

**ATP 7-22.01**

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## **HOLISTIC HEALTH AND FITNESS TESTING**

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**OCTOBER 2020**

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This publication supersedes TC 21-21, dated 25 June 1991, and Appendix A of FM 7-22, dated 26 October 2012.

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

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# HOLISTIC HEALTH AND FITNESS TESTING

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## Preface

ATP 7-22.01, *Holistic Health and Fitness Testing*, comprises the Army's physical testing doctrine and is a companion to the physical readiness domain described in FM 7-22, *Holistic Health and Fitness*, and ATP 7-22.02, *Holistic Health and Fitness Drills and Exercises*. This publication establishes physical fitness test administration and evaluation procedures for the Occupational Physical Assessment Test (OPAT), Army Combat Fitness Test (ACFT), and Combat Water Survival Test (CWST).

The OPAT certifies that Army recruits are physically ready to begin initial entry training. The ACFT measures a Soldier's physical ability to execute combat-related tasks. The ACFT validates the Soldier's and unit's physical readiness training; it demonstrates how effectively that training prepares Soldiers for the physical tasks that every Soldier has to be ready to perform. The CWST certifies that Soldiers have the ability to operate in and around water and maritime environments.

The principal audience for this doctrine is leaders at all organizational levels. All leaders are trainers. Leaders include officers, warrant officers, noncommissioned officers, and those Department of the Army (DA) Civilians in leadership positions. Trainers and educators throughout the Army will also use this publication.

Commanders, staffs, and subordinates at all levels ensure that holistic health and fitness (H2F) testing is properly administered in accordance with requirements outlined in this publication. Commanders, staffs, and subordinates ensure that their decisions and actions comply with applicable United States, international, and in some cases host-nation laws and regulations. Commanders at all levels ensure that their Soldiers operate in accordance with the law of war and the rules of engagement. (See FM 6-27/MCTP 11-10C.)

Terms included in the glossary are not codified Army terms. They are included only for clarity for the reader. This publication is not a proponent for any Army doctrine terms.

This publication prescribes DA Form 705 (*Army Combat Fitness Test Scorecard*) and DA Form 7888 (*Occupational Physical Assessment Test Scorecard*).

This doctrine and the regulations that support it apply to the Active Army, the Army National Guard/Army National Guard of the United States, and the United States Army Reserve unless otherwise stated.

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

Commander, Center for Initial Military Training  
ATTN: Director Research and Analysis  
210 Dillon Circle  
Fort Eustis, VA 23604

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## Introduction

Physical readiness is a cornerstone of Soldier readiness, and by extension, Army readiness. As one of the five domains of the Army Holistic Health and Fitness (H2F) System, physical readiness is the ability to meet the physical demands of any duty or combat role.

ATP 7-22.01 establishes the Army's doctrine for the physical testing of Soldiers. It presents a summary of tasks, conditions, and standards required to administer, grade, and score the Occupational Physical Assessment Test (OPAT), Army Combat Fitness Test (ACFT), and Combat Water Survival Test (CWST). Demonstrations for exercises are posted on the Central Army Registry website at [https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect\\_date=5%2F1%2F2020&search\\_terms=CIMT](https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect_date=5%2F1%2F2020&search_terms=CIMT). (Copy and paste this address after accessing the Central Army Registry website if the demonstrations do not populate.) Additional support for H2F test events and exercises are located on the Army Combat Fitness Test website at <https://www.army.mil/acft/>.

Chapter One, "Occupational Physical Assessment Test," covers test administration, event standards, grading, scoring, and equipment requirements to conduct the OPAT.

Chapter Two, "Army Combat Fitness Test," covers test administration, event standards, grading, scoring, and equipment requirements to conduct the ACFT and the ACFT (Modified).

Chapter Three, "Combat Water Survival Test," covers test administration, event standards, grading, scoring and equipment requirements for the CWST.

Appendix A contains the Preparation Drills and Preparation Drills (Modified). Soldiers and recruits conduct these drills prior to executing H2F testing events to include the OPAT, ACFT, and CWST.

Appendix B provides additional training drills and exercises designed to improve individual recruit performance on the OPAT events, otherwise known as OPAT improvement.

Appendix C contains the Recovery Drills and Recovery Drills (Modified). Soldiers and recruits conduct these drills at the conclusion of H2F testing events.

Appendix D provides tasks, conditions, and standards related to Army Water Survival Training. Soldiers complete this training to prepare for the CWST.

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# Chapter 1

## Occupational Physical Assessment Test

The Occupational Physical Assessment Test (OPAT) is a battery of four events used to assess a recruit's capabilities to engage in physically demanding Army training. As an assessment, the OPAT measures physical capacity in the three major areas of physical readiness: upper- and lower-body power, lower-body strength, and aerobic endurance. Recruits take four OPAT test events: Standing Long Jump (known as SLJ), Seated Power Throw (known as PWT), Strength Deadlift (known as SDL), and the Interval Aerobic Run (known as IAR). Recruiters can administer the Standing Long Jump, Seated Power Throw, and Strength Deadlift in any order. The Interval Aerobic Run is always the last test event.

### TEST ADMINISTRATION

1-1. The purpose of the OPAT is to certify that individual recruits, cadet candidates, and reclassified Soldiers are physically prepared to begin training. The OPAT predicts whether Trainees or cadet candidates can safely and effectively engage in the physical training required for their military occupational specialty (MOS) school or area of concentration. Training for the OPAT improves an individual's physical and mental readiness for initial training.

1-2. Individuals must achieve a physical demand category (known as PDC) (heavy, significant, or moderate) equal to or greater than the physical demand category required for their MOS or area of concentration prior to shipping to initial training. In some cases Soldiers attempting to reclassify into a higher physical demand category MOS or area of concentration must re-test. Individuals are authorized unlimited re-tests after an appropriate training interval. This interval depends upon the physical condition of the individual and the amount of improvement required in his or her OPAT score. Individuals have achieved substantial improvements in OPAT performance after committing to a 30-day conditioning program that follows the OPAT improvement and Future Soldier Program (known as FSP). If the logistics of re-testing make it unfeasible to test at a later date, a Soldier can re-test on the same day. Test results are valid for up to 90 days. See appendix B for more on OPAT improvement.

1-3. All OPAT test events—Standing Long Jump, Seated Power Throw, Strength Deadlift, and the Interval Aerobic Run—must be administered on the same day. Soldiers must complete all four events within one hour. The test period is defined as the period that elapses from the start to the finish of the four events: for example, from the first trial on the Standing Long Jump to the last shuttle of the Interval Aerobic Run. Individuals are authorized to take up to five-minutes to recover between events, but may elect to proceed sooner with the next event if they are ready.

1-4. Graders—an event supervisor, grader, officer in charge (OIC), or noncommissioned officer in charge (NCOIC)—administer the OPAT. A minimum of two Soldiers are required to administer an OPAT: OIC or NCOIC, and an event supervisor or grader. Graders record OPAT scores on DA Form 7888 (*Occupational Physical Assessment Test Scorecard*) (see paragraph 1-22). Graders maintain one scorecard for each individual. The recruiter, OIC, or NCOIC keeps the scorecard and enters scores into the command's system of record. Typically, recruiters grade and monitor the progress of individuals.

1-5. The Army physical fitness uniform (APFU), Army combat uniform (ACU), or civilian attire equivalent to the APFU is permitted for wear during the OPAT. Devices or equipment that offer any potential for unfair advantage during testing are unauthorized. This includes nasal strips, weight lifting gloves, braces for the spine or extremities, elastic bandages, or sunglasses. Electronic devices are also not authorized (electronic music players and cell phones). AR 670-1 specifies components of the APFU ensemble.

## **SUPERVISION**

1-6. The success of any physical fitness testing program depends on obtaining valid and accurate test results. Therefore, the OPAT must be administered to the standard in this doctrine to accurately evaluate individual potential and to control attrition from initial military training and first unit of assignment. Supervision provides for standardization in the following areas:

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

## **PREPARATION**

1-7. Preparation for the OPAT is designed to secure the most accurate evaluation of personnel participating in the test. Preparatory requirements include the following:

- Selecting and training of event supervisors, graders, timers, demonstrators, and support personnel.
- Inventorying the equipment.
- Securing the test site.

## **PLANNING**

1-8. The OIC or NCOIC ensures that testing is consistent with regard to events, scoring, equipment, and facilities. Testing is planned to permit each individual to perform at his or her maximal level. The OIC or NCOIC ensures the following:

- Individuals are not tested when fatigued, injured, or ill.
- Individuals do not participate in fatiguing activities before taking OPAT.
- If the testing is conducted outdoors, weather and environmental conditions do not inhibit physical performance.
- DD Form 2977 (*Deliberate Risk Assessment Worksheet*) is completed and approved.

## **DUTIES**

1-9. OPAT personnel must be familiar with all aspects of administration of the OPAT. Their essential duties consist of supervising individuals and laying out the test area. The OIC or NCOIC are responsible for the administration of the OPAT. When test personnel required to administer the OPAT are limited, the OIC or the NCOIC may perform the duties of an event demonstrator, back-up timer, or both. Responsibilities of the OIC or NCOIC include the following:

- Completing and documenting a DD Form 2977.
- Administering the test.
- Conducting recovery upon completion of the test.
- Procuring all necessary equipment and supplies.
- Reserving and arranging test area.
- Training of event supervisors, graders to score and time the events, event demonstrators, and support personnel.
- Ensuring tests are properly administered and that events are explained, demonstrated, and scored according to standard.
- Documenting and reporting test results.

1-10. Event supervisors are responsible for administration and scoring of test events. When test personnel required to administer the OPAT are limited, the event supervisor may perform the duties of the timer. Event supervisor responsibilities include—

- Administering one or more test events.
- Ensuring necessary equipment is on hand for each event.

- Reading OPAT event instructions.
- Conducting OPAT event demonstrations.
- Supervising event scoring to standard.
- Answering questions on scoring discrepancies and informing the OIC or NCOIC.
- Enforcing test standards.
- Recording the correct number of repetitions in the raw score block on DA Form 7888.
- Recording initials in initials box on DA Form 7888.
- Receiving training, conducted by the OIC or NCOIC, to ensure scoring is to standard.
- Demonstrators are responsible for demonstrating the events to standard.
- Timers and back-up timers are responsible for timing and scoring the OPAT to standard.

1-11. Support personnel assist in preventing unsafe acts to ensure smooth execution of the OPAT. The use of support personnel depends on local policy and unit standard operating procedures. Medical support on site is not required unless specified by local policy. The OIC, the NCOIC, or both have a plan for medical support if required.

## **TEST SITE**

1-12. The OIC and NCOIC select a test site. The test events are designed to be performed indoors if necessary. The test site will meet the following requirements:

- A site free of any significant hazards.
- A briefing area for the reading of event instructions.
- A preparation area (can be same as briefing area).
- A flat, dry area for the Standing Long Jump, Seated Power Throw, Strength Deadlift, and Interval Aerobic Run.
- A flat, solid surface with measured, 20-meter running lanes with at least a 5-meter buffer on either end for a total of 30 meters.

1-13. The OIC and NCOIC use sound judgment when selecting the Interval Aerobic Run lanes. The selected test sites should be free of significant hazards such as traffic, slippery surfaces, and areas where heavy pollution is present. The straight portion of a running track may be used for the Interval Aerobic Run.

## **EQUIPMENT**

1-14. The minimum equipment requirements for each event are listed in paragraphs 1-15 through 1-18.

### **OPAT EQUIPMENT SAFETY INSPECTIONS**

Prior to executing the OPAT, the event OIC or NCOIC visually inspects all equipment for serviceability. Particular attention should be given to the hexagon bar for stress cracks and other defects, especially at welded seams on the hexagon bar frame. These defects compromise the load-bearing capability of the bar and present a potential safety hazard to the user.

## **STANDING LONG JUMP**

1-15. The requirements for Standing Long Jump are—

- 1 x 20-meter fiberglass reinforced tape measure.
- 1 x measuring rod (polyvinyl chloride [commonly known as PVC] pipe).
- Standing Long Jump testing mat with pre-printed distances are authorized but not required.

## SEATED POWER THROW

1-16. The requirements for Seated Power Throw are—

- 1 x 20-meter fiberglass reinforced tape measure (same one used for the Standing Long Jump).
- 1 x chalk or tape restraining line.
- 1 x 4.4-pound (2 kilogram) medicine ball, textured rubber surface, solid fill.

## STRENGTH DEADLIFT

1-17. There are many configurations of weight plates that will satisfy the Strength Deadlift. The following weight plates allow maximum flexibility relative to the bar's weight. Most bars range in weight from 40 to 60 pounds. The OIC or NCOIC must weigh the hex bar to determine the proper weight. Graders must vary weight plate configurations to achieve the highest weight an individual can lift between 120 and 220 pounds. One solution for the Strength Deadlift weight plate requirements is—

- 1 x hexagon bar (40–600 pounds).
- 2 x barbell collars.
- 2 x 45-pound bumper plates.
- 2 x 35-pound bumper plates.
- 2 x 25-pound bumper plates.
- 4 x 15-pound bumper plates.
- 4 x 10-pound bumper plates.

See table 1-1 for the plate arrangement for each Strength Deadlift.

