Solid sleeve design
- Color is nonspecific

BUMPER PLATES

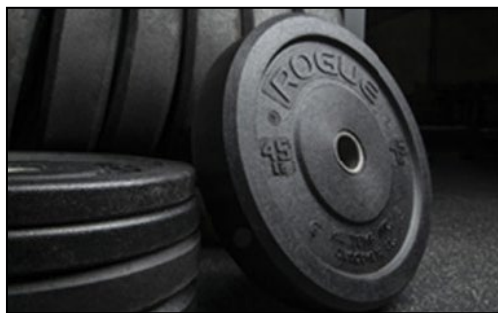


Figure A-2. Bumper plates

550 lbs of single, high-temperature bumper plates are required for each lane. Bumper plates should be constructed of vulcanized rubber and a 2-inch stainless steel insert. Inserts on the bumper should be inset from the plane of the plate, allowing better protection when multiple plates are on the bar. Additional 5-lb plates may be acquired locally and used to adjust target weights for Soldiers:

- 4 x 10-lb plate width 1 3/8 inches
- 2 x 15-lb plate width 1 7/8 inches

- 2 x 25-lb plate width 2 1/4 inches
- 2 x 35-lb plate width 3 1/8 inches
- 8 x 45-lb plate width 3 3/4 inches

Specifications

- Standard diameter is 450 millimeters (mm) (17.7 inches)
- Solid rubber plates made from high-quality rubber
- Shore durometer at 87.7 to 88.3
- Insert opening of 50.4 mm (1.98 inches)
- Insert type is forged stainless steel
- Bumper plate thickness tolerance is within 1/16 inches
- Weight tolerance is within plus/minus one percent of the claimed weight
- Color is nonspecific

HEX BAR COLLAR

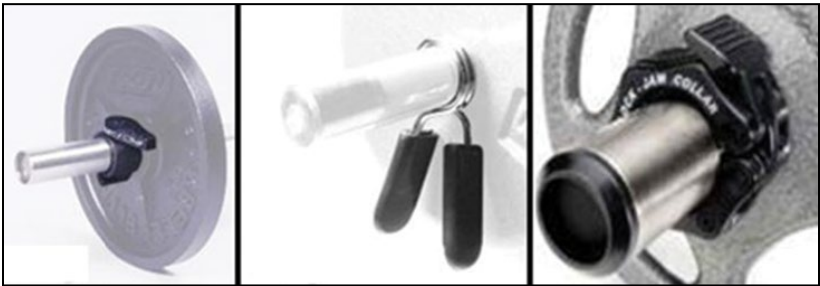


Figure A-3. Hex bar collar

Two hex bar collars are required per lane. They are designed to be used on 50-mm hex bar sleeves to provide a secure and snug fit against the bumper plates. The collar will have a quick and easy locking mechanism for easy on and off.

Specifications

- Plastic or metal hex bar collar
- Weight of 1 to 2 lbs per pair
- Hex bar and collar must be fully compatible
- Color is nonspecific

SLED WITH PULL STRAP



Figure A-4. Sled

One sled and pull strap are required per lane. The nylon sled can be dragged on multiple surfaces (grass and artificial turf). The sled can handle up to four, 45-lb bumper plates and is considerably lighter than the traditional metal sled. The sled should not be used on concrete, asphalt, or any rough-textured surface. Use of the sled on aggressive surfaces will significantly shorten the life of the sled. The nylon sled can be rolled up for storage and transportation.

Specifications

- Made of thick heavy-duty nylon
- Size standard is 22 inches long and 19.5 inches wide
- Can handle up to four, 45-lb plates
- Must include a pull strap of 92 inches with a handle on both ends
- Color is nonspecific

10-POUND SOLID MEDICINE BALL**Figure A-5. Medicine ball**

One 10-lb medicine ball is required per lane. The medicine ball is approximately 9 inches in diameter.

Specifications

- Made of hard rubber
- Firm and non-malleable
- Textured grip surface will make it easy to handle
- Should not lose its shape when thrown and should be made of a durable rubber specifically designed to withstand impact from landing on the ground after being thrown
- The inner material cannot shift and cannot be sand or similar loose material
- Must be weatherproof
- Color is nonspecific

40-POUND KETTLEBELL

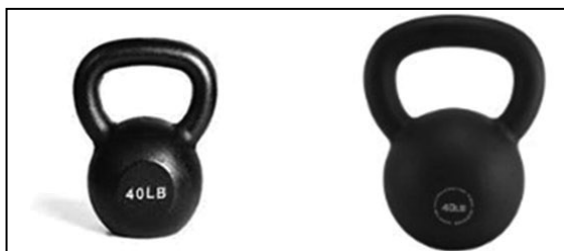


Figure A-6. 40-lb kettlebell

Two 40-lb kettlebells are required per lane. The kettlebell is a cast-iron or cast-steel weight resembling a cannonball, with a closed, single-loop handle. It should be made with a slip-free texture with a seamless, even finish.