**Table 1-1. Plate arrangement for each Strength Deadlift weight level using a 50-pound hex bar**

<b>Plates for 40lb Hex Bar</b>	<b>40lb Bar + Plates</b>	<b>Plates for 50lb Bar</b>	<b>50lb Bar + Plates</b>	<b>Plates for 60lb Hex Bar</b>	<b>60lb Bar + Plates</b>	<b>Target Weights</b>
$2 \times 25 + 2 \times 15 = 80$	$40 + 80 =$	$2 \times 35 = 70$	$50 + 70 =$	$4 \times 15 = 60$	$60 + 60 =$	120
$2 \times 45 = 90$	$40 + 90 =$	$2 \times 25 + 2 \times 15 = 80$	$50 + 80 =$	$2 \times 35 = 70$	$60 + 70 =$	130
$2 \times 35 + 2 \times 15 = 100$	$40 + 100 =$	$2 \times 45 = 90$	$50 + 90 =$	$2 \times 25 + 2 \times 15 = 80$	$60 + 80 =$	140
$2 \times + 2 \times 15 = 110$	$40 + 110 =$	$2 \times 35 + 2 \times 15 = 100$	$50 + 100 =$	$2 \times 45 = 90$	$60 + 90 =$	150
$2 \times 35 + 2 \times 25 = 120$	$40 + 120 =$	$2 \times + 2 \times 15 = 110$	$50 + 110 =$	$2 \times 35 + 2 \times 15 = 100$	$60 + 100 =$	160
$2 \times 45 + 4 \times 10 = 130$	$40 + 130 =$	$2 \times 35 + 2 \times 25 = 120$	$50 + 120 =$	$2 \times + 2 \times 15 = 110$	$60 + 110 =$	170
$2 \times 45 + 2 \times 25 = 140$	$40 + 140 =$	$2 \times 45 + 4 \times 10 = 130$	$50 + 130 =$	$2 \times 35 + 2 \times 25 = 120$	$60 + 120 =$	180
$2 \times 45 + 4 \times 15 = 150$	$40 + 150 =$	$2 \times 45 + 2 \times 25 = 140$	$50 + 140 =$	$2 \times 45 + 4 \times 10 = 130$	$60 + 130 =$	190
$2 \times 45 + 2 \times 35 = 160$	$40 + 160 =$	$2 \times 45 + 4 \times 15 = 150$	$50 + 150 =$	$2 \times 45 + 2 \times 25 = 140$	$60 + 140 =$	200
$2 \times 45 + 2 \times 25 + 2 \times 15 = 170$	$40 + 170 =$	$2 \times 45 + 2 \times 35 = 160$	$50 + 160 =$	$2 \times 45 + 4 \times 15 = 150$	$60 + 150 =$	210
$2 \times 45 + 2 \times 35 + 2 \times 10 = 180$	$40 + 180 =$	$2 \times 45 + 2 \times 25 + 2 \times 15 = 170$	$50 + 170 =$	$2 \times 45 + 2 \times 35 = 160$	$60 + 160 =$	220

\* The officer in charge or noncommissioned officer in charge adjusts weight plates based on the weight of the Hex Bar – 40-50-60 pounds.

## **INTERVAL AEROBIC RUN**

1-18. The requirements for Interval Aerobic Run are—

- 1 x digital stop watch.
- 10 x field cones.
- 1 x loudspeaker for playback of the audio recording of OPAT Interval Aerobic Run procedures.

### **TEST EVENTS**

1-19. The OPAT has four events designed to test, measure, and evaluate an individual's muscular strength and cardiovascular endurance. These events consist of the Standing Long Jump, Seated Power Throw, Strength Deadlift, and Interval Aerobic Run. Individuals may execute the first three events in any order, but they must execute the Interval Aerobic Run as the final event.

## **TEST EVENT INSTRUCTIONS**

1-20. Prior to the execution of the OPAT, the OIC, NCOIC or grader should conduct a dynamic warm up to ensure individuals are adequately prepared to perform at a maximum level for each of the four OPAT events. This warm-up may include exercises from the Preparation Drill and other stability or movement drills discussed in appendix A.

1-21. Prior to or on the test day, event supervisors brief individuals on the purpose and organization of the test. Event supervisors read the instructions aloud to all individuals taking the OPAT.

You are about to take the Occupational Physical Assessment Test or OPAT. The OPAT will measure your upper- and lower-body power, lower-body strength, and aerobic capacity. The results of the OPAT will serve as a guide in determining your physical capabilities. At this time the test administrator will hand you your OPAT scorecard. You are to carry your scorecard with you to each event. Before each test event, hand your scorecard to the grader. After you complete the event, the grader will record your score, initial the card, and return it to you. Listen closely to the test instructions. Ask questions before or during the test if the instructions are not clear to you. Do your best on each event. What are your questions about the OPAT?

## **SCORECARD**

1-22. DA Form 7888 records demographic information and scores on all four OPAT events. The individual being tested will sign the scorecard after verifying agreement with each recorded event score. The OPAT grader will sign the card and verify the MOS qualification level. See figure 1-1 on page 1-6 for side 1 of DA Form 7888. See paragraph 1-43 for discussion and illustration of side 2 of DA Form 7888—the Interval Aerobic Run tracking sheet.

OCCUPATIONAL PHYSICAL ASSESSMENT TEST SCORECARD										
For use of this form see ATP 7-22.01; the proponent agency is TRADOC.										
RECRUIT/SOLDIER										
ID #: <b>12673091</b>	NAME: (Last, First, Middle Initial) <b>MURRY, THOMAS, R.</b>			UNIT/LOCATION: <b>23AZ347</b>						
DATE: (YYYYMMDD) <b>20200515</b>	GENDER: <b>MALE</b>	AGE: <b>22</b>								
TEST EVENTS										
STANDING LONG JUMP: Distance to closest 10cm (circle highest score)										
TRIAL 1 <b>163</b>	CM	TRIAL 2 <b>158</b>	CM	TRIAL 3 <b>182</b>	CM	INITIALS <b>TM</b>				
SEATED POWER THROW: Distance to closest 10cm (circle highest score)										
TRIAL 1 <b>401</b>	CM	TRIAL 2 <b>481</b>	CM	TRIAL 3 <b>455</b>	CM	INITIALS <b>TM</b>				
STRENGTH DEADLIFT: Circle highest weight successfully lifted.										
WARM-UP / FORM CHECK WEIGHT: No more than 100 lbs.	120 lbs	140 lbs	160 lbs	180 lbs	190 lbs	<b>200 lbs</b>	210 lbs	220 lbs	INITIALS <b>TM</b>	
INTERVAL AEROBIC RUN: Record Level and Shuttle completed.										
LEVEL #: <b>7</b>	SHUTTLE #: <b>4</b>		TOTAL # SHUTTLES: <b>55</b>				INITIALS <b>TM</b>			
SIGNATURE OF RECRUIT/SOLDIER <b>Thomas R. Murry</b>						DATE: (YYYYMMDD) <b>20200515</b>				
PRINCIPAL GRADER										
PRINTED NAME: (Last, First, MI) <b>Marron, William, J.</b>				Grade/ Rank <b>SSG / E6</b>	UNIT/LOCATION: <b>1-503</b>					
SIGNATURE: <b>William J. Marron</b>				DATE: (YYYYMMDD) <b>20200515</b>						
Comments: <b>This was Murry's second OPAT attempt.</b>										

DA FORM 7888, OCT 2020

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APD AEM v1.00ES

Figure 1-1. Sample OPAT scorecard, DA Form 7888, side 1

## GRADING STANDARDS

1-23. Individuals are graded against established standards for each of the four OPAT test events and scored according to the weight, distance, or number of intervals required to pass each test event. Scores are categorized at three levels from highest to lowest: heavy (black), significant (gray) and moderate (gold). To receive a qualifying score at each category level, individuals must follow proper testing protocols and meet required distances and/or quantities for each test event.

### STANDING LONG JUMP

1-24. Figure 1-2 and figure 1-3 illustrate the Standing Long Jump.



**Figure 1-2. Standing Long Jump**



**Figure 1-3. Proper technique to execute the Standing Long Jump**

1-25. The Standing Long Jump is a forward jump for maximal distance measured in centimeters. Figure 1-2 and figure 1-3 illustrate a breakdown of the event as an individual executes it:

- The starting position is standing behind the take-off line.
- The individual may perform counter movements prior to the jump—crouching, swinging the arms, and rocking from heels to toes, but the feet cannot leave the ground.
- The individual jumps as far forward as possible.
- After landing, the individual's feet must not move. If the individual steps backwards before regaining control, the event grader measures the jump from the take-off line to the back of the rear-most foot.
- The individual may perform two practice jumps followed by three maximum effort, record jumps.
- The event grader records the three record jumps and circles the longest jump.

1-26. If the individual falls forward or backwards after landing during the record attempts, he or she will repeat the jump. See figure 1-4 on page 1-8.



**Figure 1-4. Falling backwards during the Standing Long Jump**

1-27. The jump is measured and recorded to the nearest centimeter (see figure 1-5). DA Pam 611-21 lists the standards by MOS bracket. See also table 1-2.



**Figure 1-5. Standing Long Jump measurement taken from the rear-most foot**

**Table 1-2. Standing Long Jump bracket standards**

<b>Black</b>	<b>Gray</b>	<b>Gold</b>
160 cm	140 cm	120 cm
cm	centimeter	

1-28. The event supervisor reads the OPAT instructions prior to the start of the Standing Long Jump event.

### Standing Long Jump

The purpose of the Standing Long Jump is to assess lower-body power. You will stand behind the take-off line with your feet parallel and shoulder-width apart. You will jump as far as possible with a two-foot take-off and landing. You are allowed to rock on your toes and heels, but your feet cannot leave the ground before the jump. The jump begins by moving both arms forward and backward (arm counter-movements) while bending at the knees and hips. Do not move your feet after landing. After landing if you move your feet you may be asked to repeat the jump. If you fall backwards or forwards, you will repeat the jump. You may perform two sub-maximal practice jumps followed by three maximum effort jumps. The jump is scored to the nearest centimeter from the heel closest to the take-off line. Watch this demonstration. What are your questions about the Standing Long Jump?

### SEATED POWER THROW

1-29. Figure 1-6 and figure 1-7 illustrate the Seated Power Throw. Figure 1-8 illustrates improper position.

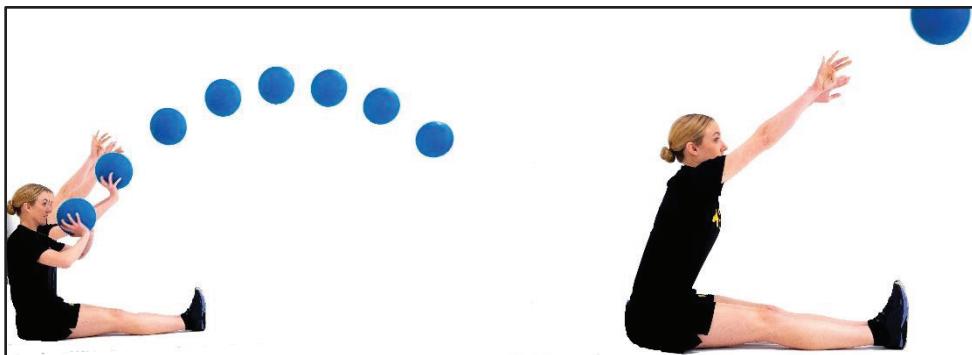


Figure 1-6. Seated Power Throw

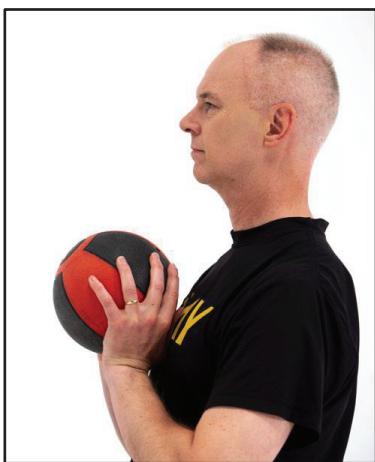


Figure 1-7. Proper hand position for the Seated Power Throw

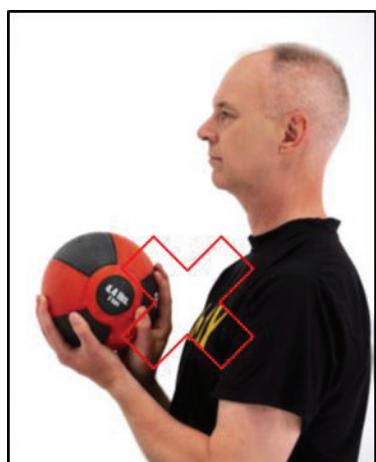


Figure 1-8. Improper hand position for the Seated Power Throw

1-30. The Seated Power Throw is a forward throw from a seated position that is measured in centimeters. An individual will conduct the event using the following breakdown:

- The starting position for the Seated Power Throw is the sitting position with legs on the ground straight out in front and feet behind the restraining line.
- From the starting position, holding the ball in both hands in front of the chest, the individual will push the ball up and away from the chest to throw it as far as possible.
- The individual may lean backwards and forwards during the throw to increase distance.
- The individual will be offered two practice throws.
- After the practice throws, the individual will perform three maximal effort throws.

1-31. The Seated Power Throw is measured and recorded to the nearest ten (10) centimeters from the restraining line to where the ball first contacts the ground. In figure 1-9, the measurement would be 4.00 meters or 400 centimeters.



**Figure 1-9. Measuring the mid-point of where the ball first contacts the ground**

1-32. DA Pam 611-21 and table 1-3 lists the MOS bracket standards for the Seated Power Throw.

**Table 1-3. Seated Power Throw bracket standards**

<b>Black</b>	<b>Gray</b>	<b>Gold</b>
450 cm	400 cm	350 cm
cm	centimeter	

1-33. The event supervisor reads the instructions prior to the start of the Seated Power Throw event.

### **Seated Power Throw**

The purpose of the Seated Power Throw is to assess upper-body power. During the test, you will sit on the floor with your legs extended straight out in front of you resting on the ground. Your feet will be behind the restraining line. You will hold the medicine ball with two hands. On the command, “GO,” bring the medicine ball to your chest with your elbows comfortably at your sides. You will pause briefly, then push-throw the medicine ball upwards and away from you at a 45-degree angle. To maximize the distance of the throw, you may lean backwards and forwards at the waist and follow through by flexing your wrists. Do not throw the medicine ball like shooting a basketball. The distance of your throw will be measured from the restraining line to the spot the ball lands. You will be offered two practice throws. After the practice throws, you will perform three maximal effort throws. The throw is measured to the nearest ten centimeters from the wall to where the ball contacts the ground. Watch this demonstration. What are your questions about the Seated Power Throw?

### **STRENGTH DEADLIFT**

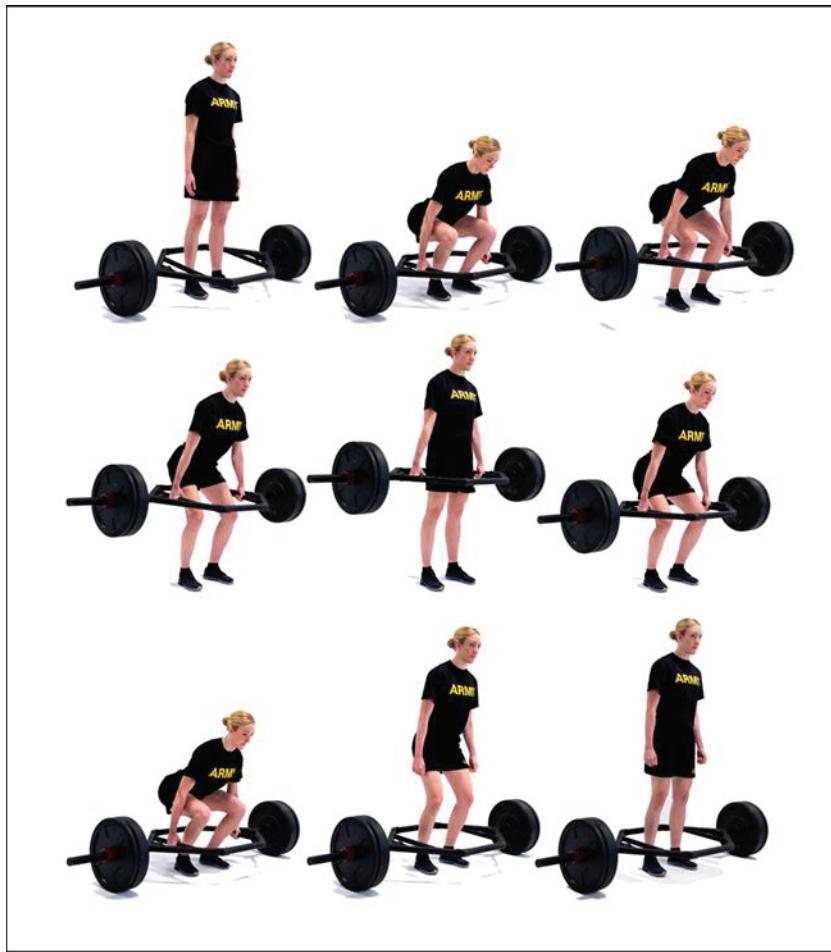
1-34. Figure 1-10 and figure 1-11 on page 1-12 illustrate the Strength Deadlift.



**Figure 1-10. Strength Deadlift**

1-35. The Strength Deadlift is a three-repetition lift. Individuals perform two practice lifts prior to the record lifts to validate lifting technique. After the practice lifts, individuals will have up to two record attempts. They will choose any weight up to 220 pounds for the first record attempt. Graders will adjust weights on the hex bar in 10-pound increments so individuals can achieve a 3-repetition maximum lift. Individuals can move up or down in weight after the first record attempt to test at a higher weight or record a successful attempt. If a grader stops an attempt for reasons described in paragraph 1-36, individuals may attempt the same weight or move down in weight. An individual will conduct the event using the following procedures:

- The starting position is the Straddle Stance inside the hex bar with arms at the side.
- When told to begin, the individual will reach down to grasp the bar at its center with each hand, bending at the hips and knees and making sure the knees stay in line with the feet.
- The individual will keep the spine straight and grasp the bar with arms fully extended—elbows straight.
- On the command, “READY, LIFT,” the individual will lift the bar from the ground by straightening the knees and hips in a slow, smooth, continuous movement.
- After reaching the standing position with knees, hips and trunk straight, the individual will be given the command, “DOWN.” He or she will lower the bar to the ground in a controlled manner until the weights touch the ground.
- The individual will repeat these steps two more times to complete a successful record attempt.



**Figure 1-11. Proper technique to execute the Strength Deadlift**

1-36. If the individual selects a weight that is too high, demonstrates poor lifting form, or has pain or discomfort, the event grader will stop the lift. The individual will be given a one-minute rest before being allowed to make another attempt at the same weight. Poor lifting form includes the following:

- Rounding of the spine.
- Knees collapsing inwards.
- Failure to reach the standing position.
- Failure to touch the weights down on the ground.
- Uncontrolled movement or tilting of the hex bar (see figure 1-12).



**Figure 1-12. Tilting of the hex bar**

1-37. DA Pam 611-21 and table 1-4 lists the MOS bracket standards for the Strength Deadlift.

**Table 1-4. Strength Deadlift bracket standards**

<b>Black</b>	<b>Gray</b>	<b>Gold</b>
160 pounds	140 pounds	120 pounds

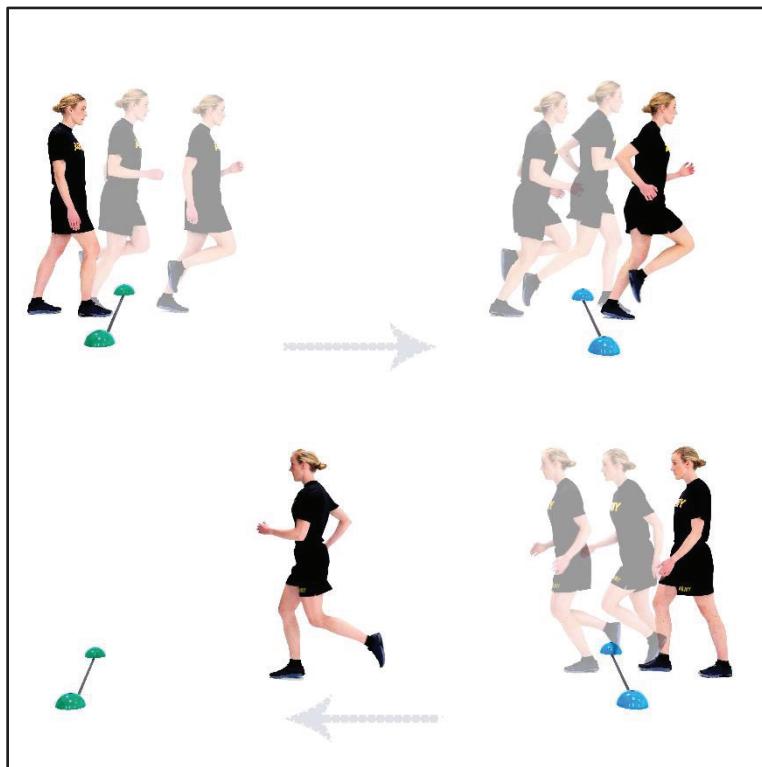
1-38. The event supervisor will read the OPAT instructions prior to the start of the Strength Deadlift event.

### **Strength Deadlift**

The purpose of the Strength Deadlift is to assess lower-body strength. Beginning with an unloaded bar or a loaded bar with less than 40 pounds. You will squat down, grasp the bar and complete a set of 2 practice deadlifts. These “check” lifts will be used to check for proper lifting form. After completing the check lifts, you will execute one record attempt at a weight of your choosing from 120 to 220 pounds. You will begin the record attempt by standing inside the bar with your feet about shoulder-width apart. Make sure your knees are in line with your toes, bend at the hips and knees, and grasp the bar with your arms at your sides and fully extended—elbows straight. On the command, “READY, LIFT,” lift the bar straight up by extending your knees and hips in a slow, smooth, and continuous movement. When you are standing with your hips and knees fully extended, you will be given the command, “DOWN.” You will lower the bar to the ground in a controlled manner. The weight plates must touch the ground. You will repeat this movement two more times for a three-repetition deadlift. If you show poor lifting technique or if you exhibit any pain or discomfort, the grader will direct you to put the bar down and stop performing the lift. You will be offered a short rest (not to exceed 1 minute) before re-attempting the same or lower weight. If you fail to complete that second attempt you will be given a chance to complete a second record attempt at a lower weight. If you are successful on the first attempt, you will be allowed a second attempt a heavier weight to increase your score. Watch this demonstration. What are your questions about the Strength Deadlift?

**INTERVAL AEROBIC RUN**

1-39. Figure 1-13 illustrates the Interval Aerobic Run.



**Figure 1-13. Interval Aerobic Run**

1-40. The Interval Aerobic Run is the final event in the OPAT. An individual will conduct the event using the following breakdown:

- The starting position is standing behind the start line.
- The test starts with a 5-second countdown ending with three beeps.
- On the third beep, the individual jogs slowly toward the opposite 20-meter line touching the line with one foot shortly before or at the same time as the next beep.
- If the individual reaches the 20-meter line before the next beep, he or she must cross the line, turn, and wait for the next beep.
- At the next beep, the individual runs to the opposite 20-meter line. He or she continues running back and forth; intervals between beeps get progressively shorter requiring the individual to run faster.
- If the individual fails to reach the line before the next beep, he or she must continue running to and touching that line before turning to run to the opposite line before the next beep.
- If the individual fails to reach the 20-meter line for two consecutive shuttles (beeps), but is successful on the third, his or her failures will be reset to zero.
- If the individual fails to reach the 20-meter line for three consecutive shuttles (beeps), he or she will be told to stop.

1-41. DA Pam 611-21 and table 1-5 lists the MOS bracket standards for the Interval Aerobic Run.

**Table 1-5. Interval Aerobic Run bracket standards**

<b>Black</b>	<b>Gray</b>	<b>Gold</b>
Level 6-2 (43 shuttles)	Level 5-8 (40 shuttles)	Level 5-4 (36 shuttles)

1-42. The event supervisor reads the OPAT instructions prior to the start of the Interval Aerobic Run event.

### **Interval Aerobic Run Instructions**

The purpose of the Interval Aerobic Run is to assess aerobic capacity. This test involves running between two designated points that are 20 meters apart. The running pace is set by beeps at specific intervals. As the test progresses, the time between beeps gets shorter, requiring you to run faster. You will stand behind the starting line facing the second line 20 meters away. The test starts with a five-second countdown ending with three beeps. On the third beep you will slowly jog towards the opposite 20-meter line. You should touch the opposite line shortly before the next beep. If you arrive early, continue across the line, turn around, and wait for the next beep. After about one minute, the speed will increase to the next level as indicated by a beep-beep-beep. The time between beeps will now be closer together and you must run slightly faster. If you do not touch the line before the beep, you will be given a warning (example: "WARNING NUMBER 1," "WARNING NUMBER 2"). If you receive a warning, you must keep running and touch the line, turn, and reach the next line before the next beep. If you fail to touch the 20-meter line for three consecutive shuttles, you will be told to stop. If you fail to reach the line for one or two consecutive shuttles, and then successfully reach the line on the third shuttle, the count for warnings will return to zero. This is a continuous running test. You may not stop or rest at any point. Watch this demonstration. What are your questions about the Interval Aerobic Run?

1-43. Event graders use the side 2 of DA Form 7888 for this event. (See figure 1-14 on page 1-16.) Instructions to event graders for properly tracking and scoring an individual's Interval Aerobic Run:

- Starting with Level 1, Shuttle 1 (1-1) mark a P (pass) in the box each time the individual reaches the line prior to the beep.
- Complete the first row, then move to row 2, then 3 and so on.
- Mark an F (fail) in each box when the individual fails to reach the 20-meter line prior to the beep.
- Ensure that if an individual fails to make the next line prior to the beep that they continue running to that line before turning to run to the next line; you cannot skip a shuttle.
- Stop the event when the individual quits or fails to reach the 20-meter for three consecutive shuttles.
- Record the Level and Shuttle and the total number of shuttles for the last successful shuttle on the front of the scorecard (see figure 1-1 on page 1-6).
- The total number of shuttles is the number on the right of each box.

1-44. In figure 1-14 on page 1-16, the last P (successful shuttle) is at Level 7, Shuttle 4. The score is 7-4 for a total of 55 shuttles.

- The Fs in the fifth and sixth rows do not impact the score. The individual was able to catch up.
- The three Fs that follow the last P do not count and are not included in the final score. The individual was not able to catch up to the beeps.

Level #	Shuttle #													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	P 1	P 2	P 3	P 4	P 5	P 6	P 7							
2	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15						
3	P 16	P 17	P 18	P 19	P 20	P 21	P 22	P 23						
4	P 24	P 25	P 26	P 27	P 28	P 29	P 30	P 31	P 32					
5	P 33	P 34	F 35	P 36	P 37	P 38	F 39	F 40	P 41					
6	P 42	P 43	F 44	F 45	P 46	P 47	P 48	P 49	F 50	P 51				
7	P 52	P 53	P 54	P 55	F 56	F 57	F 58	59	60	61				
8	62	63	64	65	66	67	68	69	70	71	72			
9	73	74	75	76	77	78	79	80	81	82	83			
10	84	85	86	87	88	89	90	91	92	93	94			
11	95	96	97	98	99	100	101	102	103	104	105	106		
12	107	108	109	110	111	112	113	114	115	116	117	118		
13	119	120	121	122	123	124	125	126	127	128	129	130	131	
14	132	133	134	135	136	137	138	139	140	141	142	143	144	
15	145	146	147	148	149	150	151	152	153	154	155	155	157	
16	158	159	160	161	162	163	164	165	166	167	168	169	170	171
17	172	173	174	175	176	177	178	179	180	181	182	183	184	185

Instructions for completing the Interval Aerobic Run (IAR) tracking sheet:

1. The starting position is the runner standing behind the take-off line. The test begins with a 5-second countdown and three beeps.
2. At the conclusion of the three beeps, the runner moves toward the opposite 20-meter line; the goal is to reach the 20-meter line shortly before next beep. The runner must touch on or over the line on each shuttle.
3. If the runner reaches the 20-meter line shortly before or on the beep, the runner must touch a foot on or over the line, turn and run to the opposite line.
4. If the runner reaches the 20-meter line before the next beep, the runner must cross the line, turn and wait for the next beep.
5. As this back and forth shuttle pattern continues, time intervals for each level decrease, causing the runner to run faster to complete the 20-meters.
6. If the runner fails to reach the line before the beep, the runner must continue running to the line, touch on or over the line before turning to run the next line.
7. Starting with Level 1, Shuttle 1 (1-1) mark a P (pass) in the box each time the runner reaches the line prior to the beep.
8. Mark an F (fail) in each box for every shuttle when the runner fails to reach a 20-meter line prior to the beep.
9. Complete row 1 (Level 1), then row 2 (Level 2), then 3 (Level 3) and so on.
10. There is no penalty for failing one shuttle. There is no penalty for failing two consecutive shuttles if the runner can "catch up" and reach the third 20-meter shuttle line before the beep; if the runner is successful on the third, the shuttle failure count is reset. If the runner fails to make the 20-meter line before the beep, the runner must continue running to that line and touch on or over the line before turning to start the next shuttle.
11. The IAR test is terminated when the runner:
  - (1) stops running,
  - (2) turns to start another shuttle before reaching the 20-meter line, or
  - (3) fails to reach the 20-meter line for three consecutive shuttles.
12. On the front of the DA Form 7888, record the Level (from 1 to 17 in the left column) and Shuttle (from 1 to 14 along the top row) and total number of shuttles (from the "box" with the last successful shuttle / "P") - example: Level 7 - Shuttle 4 = 55 total shuttles.

Figure 1-14. Sample Interval Aerobic Run tracking sheet, DA Form 7888, side 2

## Chapter 2

# Army Combat Fitness Test

This chapter directs the standards for the six events of the ACFT and the standards for the three non-impact aerobic endurance test events used in the ACFT (Modified) for Soldiers on permanent profile. ACFT standards are important for the safety of the Soldier and the readiness of the Army. Soldiers and graders must know the testing protocols and standards to successfully pass the ACFT.

### **ADMINISTRATION**

2-1. Paragraphs 2-2 through 2-30 discuss the proper administration of the ACFT. They include supervising the ACFT, preparing the training site, developing qualified graders, and selecting and inspecting the equipment required to execute the ACFT. ACFT administration is a unit commander's responsibility. The Army Combat Fitness Test website at <https://www.army.mil/acft/> provides detailed descriptions and instructional videos for each testing event. Video demonstration drills by name are available at [https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect\\_date=5%2F1%2F2020&search\\_terms=CIMT](https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect_date=5%2F1%2F2020&search_terms=CIMT)—the Central Army Registry website. (Copy and paste this address after accessing the Central Army Registry website if the demonstrations do not populate.)