Specifications

- The weight of the kettlebell will be within plus/minus 1 percent of the 40-lb required weight.
- Cast iron or cast steel
- Powder-coated
- Approximate height of 11 inches
- Has a flat base allowing it to stand with the handle positioned vertically
- Color is nonspecific

METRIC MEASURING TAPE



Figure A-7. Measuring tape

One measuring tape is required per lane. The tape will be a durable, long-lasting, vinyl-coated fiberglass tape in a shatter-resistant case that has an easy-to-wind, flush-folding handle.

Specifications

- 30-meter long tape divided into increments of meters and centimeters
- Color is nonspecific

CLIMBING BARS

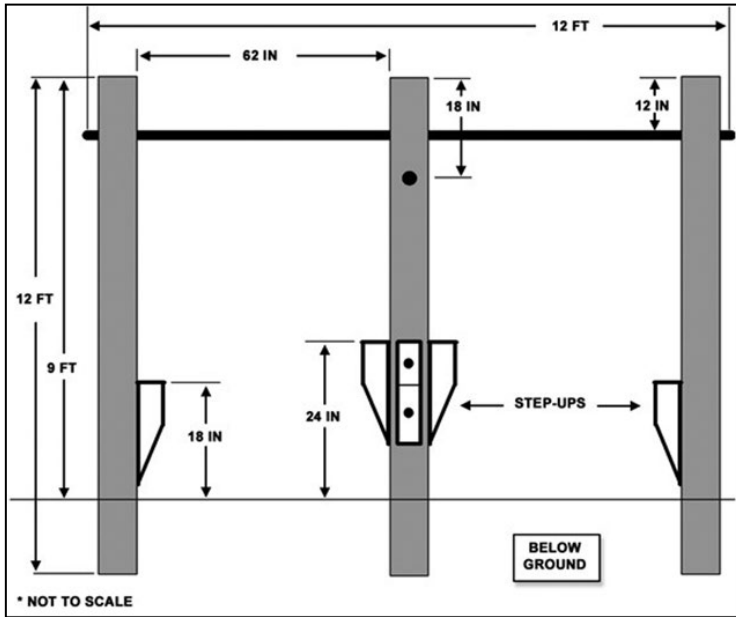


Figure A-8. Climbing pod diagram

Climbing bars arranged in groups of four are required for physical readiness training and testing. Climbing bars provide adequate space and facilitate better command and control than traditional pull-up bars. Their design and arrangement provide safe upper-body pulling and core training across a range of Soldier heights. Each group of four climbing bars accommodates 12 Soldiers. When Soldiers are training together as a group of 12 on the climbing bars, their close proximity will build the type of cooperation and communication needed to perform well in a similar situation in combat. As fatigue builds across Climbing Drills 1 and 2, concentration and communication will be challenged. Both must be sustained by the exercising Soldier and his/her spotters.

Climbing bars are the standard equipment for conducting the Leg Tuck (LTK) event in the ACFT. They are arranged on or in close proximity to the ACFT field.

The following planning considerations apply:

- Traditional pull-up bars are too narrow to properly conduct the LTK and other climbing drill exercises. They do not allow enough space for spotters to stand between the verticals.
- Use of multiple climbing bar “pods” allow efficient mass training.
- The climbing drills require one bar for every three Soldiers when performed as a single activity.
- Total ground surface area for four pods is only 625 square feet.
- One climbing pod will accommodate 16 stations of three Soldiers per station for a total of 48 Soldiers.
- Additional freestanding pods should be constructed to accommodate more Soldiers.

Specifications

The following are specifications for the climbing bars (see Figure A-8):

- Consist of five posts.
- Each of the five posts measure 6 by 6 inches and are 12 feet long.
- Each post is sunk 3 feet into the ground.
- Consist of two bars.
- Each of the two bars is a threaded, hollow metal pipe.
- Each bar measures 1.5 inches outside diameter by 12 feet long. A diameter variance of 1.25 to 1.75 inches is allowed for ACFT testing.
- Each bar has two, 1-inch deep end caps.
- The bars run through the 6- by 6-inch posts at 7.5 and 8 feet above the ground. Any higher increases the risk of injury from an uncontrolled drop from the bar. A higher bar is too high for spotters to support the exercising Soldier.
- The distance from inside post edge to inside post edge is approximately 62 inches. This measurement provides enough bar space to allow room for spotters and to conduct all exercises safely.
- The step-ups (16 inches long) are cut from 4- by 4-inch, 8-foot posts and secured to the 6- by 6-foot posts with 3-inch countersunk screws.
- The step-ups on the outside 6- by 6-inch posts are 18 inches from the ground. The step-ups on the inside post are 24 inches above the ground.