### **SUPERVISION**

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

2-3. The ACFT aims to accurately reflect Soldier combat performance capability linked to warrior tasks and battle drills (known as WTBD) and common Soldier tasks. 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 warrior tasks and battle drills. 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.

2-4. An ACFT-focused program trains all aspects of fitness, including mental toughness. Just as Soldiers have to carefully manage energy output across different moments in combat, so too will Soldiers have to plan their pacing strategies to avoid under-performing on one of the later events in the ACFT. For example, Soldiers who are accustomed to relatively fast run times on the Army Physical Fitness Test (known as APFT) will have to think and train differently to match these times on the ACFT.

2-5. The ACFT tests a Soldier's ability to move under fatigue—his or her ability to concentrate and keep going to sustain lethality. Soldiers unaccustomed to moving heavy weights will be more likely to fatigue and demonstrate improper form on the Maximum Deadlift, Standing Power Throw, Hand-Release Push-Up, Sprint-Drag-Carry, or Leg Tuck. Movement lethality degrades with fatigue. Soldiers must be tenacious to maintain lethality.

2-6. The success of any physical fitness testing program depends on obtaining valid and accurate test results. Therefore, leaders must administer the ACFT to standard 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 for 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**

2-7. Preparation for the ACFT enables leaders to secure the most accurate evaluation of personnel participating in the test. Preparatory requirements include the following:

- Selecting and training the OICs or NCOICs, graders, timers, and support personnel.
- Equipment inventory and inspection.
- Securing a proper test site.

## **PLANNING**

2-8. The commander ensures that testing is consistent with regard to events, scoring, uniform, equipment, and facilities. The commander schedules testing to enable Soldiers to perform at their maximal level. Planning for ACFT should ensure the following:

- Soldiers have been properly trained for the events using physical training programs described in FM 7-22 and ATP 7-22.02.
- 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.
- Uniform is appropriate for weather and environmental conditions.
- DD Form 2977 is completed and approved.

## **DUTIES**

2-9. ACFT personnel must be familiar with all aspects of the administration of the ACFT. These personnel supervise Soldiers and lay out the test area. Each test will have an OIC or NCOIC and one grader for every four Soldiers tested. Individual Soldiers are not authorized to self-administer the ACFT for record test purposes.

2-10. The OIC or NCOIC supervises the ACFT and manages the running clock. Two graders will combine to administer the test events and measure distance, time, weight, and repetitions. If the OIC or NCOIC has only one grader available, the OIC or NCOIC may serve as the second grader. For example, the OIC will time the Hand-Release Push-Up, Sprint-Drag-Carry, Leg Tuck, and 2-Mile Run; score the Standing Power Throw; and observe the 25-meter line in the Sprint-Drag-Carry.

2-11. The OIC and NCOIC are responsible for administering the ACFT. During the week prior to test day, the OIC or NCOIC briefs Soldiers on the purpose, organization, and protocols of the test. The OIC or NCOIC posts the ACFT testing manual for Soldiers to review. The OIC or NCOIC explains test administration, to include demonstrating test event execution and answering questions about administrative procedures. They remind Soldiers about scorecard management, scoring standards, and testing sequence. Responsibilities include—

- Administering and conducting the test.
- Managing the 2-hour time clock.
- Procuring and inspecting all testing equipment and supplies.
- Arranging and laying out test area.
- Training and validating graders and support personnel.
- Ensuring test events are administered in accordance with this doctrine and scored to standard.
- Reporting test results in the Digital Training Management System (also known as DTMS).

2-12. Each lane will have a grader. Event graders are responsible for scoring events to standard. The graders count the number of repetitions out loud, time events, measure distances, and correct event performances. When Soldiers complete their ACFT events, the grader records the number of completed repetitions, distances, or times on the DA Form 705 (*Army Combat Fitness Test Scorecard*). After entering the Soldier's 2-Mile Run time on the DA Form 705, the grader converts the raw scores for all the events into point scores for each event, enters the total on the DA Form 705, and initials each event. The grader confirms the scores with the tested Soldier who also signs the DA Form 705 to confirm its accuracy. The grader then returns all DA Form 705s to the OIC or NCOIC. The grader's responsibilities include—

- 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 Standing Power Throw and Sprint-Drag-Carry to ensure Soldier and grader safety and eliminating interference between lanes.
- Measuring the Standing Power Throw distance. The grader also confirms correct foot and hand touch at the 25-meter turn line during the Sprint-Drag-Carry.
- Recording the correct number of repetitions, distances, weight, and times in the raw score block on DA Form 705.
- Addressing and resolving questions on scoring discrepancies and informing the OIC or NCOIC.
- Recording initials and signatures on DA Form 705.

2-13. When OICs, NCOICs, or graders time events, they use the event-specific timing standards as covered in paragraphs 2-14 through 2-18.

### **HAND-RELEASE PUSH-UP**

2-14. The OIC or NCOIC begins the Hand-Release Push-Up with the command, "GET SET." On the command, "GO," time starts on both the timer's 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 final 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**

2-15. The OIC or NCOIC begins the Sprint-Drag-Carry with the command "GET SET." On the command, "GO," the grader starts the time for each 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**

2-16. After the OIC or NCOIC has given the command, "GET SET," and the first Soldier has assumed the starting position of the Leg Tuck and is ready to begin the event, the grader gives the command, "GO." The OIC or NCOIC starts the two-minute clock. The OIC or NCOIC ensures that two minutes have elapsed before the second Soldier starts his or her attempt. This ensures that the last Soldier to complete the Sprint-Drag-Carry gets adequate recovery before beginning the Leg Tuck.

### **2-MILE RUN**

2-17. The OIC or NCOIC begins the 2-Mile Run with the command, "GET SET." The 2-Mile Run time starts on both the OIC or NCOIC's and grader's stop watches on the command, "GO." As Soldiers approach 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"). If the Soldier is running laps, the

timer calls out the time as the Soldier completes each lap. Graders record each Soldier's final 2-Mile Run time on his or her DA Form 705.

2-18. 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. Medical support on site is not required unless specified by local policy. The OIC or NCOIC will have a plan for medical support (if required).

## **TEST SITE**

2-19. Each unit has a designated ACFT test site and a designated ACFT grader team. A 16-lane site provides the capacity to test 64 Soldiers (4 Soldiers per lane) every 120 minutes or less.

2-20. The OIC or NCOIC selects an outdoor grass or artificial turf test site that is flat and free of debris. The test site includes the start and finish point for the 2-Mile Run. A test site has the following:

- An area of approximately 30 meters by 50 meters for up to 16 lanes. (One lane is 25 meters long and 2.5 to 3 meters wide. Each lane requires space on either end for turning the sled and running through the finish.)
- A site free of any significant hazards.
- An area to conduct Preparation Drills and Recovery Drills.
- A soft, flat area for field-based events.

2-21. The surface used for the Sprint-Drag-Carry may be standard or modified. Other surfaces are restricted:

- Standard: Sprint-Drag-Carry may be performed on properly maintained grass or artificial turf with a standard 90-pound nylon sled. When the surface does not obviously meet the standard definition, it will be classified as modified.
- Modified: Sprint-Drag-Carry may be performed on wood (for example a gym floor), packed dirt (for example a baseball infield or parade field), vinyl, or smooth concrete (for example a motor pool or hangar bay) with 180-pound nylon sled. The sled weight will be adjusted by the ACFT OIC or NCOIC during set-up when a modified surface is used.
- Restricted: Sprint-Drag-Carry will not be performed on unimproved dirt or gravel surfaces, rubberized track or gym floors, ice, or snow.

2-22. Standard surfaces are preferred. All surfaces must be level. When environmental conditions prohibit outdoor testing, Soldiers may use an indoor surface for the Sprint-Drag-Carry. Indoor Sprint-Drag-Carry lanes must have enough space on either end of the 25-meter lane for Soldiers to turn or sprint across the finish line. No other adjustments to Sprint-Drag-Carry standards and scoring are authorized.

2-23. The OIC or NCOIC must use sound judgment when selecting the Sprint-Drag-Carry surface and the site of the 2-Mile Run. When environmental conditions prohibit outdoor testing, Soldiers may use an indoor track for the 2-Mile Run. There is no requirement to survey run courses. Selected test sites should be free of significant hazards such as traffic, slippery road surfaces, and areas where heavy air pollution is present. A generally flat, measured running course has a solid, improved surface that is not more than 3-percent uphill grade and no overall decline (start and finish must be at the same altitude).

## **EQUIPMENT**

### **ACFT EQUIPMENT SAFETY INSPECTIONS**

Prior to executing the ACFT, all equipment should be visibly inspected for serviceability by the event OIC or NCOIC. Particular attention should be given to the hexagon bar for stress cracks at all welded seams, torn fabric or stitching on the nylon sled or pull strap, and loose connections on pull-up bars. Defects may compromise the load bearing capability of equipment and present a potential safety hazard to the user.

2-24. Specifications for ACFT equipment are described in appendix A. Paragraphs 2-25 through 2-30 detail the minimum equipment requirements for a single lane and a 16-lane set for the ACFT.

### 3 REPETITION MAXIMUM DEADLIFT

2-25. Table 2-1 illustrates arrangement for a 3 Repetition Maximum Deadlift:

- Single lane:
  - 1 x hexagon bar weighing 60 pounds.
  - 2 x barbell collars.
- To equip a single lane with the minimum weight (the 140-pound lane):
  - 1 x hexagon bar weighing 60 pounds.
  - 2 x 25-pound bumper plates.
  - 2 x 15-pound bumper plates.
- To equip a single lane with the maximum weight (the 340-pound lane):
  - 1 x hexagon bar weighing 60 pounds.
  - 4 x 45-pound bumper plates.
  - 2 x 35-pound bumper plates.
  - 2 x 15-pound bumper plates.
- To equip 16 lanes for the Maximum Deadlift using the plate arrangement in table 2-1 requires approximately 4,000 pounds:
  - 42 x 45-pound bumper plates.
  - 24 x 35-pound bumper plates.
  - 22 x 25-pound bumper plates.
  - 20 x 15-pound bumper plates.
  - 10 x 10-pound bumper plates.

Units are encouraged to purchase 36 5-pound bumper or cast iron plates to make changing weights easier and safer.

**Table 2-1. Standard plate arrangement for 16 lanes**

<b>Plates (lb)*</b>	<b>Plates + Hex Bar (lb)</b>	<b>Weight Level (lb)</b>
2 x 25 + 2 x 15 = 80	80 + 60 =	140
2 x 45 = 90	90 + 60 =	150
4 x 25 = 100	100 + 60 =	160
2 x 45 + 2 x 10 = 110	110 + 60 =	170
4 x 25 + 2 x 10 = 120	120 + 60 =	180
2 x 35 + 4 x 15 = 130	130 + 60 =	190
2 x 45 + 2 x 25 = 140	140 + 60 =	200
2 x 35 + 2 x 25+ 2 x 15 = 150	150 + 60 =	210
2 x 45 + 2 x 35 = 160	160 + 60 =	220
2 x 45 + 2 x 25 + 2 x 15 =170	170 + 60 =	230
4 x 45 = 180	180 + 60 =	240
2 x 45 + 2 x 35 + 2 x 15 = 190	190 + 60 =	250
2 x 45 + 2 x 35 + 4 x 10 = 200	200 + 60 =	260
4 x 45 + 2 x 15 = 210	210 + 60 =	270
4 x 35 + 2 x 25 + 2 x 15 = 220	220 + 60 =	280
4 x 45 + 2 x 25 = 230	230 + 60 =	290
4 x 35 + 4 x 25 = 240	240 + 60 =	300

**Table 2-1. Standard plate arrangement for 16 lanes (*continued*)**

<b>Plates (lb)*</b>	<b>Plates + Hex Bar (lb)</b>	<b>Weight Level (lb)</b>
4 x 45 + 2 x 35 = 250	250 + 60 =	310
4 x 45 + 2 x 25 + 2 x 15 = 260	260 + 60 =	320
4 x 45 + 2 x 35 + 2 x 10 = 270	270 + 60 =	330
4 x 45 + 2 x 35 + 2 x 15 = 280	280 + 60 =	340

\*plate arrangement will change if the weight of the hex bar does not weigh 60 lb.  
lb      pound

**STANDING POWER THROW**

2-26. The Standing Power Throw consists of—

- Single Lane:
  - 1 x 10-pound medicine ball.
  - 1 x 25-meter measuring tape (also used for Sprint-Drag-Carry).
  - 1 x measuring stick.
  - 12 x field cones (also used for Sprint-Drag-Carry) placed at the start line, finish line, and 5-meter points in each lane.
  - 1 x hand towel.
- 16-Lane set:
  - 16 x 10-pound medicine balls.
  - 8 x 25-meter measuring tapes (also used for Sprint-Drag-Carry) placed between 2 lanes.
  - 8 x measuring sticks.
  - 110 x field cones (also used for Sprint-Drag-Carry).
  - 16 x hand towels.

**HAND-RELEASE PUSH-UP**

2-27. The Hand-Release Push-Up consists of—

- Single Lane:
  - 2 x stopwatches used by the OIC or NCOIC and back-up timer (also used for Sprint-Drag-Carry, Leg Tuck, and 2-Mile Run).
- 16-Lane set:
  - 2 x stopwatches used by the OIC or NCOIC and back-up timer (also used for Sprint-Drag-Carry, Leg Tuck, and 2-Mile Run); time for the Hand-Release Push-Up is controlled by the OIC or NCOIC for all lanes.

**SPRINT-DRAG-CARRY**

2-28. The Sprint-Drag-Carry consists of—

- Single Lane:
  - 1 x nylon sled and pull strap.
  - 2 x 45-pound bumper plates (4 x 45-pound bumper plates for a modified surface).
  - 2 x 40-pound kettlebells.
  - 2 x stopwatches used by the OIC or NCOIC and by the lane grader.
- 16-Lane set:
  - 16 x nylon sleds and pull straps.
  - 32 x 45-pound bumper plates.
  - 32 x 40-pound kettlebells.
  - 17 x stopwatches used by the OIC or NCOIC and by the lane graders.

## LEG TUCK

2-29. The Leg Tuck consists of—

- Single lane:
  - 1 x pull-up bar or climbing pod.
  - 1 x stopwatch used by the OIC or NCOIC.
- 16-Lane set:
  - 1 x stopwatch used by the OIC or NCOIC.
  - 16 x pull-up bars or one x climbing pod with the following dimensions and features: 8 x 1.5-meters wide climbing bars at 2.2 or 2.4 meters off the ground with step ups at .4 meters and .6 meters off the ground.

## 2-MILE RUN

2-30. The 2-Mile Run consists of—

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

## EVENTS

2-31. The following section outlines the tasks, conditions, and standards to properly execute all six events in the ACFT. The protocols and instructions in paragraphs 2-32 through 2-54 provide the test OIC or NCOIC and graders the proper format to successfully execute the ACFT to standard.

## PROTOCOLS

2-32. Soldiers complete the six events of the ACFT in order on the same day during a test period not to exceed 120 minutes to include Preparation Drill and 3 Repetition Maximum Deadlift preparation. This time limit applies to all ACFT scenarios, to include Soldiers taking the Army Combat Fitness Test (Modified) (ACFT MOD) as well as Soldiers testing individually or in pairs. The test period is the time that elapses from the start of the Preparation Drill to the finish of the 2-Mile Run (from the first Bend and Reach to the 21-minute point of the 2-Mile Run) or the finish of the 25 minutes allowed for completion of the ACFT MOD events.

2-33. 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.

2-34. Starting with the Standing Power Throw test event, Soldiers rotate as groups of four through each lane. Fewer than four Soldiers per lane is authorized; however, the OIC or NCOIC should move Soldiers to create as many groups of four Soldiers as possible. 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 starts. The first five test events proceed in this fashion. After the Leg Tuck, there is a programmed rest of 10 minutes that starts when the last Soldier completes the Leg Tuck.

2-35. Except for 10 minutes to recover after the Leg Tuck, 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, 5 minutes of rest are programmed between the first four events. The 10-minute rest after the Leg Tuck remains the same for all scenarios.

2-36. There are no test event re-starts. Incorrectly performed repetitions are not counted. The grader records and initials the correctly completed number of repetitions, distances, and times. Soldiers sign their scorecards before leaving the test site, acknowledging that they concur with the scores recorded by their grader. The OIC or NCOIC resolve questions within the 120-minute time limit for execution of the ACFT. Video recording of the test for training purposes is permitted, but the OIC or NCOIC will not use the video to adjudicate event scores. A video cannot substitute for direct observation by a properly trained grader.

2-37. Soldiers can only wear prescribed APFU components during the ACFT. Any piece of clothing not prescribed as a component of the APFU is not permitted for wear during the ACFT. Neither are devices or equipment that offer any potential for unfair advantage during testing. Soldiers cannot wear the following items: 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 include electronic music players and cell phones. AR 670-1 specifies the components of the APFU. To protect the hands, Soldiers may use gloves that conform to AR 670-1 for any event and at any time of year in any climate.

2-38. The Preparation Drill is a dynamic warm-up that properly prepares the body for more intense activity such as the ACFT. The 2-hour running clock begins with the start of the Preparation Drill. 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 completing the Preparation Drill and Maximum Deadlift warm up preparation, the first event (the Maximum Deadlift) will begin. Upon completion of all ACFT events, Soldiers will conduct the Recovery Drill as either a collective or individual activity. See appendix C for more on Recovery Drills.

### **3 REPETITION MAXIMUM DEADLIFT**

2-39. The 3 Repetition Maximum Deadlift (also known as MDL) is the first ACFT event. A 10-minute warm-up for the Maximum Deadlift event should follow the same warm-up pattern used by the Soldier when training for the event. To improve their performance, Soldiers should know their goal weight for the test and should have lifted that weight in training. They should be confident that they can lift their goal weight while maintaining energy for the subsequent ACFT events. The recommended Maximum Deadlift preparation sets are—

- 8–10 repetitions at 25 percent goal weight or with empty bar (rest 2 minutes).
- 6 repetitions at 40 percent goal weight (rest 3 minutes).
- 4 repetitions at 50 percent goal weight (rest 4 minutes or until Maximum Deadlift event starts).
- Optional: 1 repetition at 80 percent goal weight (rest until Maximum Deadlift event starts).

2-40. After completing the 10-minute Maximum Deadlift preparation, Soldiers arrange themselves in a stack behind the weight they intend to lift. Graders arrange the weight on the Maximum Deadlift bars so there is an even distribution of Soldiers in each lane, and generally not more than five Soldiers in any one lane. Once the Soldiers are aligned in their stacks—

- The NCOIC sounds, “GRADERS READY.”
- After a visual signal from the graders indicating that they are prepared to score the Maximum Deadlift, the NCOIC begins the event with the command, “THE MAXIMUM DEADLIFT STARTS NOW.”
- The first Soldier in every lane steps forward.
- The grader gives the Soldier the command, “GET SET, GO.”
- The Soldier performs the Maximum Deadlift.
- As they complete the Maximum Deadlift, Soldiers are directed by the OIC or NCOIC or other graders to a lane for the Standing Power Throw.
- Repeat steps 3 through 5 until all Soldiers have completed the event.

### **STANDING POWER THROW**

2-41. The OIC or NCOIC selects four Soldiers to fill each Standing Power Throw lane starting with lane one. In each lane, the Soldier who achieved the lowest weight on the Maximum Deadlift is the first Soldier in the Standing Power Throw lane. Soldiers maintain this order for the next four events. If only one or two Soldiers are being tested, they are given the programmed 5-minute rest period. Once all tested Soldiers are arranged in stacks of four across the lanes, the Standing Power Throw begins.

2-42. Graders in adjacent lanes work together to grade the event. One grader—the Scorer—moves down the lane to measure or score the throw while the other grader remains at the start line to control the tested Soldiers and make sure that 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. Once the Soldiers are aligned in their stacks—

- The first Soldier in the stack moves to the start line, grasps the ball, and cleans off excess moisture and debris.
- The NCOIC sounds, “GRADERS READY.”
- After a visual signal from the graders indicating that they are prepared to score the Standing Power Throw, the NCOIC begins the event with command, “GO.”
- In the two lanes they control, graders direct one throw at a time, alternating between Soldiers until each one has completed two throws.
- After completing their two throws, as a signal to the NCOIC, Soldiers place the ball on the ground centered in their lanes behind the start line and stand fast. If a Soldier faults on both throws, he or she is allowed a third attempt.
- When all lanes are complete (all medicine balls are on the ground), the NCOIC sounds off, “NEXT SOLDIER, MOVE FORWARD.”
- The Soldier who just tested moves onto the lane and replaces the ball retriever. The ball retriever moves to the back of the stack.
- The next Soldier in line moves to the start line, picks up the ball, and cleans off excess moisture and debris.
- Repeat steps 2 through 8 until all Soldiers have completed the event.

### **HAND-RELEASE PUSH-UP**

2-43. The Hand-Release Push-Up begins after the Standing Power Throw, or after the programmed five-minute rest period for the Standing Power Throw if only one or two Soldiers are being tested. The first Soldier in the lane steps forward and assumes the Hand-Release Push-Up starting position on the ground behind the lane start line. Once the Soldiers are aligned in their stacks—

- The NCOIC sounds, “GRADERS READY.”
- After a visual signal from the graders indicating that they are prepared to score the Hand-Release Push-Up, the NCOIC begins the event with the command “GET SET, GO.”
- The first Soldier in every lane begins performing the Hand-Release Push-Up.
- The NCOIC counts down the time to two minutes and give the command, “STOP.”
- Graders count the number of correctly completed repetitions.
- Soldiers return to the back of their stacks, and the next Soldiers step forward to test when directed by the NCOIC.
- Repeat steps 1 through 6 until all Soldiers have completed the event.

### **SPRINT-DRAG-CARRY**

2-44. The Sprint-Drag-Carry begins after the last Soldier has completed the Hand-Release Push-Up, 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 Hand-Release Push-Up starting position on the ground behind the lane start line. Once the Soldiers are in their start positions—

- The NCOIC sounds, “GRADERS READY.”
- After a visual signal from the graders indicating that they are prepared to time the Sprint-Drag-Carry, the NCOIC begins the event with the command, “GET SET, GO.”
- The first Soldier in every lane begins performing the Sprint-Drag-Carry, and the graders start their own stopwatches to time their Soldiers.
- Graders position themselves to observe violations but do not accompany Soldiers up and down the lanes. Similar to the Standing Power Throw, one grader moves 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.
- After completing their turns, Soldiers return to the back of their stack.

- The NCOIC gives the command, “NEXT SOLDIER, MOVE FORWARD.”
- The next Soldier moves forward to adjust the Sprint-Drag-Carry equipment before assuming the Hand-Release Push-Up starting position.
- Repeat steps 1 through 7 until all Soldiers have completed the event.

## **LEG TUCK**

2-45. The Leg Tuck begins after the last Soldier has completed the Sprint-Drag-Carry, 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. Once the Soldiers are aligned in their stacks—

- The NCOIC gives the command, “GRADERS READY.”
- After a visual signal from the graders indicating that they are prepared to grade the Leg Tuck, the NCOIC gives the command, “GET SET.”
- The first Soldier in the lane assumes the Leg Tuck starting position.
- The grader, seeing that 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.
- Upon hearing the first command, “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 Sprint-Drag-Carry.
- For the first Soldier, the grader counts the number of repetitions.
- After the OIC or NCOIC announces that the two minutes has elapsed and that the first Soldier has completed his or her attempt, the grader calls, “NEXT SOLDIER, GET READY.”
- The second Soldier assumes the Leg Tuck starting position.
- The grader gives the Soldier the command, “GO,” and begins counting the number of repetitions.
- The third and fourth Soldiers begin the event when the previous Soldier in the lane has finished his or her attempt.

## **2-MILE RUN**

2-46. The OIC or NCOIC enforces a 10-minute rest period after the Leg Tuck. The 10-minute rest period starts when the last Soldier completes the Leg Tuck. During this time, graders issue numbers or vests to their Soldiers, and Soldiers move to the 2-Mile Run start line. The 2-Mile Run starts at the end of the ten minutes:

- The NCOIC gives the command, “GET SET, GO,” and starts the clock.
- If the run is conducted on a track, graders record the number of completed laps for each of their Soldiers.
- The NCOIC announces the elapsed time as Soldiers cross the finish line.
- Graders enter the time on the DA Form 705 and ensure that Soldiers sign their cards after the 2-Mile Run is complete.

## INSTRUCTIONS

2-47. Before completing the Preparation Drill, event supervisors read the instructions aloud to all Soldiers taking the ACFT.

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 endurance, 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 3 Repetition Maximum Deadlift 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 Leg Tuck event, there will be a 10-minute recovery period for all tested Soldiers before the start of the 2-Mile Run. Do the best you can on each of the events.

2-48. The OIC or NCOIC hands out one DA Form 705 to each Soldier at this time. The OIC or NCOIC instructs the Soldiers to fill in the appropriate spaces with the required personal data. Event supervisors read the instructions aloud to all Soldiers taking the ACFT.

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

2-49. The OIC or NCOIC give Soldiers time to complete the required information. Next, the OIC or NCOIC explains procedures for scorecard use during testing. Event supervisors read the instructions aloud to all Soldiers taking the ACFT.

You are to carry this card with you to the first event, the Maximum Deadlift, and give it to the grader. The Maximum Deadlift grader will record your Maximum Deadlift weight and return the card to you to take to the Standing Power Throw lane grader. The Standing Power Throw 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 to show your agreement with your score.

2-50. To maintain control, encourage cohesion, and improve awareness of event standards, the OIC or NCOIC or the event supervisors 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**

2-51. In order to pass the ACFT, 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.

2-52. The grader records ACFT results on a DA Form 705 (see figure 2-1 and figure 2-2 on page 2-14). 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.

2-53. 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, injured, or on a temporary profile that limits them physically. By starting the test, Soldiers acknowledge they are ready to test and that they understand the test standards. If a Soldier becomes ill or injured during the ACFT and fails to achieve the minimum passing score, he or she is considered a test failure.

2-54. The DA Form 705 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 2-Mile Run, the grader will convert the raw scores to point scores, total the points, and sign the card. The Soldier will also sign the scorecard after verifying agreement with each recorded event score. See figure 2-1 for a sample DA Form 705 and figure 2-2 on page 2-14 for the conversion to points table (side 2 of DA Form 705). The Digital Training Management System (known as DTMS) is the system of record to document ACFT results. See FM 7-0 for details on the Digital Training Management System available at <https://dtms.army.mil/>.

Army Combat Fitness Test Scorecard							
For use of this form, see ATP 7-22.01; the proponent agency is TRADOC.							
Body Composition Testing will NOT be conducted on the same day as the ACFT. To avoid illness and injury, height and weight will be recorded at least 7 days before or at least 7 days after the ACFT.				NAME (Last, First, MI) <b>HENNING, GEORGE, A</b> GENDER <b>MALE</b> UNIT <b>A/1-503 IN</b>			
TEST ONE				TEST TWO			
DATE (YYYYMMDD) <b>20191105</b>	MOS <b>11C</b>	GRADE <b>E5</b>	AGE <b>25</b>	DATE (YYYYMMDD) <b>20200123</b>	MOS <b>11C</b>	GRADE <b>E5</b>	AGE <b>26</b>
HEIGHT (Inches) <b>70</b>	BODY COMPOSITION DATE: <b>WEIGHT: 171 lbs GO NO-GO BODY FAT: 20% GO / NO-GO</b>			HEIGHT (Inches) <b>70</b>	BODY COMPOSITION DATE: <b>WEIGHT: 174 lbs GO NO-GO BODY FAT: 18% GO / NO-GO</b>		
3 REPETITION MAXIMUM DEADLIFT: weight lifted - circle heaviest (lbs)							
1st ATTEMPT <b>160</b>	2nd ATTEMPT <b>220</b>	POINTS <b>74</b>	GRADER INITIALS <b>JLB</b>	1st ATTEMPT <b>180</b>	2nd ATTEMPT <b>240</b>	POINTS <b>78</b>	GRADER INITIALS <b>BDE</b>
STANDING POWER THROW: distance thrown - circle longest (meters.centimeters)							
1st ATTEMPT <b>6.8</b>	2nd ATTEMPT <b>7.1</b>	POINTS <b>67</b>	GRADER INITIALS <b>JLB</b>	1st ATTEMPT <b>7.1</b>	2nd ATTEMPT <b>8.0</b>	POINTS <b>70</b>	GRADER INITIALS <b>BDE</b>
HAND RELEASE PUSH-UP: number of correctly performed repetitions							
REPETITIONS <b>27</b>	POINTS <b>68</b>	GRADER INITIALS <b>JLB</b>		REPETITIONS <b>32</b>	POINTS <b>72</b>	GRADER INITIALS <b>BDE</b>	
SPRINT-DRAG-CARRY: overall event time (minutes:seconds)							
TIME <b>2:35</b>	POINTS <b>64</b>	GRADER INITIALS <b>JLB</b>		TIME <b>2:10</b>	POINTS <b>70</b>	GRADER INITIALS <b>BDE</b>	
LEG TUCK: number of correctly performed repetitions							
REPETITIONS <b>0</b>	POINTS <b>0</b>	GRADER INITIALS <b>JLB</b>		REPETITIONS <b>1</b>	POINTS <b>60</b>	GRADER INITIALS <b>BDE</b>	
TWO-MILE RUN: overall event time (minutes:seconds)							
TIME <b>20:15</b>	POINTS <b>61</b>	GRADER INITIALS <b>JLB</b>		TIME <b>19:04</b>	POINTS <b>64</b>	GRADER INITIALS <b>BDE</b>	
5K ROW / 1K SWIM / 12K BIKE (circle one): overall time to reach required distance							
TIME <b>n/a</b>	PASS / FAIL <b>n/a</b>	POINTS (60/0) <b>n/a</b>	GRADER INITIALS <b>n/a</b>	TIME <b>n/a</b>	PASS / FAIL <b>n/a</b>	POINTS (60/0) <b>n/a</b>	GRADER INITIALS <b>n/a</b>
Soldier Signature: <b>George A. Henning</b>	Date: <b>04NOV2019</b>	TOTAL POINTS <b>334</b>		Soldier Signature: <b>George A. Henning</b>	Date: <b>03FEB2020</b>	TOTAL POINTS <b>414</b>	
NCOIC/OIC (Last, First, M.I. / Rank) <b>BAKER, JOHN, L.</b>		PASS / FAIL (Circle one)		NCOIC/OIC (Last, First, M.I. / Rank) <b>BROWN, LAURA, M.</b>		PASS / FAIL (Circle one)	
NCOIC/OIC SIGNATURE <b>John L. Baker</b>	Date: <b>04NOV2019</b>			NCOIC/OIC SIGNATURE <b>Laura M. Brown</b>	Date: <b>03FEB2020</b>		
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Figure 2-1. Sample ACFT scorecard, DA Form 705, side 1