PORTABLE PULL-UP BAR

Figure A-9. Portable pull-up bar

A portable pull-up bar is authorized as an alternate to the climbing bar for the LTK event in the ACFT. It does not conform to the standard for the conduct for safe physical readiness training of Climbing Drills 1 and 2. One pull-up bar per lane is required for the ACFT. A squat-style rack stand with a 90-inch (7 foot, 6 inches) high bar that is 48 to 62 inches long gives ample space for the LTK event and will fit under an 8 foot-high indoor ceiling. The pull-up bar can be disassembled for storage and transportation to and from ACFT test sites.

Specifications

- The bar has a 1.25- to 1.75-inch outside diameter. A 2-inch diameter is too large for safe performance of the test.
- A smooth, unpainted galvanized steel bar with shallow knurling is acceptable.

- System weight of 146 lbs
- Bar length of 48 to 62 inches
- Bar height minimum of 86 inches, preferably 90 inches
- 2 x 3-inch, 11 gauge steel frame
- Load capacity of 1,000 lbs
- Color is non-specific

MODIFIED ARMY COMBAT FITNESS TEST EQUIPMENT

Bike

The bike event requires a stationary bicycle that tests a Soldier's lower body muscular endurance. It cannot incorporate assistance from the Soldier's upper body. The ergometer must be available for training and testing. The seat and handlebars must be adjustable to accommodate Soldiers of different sizes. It must have an odometer that accurately measures time and distance, as well as level of resistance. The level of resistance must be adjustable. During the initial operation capability (IOC) period, the cycle ergometer must be an approved model from the following list:

- Precor
- Lifefitness
- Monark
- Concept 2

Rower

The row event requires a stationary rowing ergometer (a rower) that tests a Soldier's upper and lower body muscular endurance. The rower must be available for training and testing. The seat, handles, and rail must accommodate Soldiers of different sizes. It must have an odometer that accurately measures time and distance as well as level of resistance. The level of resistance must be adjustable. During the IOC period, the rower must be an approved model from the following list:

- Precor
- Lifefitness
- Monark
- Concept 2

ARMY COMBAT FITNESS TEST FIELD

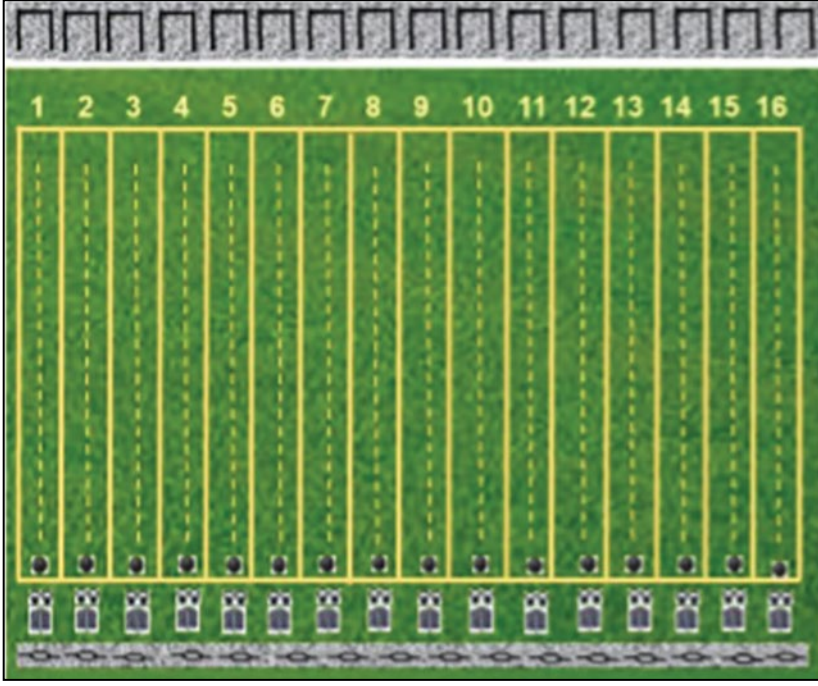


Figure A-10. ACFT field layout

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