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	15:0		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		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		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		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		3:35	0	22:48

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Figure 2-2. ACFT conversion scoring scale, DA Form 705, side 2

## STANDARDS

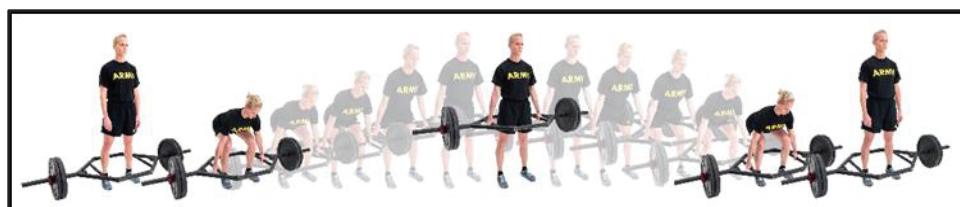
2-55. Paragraphs 2-56 through 2-96 outline the performance standards to properly execute the six-event ACFT. These paragraphs include illustrations and instructions to perform each event as a visual guide to both graders and test takers to ensure all Soldiers follow standardized procedures when administering or taking the ACFT. The Central Army Registry website provides video demonstration drills by name at [https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect\\_date=5%2F1%2F2020&search\\_terms=CIMT](https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect_date=5%2F1%2F2020&search_terms=CIMT). (Copy and paste this address after accessing the Central Army Registry website if the demonstrations do not populate.) The Army Combat Fitness Test website at <https://www.army.mil/acft/> provides detailed descriptions and instructional videos for each testing event.

### 3 REPETITION MAXIMUM DEADLIFT

2-56. Figure 2-3 and figure 2-4 illustrate the 3 Repetition Maximum Deadlift.



**Figure 2-3. Maximum Deadlift**



**Figure 2-4. Proper technique to execute the Maximum Deadlift**

2-57. The Maximum Deadlift is a muscular strength test that mimics movements required to safely and effectively lift heavy loads from the ground. For example, the Maximum Deadlift 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.

2-58. It is important to understand the difference between an attempt and a repetition. A successful Maximum Deadlift attempt is three repetitions to standard.

2-59. An Maximum Deadlift repetition consists of three parts: preparatory phase, upward movement, and downward movement:

- Preparatory phase: on the command, “GET SET,” the Soldier steps inside the hex bar, feet shoulder width apart, and locates the mid-point 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. Arms are fully extended, back is flat, head aligns with the spine or is slightly extended, and heels are in contact with the ground. Each repetition begins from this position.
- Upward movement phase: 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 remain in the same position. The Soldier and the weight must remain balanced and controlled throughout the movement.
- Downward movement phase: 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.

2-60. The Soldier executes three repetitions with the same weight. If the Soldier fails on the first attempt, he or she will be allowed to attempt a lower weight of his or her choosing. If the Soldier completes a successful attempt, he or 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.

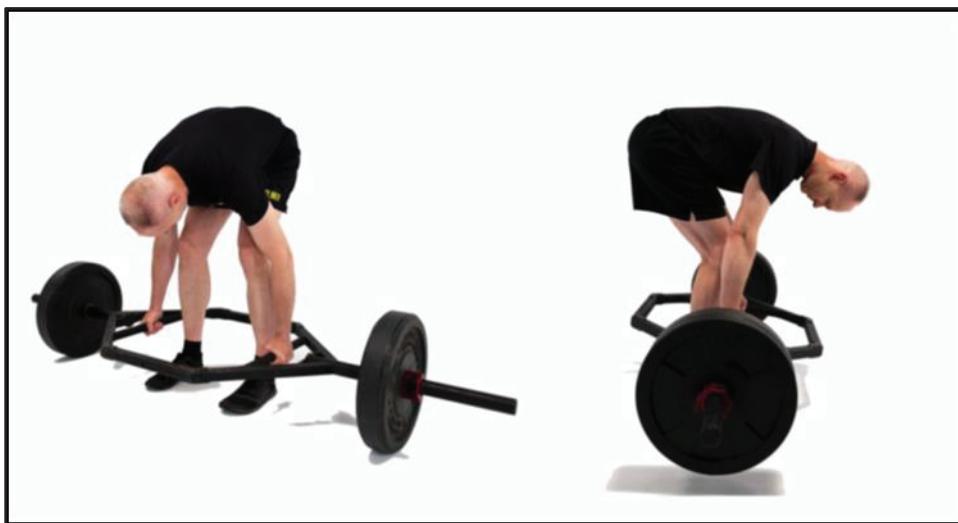
2-61. If the Soldier makes an unsafe movement on the first repetition, the grader informs the Soldier of the error and tells the Soldier to stop. This is a safety stop. After being told of the error, he or she is allowed to resume the attempt from the beginning. The grader uses a safety stop on the first repetition of an attempt to prevent repeated movements that might cause injury to the Soldier. This safety stop during the first repetition does not count as a record attempt. If the Soldier makes the same or another safety stop on the second or third repetition, the grader will stop them again, explain the error, and record a failed attempt. If, after failing the first attempt, the Soldier repeats the same safety stop on the first repetition of a second attempt, he or she is allowed to re-start the second attempt. The same standards apply to the second and third repetitions of the second attempt as they do for the first attempt.

2-62. If a safety stop happens on the second or third repetition, the grader terminates the attempt and counts it 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 or her choosing. Maximum Deadlift safety stops are—

- Allowing one or both knees to move together during any part of the movement (figure 2-5).
- Moving the hips above the shoulders to initiate the upward movement (figure 2-6).
- Letting the back or shoulders round out during any part of the movement (figure 2-6).
- Losing balance during any part of the movement—this includes stepping forwards or backwards from the starting position. If the Soldier loses balance during the first repetition, he or she will be safety stopped. If the Soldier loses balance on the second or third repetition, the grader terminates the attempt and counts it as a failed attempt.



**Figure 2-5. Knees moving closer together**



**Figure 2-6. Hips moving above the shoulders or rounding of the spine**

2-63. A Maximum Deadlift 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 (figure 2-7).
- 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 2-7. Touching the plates to the ground versus not touching the ground**

2-64. If the Soldier completes an attempt, the grader records the weight and asks the Soldier if he or she would like to attempt a higher weight. The Soldier is allowed one attempt at a higher weight of his or her choosing. The weight of the heaviest successful attempt is the raw score circled on the DA Form 705.

2-65. Prior to the test date, the OIC or NCOIC will review the Maximum Deadlift testing instructions. 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 mid-point 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 3 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 3 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

2-66. Figure 2-8 illustrates the Standing Power Throw.



**Figure 2-8. Standing Power Throw**

2-67. The Standing Power Throw 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 to climb up a wall, loading equipment, and employing progressive levels of force in hand-to-hand contact.

2-68. The Standing Power Throw consists of two phases, a preparatory phase and a throwing phase:

- Preparatory phase: the Soldier faces away from the throw line, grasps the medicine ball (10 pounds) 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 moves 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 grader records the repetition as a zero.

2-69. The Soldier performs two throws alternating with the Soldier in an adjacent lane. The longest throw counts for record. The Soldier uses maximal effort to throw the ball backwards and overhead as far as possible. The grader observes the Soldier's feet to make sure the feet 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 before or after the ball lands, this attempt is a fault and the grader records a score of "0".

2-70. The grader marks the point where the ball lands and reads off the measurement to the nearest decimeter. The grader takes the measurement from the center of the ball's landing point perpendicular to the tape measure. The grader announces the score, for example, "10 METERS AND 50 CENTIMETERS" or "TEN POINT FIVE" and then writes the score on the scorecard. The longer of the two throws counts as the Soldier's raw score.

2-71. If the Soldiers faults, the grader records that throw as a zero. Faults include—

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

2-72. In the highly unlikely event a Soldier faults on both throw attempts, the grader gives the Soldier one more attempt to score a record throw. This is recorded as the second attempt on the DA Form 705. The score for a fault on the first throw is recorded as a zero.

2-73. Prior to the test date, the OIC or NCOIC will review the Standing Power Throw testing instructions and makes instructions available to Soldiers. The following instructions will be available to Soldiers prior to the test.

### **Standing Power Throw**

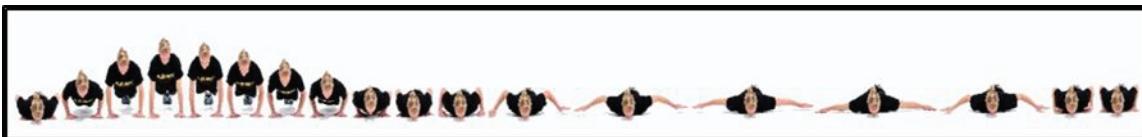
You will face away from the throw line and grasp a 10-pound medicine ball with both hands. Stand with the heels at (but not on or over) the start line. To avoid having the ball slip, grasp firmly and as far around the sides or beneath the ball as possible. You may make several preparatory movements by 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**

2-74. Figure 2-9 and figure 2-10 illustrate the Hand-Release Push-Up.



**Figure 2-9. Hand-Release Push-Up**



**Figure 2-10. Proper technique to execute the Hand-Release Push-Up**

2-75. The Hand-Release Push-Up 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 tests 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 Hand-Release Push-Up provides a safe, equipment-free test of large muscle groups in the shoulders, trunk, hips, and legs.

2-76. On the command, "GET SET," the Soldier assumes the prone position with hands flat on the ground beneath the shoulders. The chest and front of the hips and thighs are on the ground. Toes are touching the ground and feet are together or up to a boot's width apart as measured by the grader. The ankles are flexed. The head does not have to be on the ground.

2-77. With the hands placed flat on the ground, the index fingers are inside the outer edge of the shoulders. The hands return to this position to complete each repetition. The feet remain on the ground throughout the event and cannot be more than a boot's width apart. The Hand-Release Push-Up consists of four movements:

- Movement 1: on the command, "GO," the Soldier pushes 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 bends the elbows to lower the body to the ground. The chest, hips, and thighs 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 immediately moves 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 makes an immediate movement to place his or her hands back on the ground to return to the starting position to complete the repetition.

2-78. A repetition does not count if the Soldier makes a movement error during any of the repetitions. The Hand-Release Push-Up errors are—

- 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.

2-79. The grader terminates the Hand-Release Push-Up event 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 he or she is 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 movement) before raising up from the ground.

2-80. During the Hand-Release Push-Up, graders kneel or sit so that they can check the position and alignment of the Soldier's hands, chest, body, and feet. Additional instructions to the Soldier include—

- “You should not wear glasses while performing the Hand-Release Push-Up event.”
- “You must keep your head in line with your body, and your eyes focused on the ground.”
- “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.”

2-81. The grader records the number of correct repetitions completed in two minutes as the raw score on the DA Form 705.

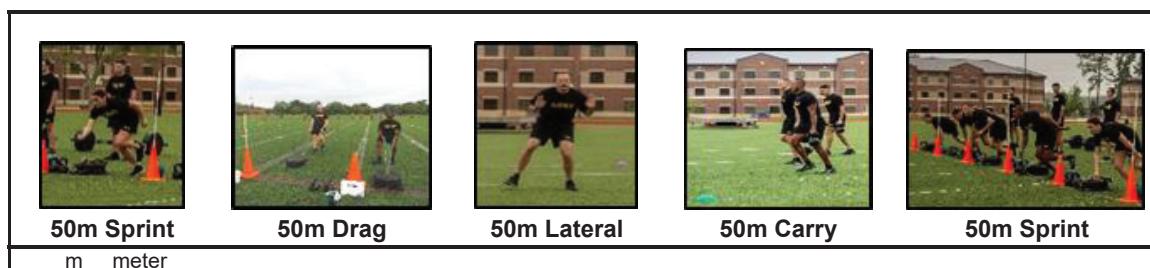
2-82. Prior to the test date, the OIC or NCOIC will review the Hand-Release Push-Up testing instructions and makes instructions available to Soldiers. The following instructions will be available to Soldiers prior to the test.

### 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. While at rest, if you move out of the front leaning rest 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, however your eyes will be focused on the ground throughout the Hand-Release Push-Up test event. 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

2-83. The Sprint-Drag-Carry is a timed, 250-meter shuttle event that measures anaerobic capacity as well as muscular endurance and muscular strength. See figure 2-11. These components of fitness are needed to accomplish high intensity tasks for relatively brief periods of time from a few seconds to a few minutes. This physical capacity contributes to a Soldier's ability to react rapidly to direct and indirect fire, build a hasty fighting position, and extract a casualty and carry them to safety.



**Figure 2-11. Sprint-Drag-Carry**

2-84. On the command, "GET SET," assume the prone position with the top of the head behind the start line, ready to complete 5 x 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 calls them back to do so.
- Drag: grasp each strap handle on the 90-pound sled and pull the sled backwards until the entire sled crosses the 25-meter line. Turn the sled and continue pulling backward until the entire sled has crossed the start line. If the Soldier fails to cross the 25-meter line, the grader calls them back to do so.

- Lateral: perform the lateral (leading with either the right or left foot) for 25 meters, touching the 25-meter line with a foot and hand and perform the lateral leading with the opposite foot back to the start line. For example: lead out with the right foot for 25 meters, lead back with the left foot. The Soldier should always face in the same direction out and back. 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 calls them back to do so.
- Carry: grasp the handles of the two 40-pound 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 calls them back to do so. If the Soldier drops the kettlebells at the start line, the grader calls the Soldier back to re-place 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 calls the Soldier back to do so.

2-85. After the Soldier crosses the start line, the grader records the Soldier's time on the DA Form 705.

2-86. Prior to the test date, the OIC or NCOIC will review the Sprint-Drag-Carry testing instructions and makes instructions available to Soldiers. 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 5 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 grader 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 grader 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 foot and hand before performing the lateral back to the start line. The lateral will be performed leading with the left foot in one direction and the right foot in the other direction. For the fourth shuttle, grasp the handles of the two 40-pound 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**

2-87. Figure 2-12 illustrates the Leg Tuck.



**Figure 2-12. Leg Tuck**

2-88. The Leg Tuck tests a Soldier's grip, shoulder, core, and hip flexor strength. It is a muscular strength and endurance event with high occupational relevance. Leg Tuck movements assist Soldiers in all climbing tasks and in surmounting obstacles like climbing a vertical wall, climbing onto a shelf, climbing along a rope, or low crawling. This test event requires well-conditioned abdominal and hip flexor muscles that assist Soldiers in load carriage and in avoiding injuries to the upper and lower back.

2-89. Like the Maximum Deadlift, the Leg Tuck has three phases: preparatory, upward movement, and downward movement:

- 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. Therefore, taller Soldiers may have to bend their knees.
- Upward movement phase: on the command, “GO,” the Soldier flexes 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 or back of the upper arm respectively so they touch or are in contact with the elbows at the same time. The

grader must observe both knees in contact with the elbows or upper arms for the Soldier to receive credit for the repetition.

- Downward movement phase: the Soldier returns under control to the straight-arm hang position to complete the repetition. If the elbows remain bent, that repetition does 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 ends when the Soldier voluntarily stops or drops from the bar. Using the ground or post to rest or push from between repetitions also terminates the event.

2-90. Leg Tuck errors that will cause a repetition to not be counted are—

- Failure to touch both knees or thighs to the elbows or back of the arm 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 on the last repetition.

2-91. The number of successfully completed repetitions counts as the raw score on the DA Form 705.

2-92. Prior to the test date, the OIC or NCOIC will review the Leg Tuck testing instructions and makes instructions available to Soldiers. 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 or 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 off to complete a repetition.

## **2-MILE RUN**

2-93. The 2-Mile Run is a test of aerobic endurance. See figure 2-13 on page 2-26. 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 covered in paragraphs 2-20 through 2-23. Soldiers do not conduct this event on unimproved terrain. The event commences no more than ten minutes after the completion of the Leg Tuck event. The start and finish line will be at the same location as the other events.



**Figure 2-13. 2-Mile Run**

2-94. On the command, “GO,” the clock starts, and the Soldier begins 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.

2-95. Graders enter the time on the DA Form 705 and ensure that Soldiers sign their cards after the 2-Mile Run is complete. The grader records the time taken as the Soldier crosses the finish line at the 2-mile point on the DA Form 705.

2-96. Prior to the test date, the OIC or NCOIC will review the 2-Mile Run testing instructions and makes instructions available to Soldiers. 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.

### **ARMY COMBAT FITNESS TEST (MODIFIED)**

2-97. The ACFT MOD provides commanders information on the risk they are taking by deploying Soldiers who cannot complete the full, 6-event ACFT. When a permanently profiled Soldier achieves minimum ACFT MOD scores, those scores tell the commander to be confident that his or her Soldiers are able to perform the critical physical tasks required to protect themselves 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.

### **TEMPORARY PROFILES**

2-98. Soldiers who are on temporary profiles recover from their illness or injury, will rehabilitate and recondition, and come off their profiles before taking a record ACFT. Non-impact aerobic endurance test events are not authorized for Soldier on temporary profiles. They may practice and train for the ACFT while

on profile, but they will not take a record ACFT if they are unable to execute all six events. From the first day of 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 those tasks. Rehabilitation and reconditioning incorporates modified physical readiness training and testing drills and exercises. Soldiers with temporary physical profiles must be ready to take a regular six-event ACFT after completing rehabilitation and reconditioning.

## PERMANENT PROFILES

2-99. The ACFT MOD for permanently profiled, deployable Soldiers consists of a minimum of three events. Soldiers taking the ACFT MOD test events can be tested with other Soldiers in the unit when the whole unit takes the ACFT test. They can also be tested in separate lanes or on different days. Soldiers are required to take all the events that they are not profiled against. For example, they could take four events if they are only profiled against the Standing Power Throw and the Leg Tuck. Or they could take five events if they are only profiled against only the Hand-Release Push-Up. It is possible for a permanently profiled Soldier to take all six ACFT test events with the only difference from a standard ACFT being a non-impact aerobic endurance event rather than the 2-Mile Run. At a minimum, permanently profiled Soldiers must pass—

- 3 Repetition Maximum Deadlift, with a minimum raw score of 140 pounds, for a scaled score of 60 points.
- Sprint-Drag-Carry with a minimum time of 3:00 minutes, for a scaled score of 60 points.
- The 2-Mile Run—or one of the 5000-Meter Row, 12000-Meter Bike, Or A 1000-Meter Swim—with a minimum time of 25 minutes for each, for a pass or fail score of 60 points.

2-100. When testing with their unit, permanently profiled Soldiers will be in the last or fourth position in the lane for every event, taking only those events allowed by their profiles. If Soldiers are only taking one event—the row, bike, or swim—they 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 ten minutes after their last event. If they are taking the swim event, they will move from the test site to the pool to complete their ACFT MOD in 120 minutes.

## PHYSICAL PROFILES

2-101. A Soldier's DA Form 3349 (*Physical Profile*) must clearly indicate which of the ACFT events the permanently profiled Soldier can and cannot take. Example comments include the following:

- May attempt all six ACFT test events.
- May attempt the three ACFT MOD events (Maximum Deadlift, Sprint-Drag-Carry, and 2-Mile Run, or an alternate aerobic assessment).
- May attempt four, five, or six event ACFT MOD including alternate non-impact aerobic endurance test event.
- May attempt a single non-impact aerobic endurance test event.

2-102. Primary care and specialty providers complete the DA Form 3349 taking the following steps to modify a Soldier's permanent profile:

- Determine the Soldier's current medical condition, changes since the last profile review, and limitations with regard to physical readiness training and the 6-event ACFT.
- Review with the Soldier to determine which of the six ACFT test events that the Soldier can safely perform without aggravating the medical condition. The determination includes whether the Soldier can perform the 2-Mile Run or a non-impact aerobic endurance test event.
- Add the ACFT test events that the Soldier can perform in the Soldier's permanent profile. Use the Medical Readiness Portal to access the e-Profile and select all the standard ACFT events and the alternate aerobic events in which the Soldier may participate from the ACFT MOD template.

## **STANDARDS**

2-103. Non-impact aerobic endurance test events assess the aerobic and muscular endurance of Soldiers with permanent medical profiles that cannot perform the 2-Mile Run. The profiled Soldier must complete the non-impact aerobic endurance test event in a time equal to or less than 25 minutes to receive a passing score. The Soldier must receive a passing score in the non-impact aerobic endurance test event to PASS the ACFT MOD. The non-impact aerobic endurance test events are the following:

- 5,000-Meter Row.
- 12,000-Meter Bike.
- 1,000-Meter Swim.

### **ROW**

2-104. The 5,000-Meter 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 grader ensures the rowing machine is calibrated prior to test administration to ensure it accurately computes the time and distance rowed.

2-105. The grader allows each Soldier a short warm-up period and an opportunity to adjust resistance and seat position. The grader reads the following instructions aloud and answers questions.

#### **Instructions for the 5,000-Meter Row Event**

The 5,000-Meter Row event measures your level of aerobic fitness. On the command, “GO,” the clock will start, and you will begin rowing at your own pace. You may pause and rest during the test, however you may not get off the rower. 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?

2-106. When the grader gives the command, “GET SET,” the Soldiers position themselves to begin the event. Time begins when the grader gives the command, “GO.” The grader calls out times in minutes and seconds as Soldiers near the test distance or the required 25-minute time. The grader calls out the time remaining every 30 seconds for the last two minutes of the allowable time and every second during the last ten seconds leading up to the 25-minute mark. Soldiers must continue rowing until they reach the 5,000-meter distance regardless of the time.

2-107. The grader must observe the Soldier throughout the event. The grader will have to observe the odometer as the distance approaches 5,000 meters. On the DA Form 705, the grader records the time and pass or fail. Zero points are awarded for a fail. Sixty points are awarded for a pass.

### **BIKE**

2-108. The 12,000-Meter 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 grader ensures the cycle ergometer is calibrated prior to test administration to ensure it accurately computes the time and distance biked. The process for setting the distance on the odometer is similar to that used on the rowing machine. If pedals that accommodate clip-in cycling shoes are available, Soldiers may use them.

2-109. The grader allows each Soldier a short warm-up period and an opportunity to adjust handlebar and seat height. The grader reads the following instructions aloud and answers questions.

### **Instructions for the 12,000-Meter Bike Event**

The 12,000-Meter Bike event measures your level of aerobic fitness. On the command, "GO," the clock will start, and you will begin pedaling at your own pace. You may pause and rest during the test, however you may not get off the bike. You must complete the 12,000-meter distance in 25 minutes or less. What are your questions about this event?

2-110. When the grader gives the command, "GET SET," the Soldiers position themselves to begin the event. Time begins when the timer gives the command, "GO." The grader calls out times in minutes and seconds as Soldiers near the end of the test distance or the required 25-minute time. The grader calls out the time remaining every 30 seconds for the last two minutes of the allowable time and every second during the last ten seconds. Soldiers must continue cycling until they reach the 12,000-meter distance regardless of the time.

2-111. The grader must observe the Soldier throughout the event. The grader has to observe the odometer as the distance approaches 12,000 meters. On the DA Form 705, the grader records the time and pass or fail. Zero points are awarded for a fail. Sixty points are awarded for a pass.

## **SWIM**

2-112. The 1,000-Meter Swim event requires a swimming pool with a minimum depth of one meter. The event requires one OIC or NCOIC, one grader for every three Soldiers, one timer, one back-up timer, and support personnel to ensure proper control and safety. The OIC or NCOIC is not an event grader. A grader may serve as a timer.

2-113. Most American pools are 25 yards long. If your pool length (equal to one lap) is measured in yards, the NCOIC converts 25 meters to yards. To convert 1,000 meters to yards, multiply 1,000 by 1.094 (1,000 meters = 1094 yards). To swim 1,000 meters in a 25-yard pool requires the Soldier to swim 43  $\frac{3}{4}$  laps or 43 laps and 75 feet. The NCOIC should measure the distance from the end of the pool to the 75-foot point and place a marker or cone at the endpoint for the 1,000 meter swim. Graders should position themselves at the endpoint of the swim (1,000 meters or 1094 yards) to accurately mark the finish time.

2-114. The OIC or NCOIC allow each Soldier a short warm-up period so that the Soldier can adjust to the water temperature, check goggles and swim a short distance to become familiar with the pool. The OIC or NCOIC reads the instructions aloud and answers questions.

### **Instructions for the 1,000-Meter Swim Event**

The 1,000-Meter Swim event 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?

2-115. When the OIC or NCOIC gives the command, "GET SET," the Soldiers position themselves in the water holding on to the wall ready to begin the event. When the OIC or NCOIC gives the command, "GO," time starts and the Soldier begins to swim. The grader calls out times in minutes and seconds as the Soldier nears the finish or the required 25-minute time. Soldiers must continue swimming until they reach the 1,000-meter distance regardless of the time. Time is recorded by the grader when the Soldier touches the end of the pool or crosses a predetermined line that establishes the 1,000-meter mark.

2-116. Graders must observe the Soldiers assigned to them. They must ensure that each Soldier touches the wall at every turn. On the DA Form 705, the grader records the time and pass or fail. Zero points are awarded for a fail. Sixty points are awarded for a pass.

2-117. Certified lifeguards are highly encouraged during the 1,000-meter swim test.

## **Chapter 3**

# **Combat Water Survival Test**

This chapter directs the standards for CWST. It discusses the intent of the test and its three events.

### **INTENT**

3-1. The CWST aims to accurately record a Soldier's ability to safely function in a water environment. The CWST consists of three events executed in sequence with up to ten minutes allowed between events. The test events are not timed or scored. There are no restarts allowed. A CWST pass occurs when the Soldier completes all three events without signs of panic or inability to complete the test event distance. The three test events are the following:

- 15-Meter Swim with Equipment and Weapon.
- 3-Meter Drop and Pool Exit.
- Equipment Removal.

3-2. Soldiers perform all CWST events wearing ACUs with top button closed, boots on, and trousers unbloused. Equipment includes the improved outer tactical vest (IOTV) without plates and an M16 or M4 training aid. Soldiers conduct CWST events in pools, not open water. The length and width of the pool for this test are based on a pool that is 25 yards or meters long by 15-yards or meters wide. The pool must have a 3-meter high diving board or platform and be 3-meters deep. The event supervisor must make adjustments accordingly when the pool is larger or smaller, deeper or shallower.

3-3. The same safety considerations and requirements used in Army Water Survival Training (see Appendix D of this publication and FM 7-22) also apply to the CWST. Commanders ensure that—

- Test administrators are properly prepared and have integrated risk management.
- The OIC and NCOIC properly prepared the test site.
- Testing Soldiers are not ill, injured, or fatigued prior to taking CWST.

3-4. Test personnel include the OIC or NCOIC, event supervisor, grader, demonstrator, and support personnel such as lifeguards and medical support if required by unit or local policy.

3-5. The event supervisor reads the instructions for the CWST to Soldiers prior to the test and then makes instructions available.

### **Instructions for the Army Combat Water Survival Test**

You are about to take the Army Combat Water Survival Test, a test that will measure your ability to safely function in a water environment. The CWST consists of three events: 15-Meter Swim with Equipment and Weapon, 3-Meter Drop and Pool Exit, and Equipment Removal. If you fail any one of these three events, you will be a CWST failure. The results of this test will give you and your commander an indication of your state of readiness and will act as a guide in determining your water survival training needs. Listen closely to the test instructions and do the best you can on each of the events.

## **EVENT 1: 15-METER SWIM WITH EQUIPMENT AND WEAPON**

3-6. The event supervisor reads the instructions for the 15-Meter Swim with Equipment and Weapon to Soldiers prior to the test and then makes instructions available.

### **Instructions for the 15-Meter Swim with Equipment and Weapon**

The 15-Meter Swim with Equipment and Weapon event will measure your ability to enter the water and successfully swim a distance of 15 meters with weapon and equipment. You will move to the starting point at the deep end of the pool. The grader will attach a safety line to your uniform. On the command, "GET SET," you will stand behind the edge of the pool with weapon at port arms. On the command, "JUMP," you will enter the deep end of the pool using the stride entry and continue to swim any stroke to complete the 15-meter distance. Pull your weapon in close to your body to reduce drag. It is recommended that you use the sidestroke to swim the required 15 meters. The sidestroke will allow your free arm to carry the rifle. The sidestroke is used because it is also one of the least tiring and most efficient of the swimming strokes. Always attempt to keep yourself horizontal. During the swim you will not be allowed to touch the sides or bottom of the pool. If you show signs of panic or an inability to complete the distance, the grader or assistant instructor will pull you to the side of the pool using the safety line or shepherd's crook. Watch this demonstration. Are there any questions about this event?

## **EVENT 2: 3-METER DROP AND POOL EXIT**

3-7. The event supervisor reads the instructions for the 3-Meter Drop and Pool Exit to Soldiers prior to the test and then makes instructions available.

**Instructions for the 3-Meter Drop and Pool Exit**

The 3-Meter Drop and Pool Exit with weapon and equipment event will measure your ability to enter the water and successfully swim to the side of the pool with weapon and equipment. You will move to the starting point at the base of the 3-meter diving board or platform. The grader or assistant instructor will attach a safety line to your uniform. On command, you will climb the diving board ladder or platform steps to the 3-meter drop starting point. On the command, "GET SET," you will hold your weapon at port arms. On the command, "ENTER THE WATER," you will walk to the end of the diving board or platform at the deep end of the pool with your weapon held overhead with both arms. You will then enter the water using the stride entry by stepping off the diving board or platform. Enter the water with your trunk leaning slightly forward, head up, and legs spread in a stride position (one forward, the other back). Upon entry, drive your arms downward slapping the water with your weapon. Using any stroke, swim to the side of the pool to exit. If you show signs of panic or an inability to complete the distance, the grader or assistant instructor will pull you to the side of the pool using the attached safety line or shepherd's crook. Watch this demonstration. Are there any questions about this event?

**EVENT 3: EQUIPMENT REMOVAL**

- 3-8. The event supervisor reads the instructions for Equipment Removal to Soldiers prior to the test and then makes instructions available.

**Instructions for the Equipment Removal**

The Equipment Removal event will measure your ability to enter the water, submerge to the bottom of the pool, successfully remove your equipment, surface, and swim to the side of the pool. You will move to a starting point at the deep end of the pool. On the command, "GET SET," you will stand behind the entry line with your weapon slung over the left shoulder. With your right hand you will grasp the sling close to the sling clamp at the chest. With your left hand you will grasp the weapon butt plate. You will then pull your weapon tight to the back. On the command, "ENTER THE WATER," you will enter the deep end of the pool using a rear entry. You will then submerge to the bottom of the pool, remove your weapon, and place it on the bottom of the pool. Once you have released your weapon, you will remove the IOTV and place it on the bottom of the pool. Once you have removed all your gear, you will surface and swim any stroke to the side of the pool. If you show signs of panic or an inability to complete the distance, the grader or assistant instructor will pull you to the side of the pool using the attached safety line or shepherd's crook. Watch this demonstration. Are there any questions about this event?

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## **Appendix A**

# **Preparation Drills**

This appendix covers Preparation Drills. It has two parts: Preparation Drills and Preparation Drills (Modified). Each part of this appendix provides exercises designed to strengthen the body and reduce injuries.

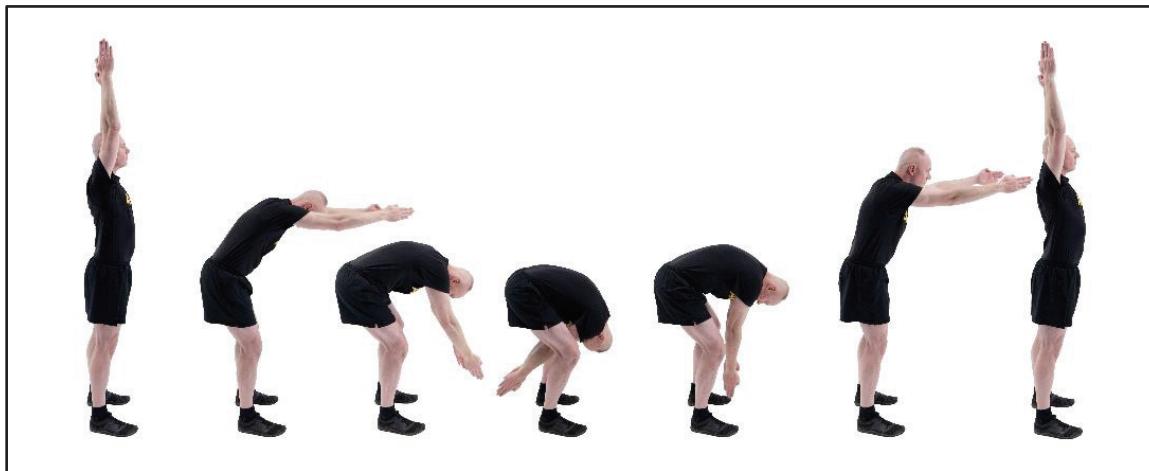
### **THE PREPARATION DRILL**

A-1. The Preparation Drill (known as PD) is a battery of exercises intended to decrease the likelihood of suffering a musculoskeletal injury during the execution of more rigorous physical training such as the ACFT. The Preparation Drill has 10 exercises: Bend and Reach, Rear Lunge, High Jumper, Rower, Squat Bender, Windmill, Forward Lunge, Prone Row, Bent-Leg Body Twist, and Push-Up. The Army Combat Fitness Test website at <https://www.army.mil/acft/> provides detailed descriptions and instructional videos for each testing event. The Central Army Registry website provides video demonstration drills by name at [https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect\\_date=5%2F1%2F2020&search\\_terms=CIMT](https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect_date=5%2F1%2F2020&search_terms=CIMT). (Copy and paste this address after accessing the Central Army Registry website if the demonstrations do not populate.)

## **1. BEND AND REACH**

A-2. The Bend and Reach is the first exercise in the Preparation Drill (see figure A-1). 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. Soldiers conduct the movement in formation at a slow cadence:

- The starting position for the Bend and Reach is the straddle stance with the 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.



**Figure A-1. PD1 Bend and Reach**

## **2. REAR LUNGE**

A-3. The Rear Lunge is the second exercise in the Preparation Drill (see figure A-2 and figure A-3). This exercise promotes flexibility, strength, and balance in the hip and leg. It prepares the Soldier for taking cover and assuming kneeling firing positions. Soldiers conduct the movement 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.



Figure A-2. PD2 Rear Lunge

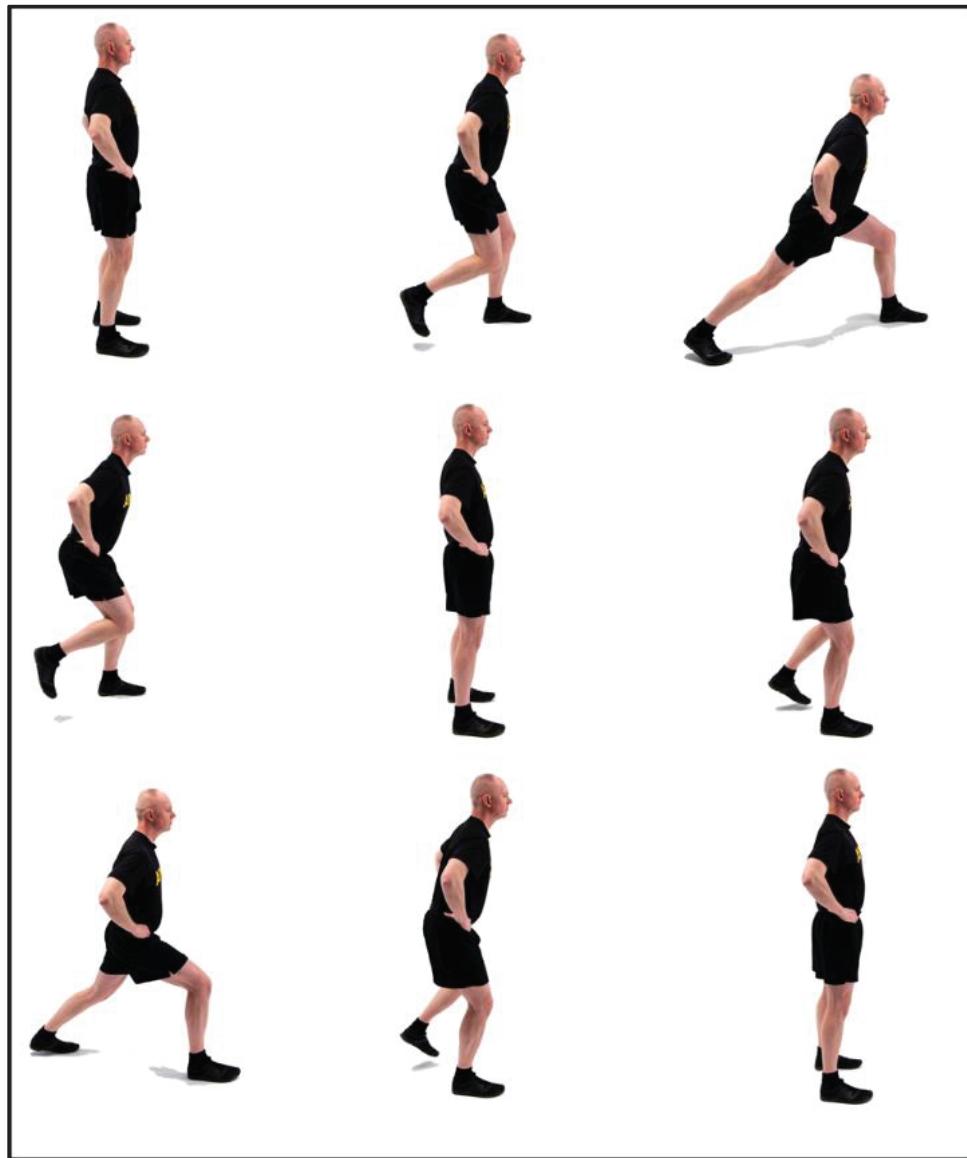
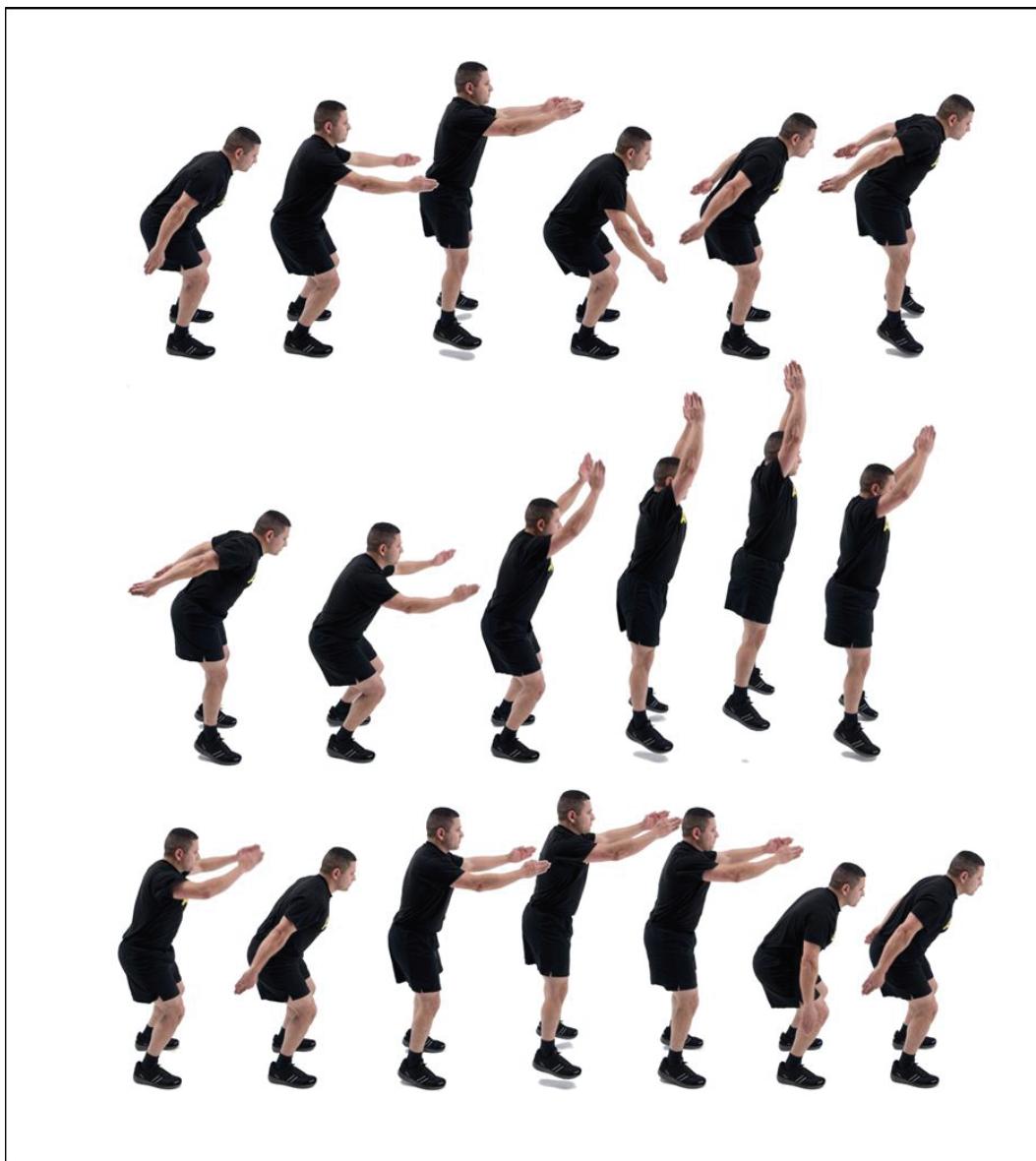


Figure A-3. PD2 Proper technique to execute the Rear Lunge

### **3. HIGH JUMPER**

A-4. The High Jumper is the third exercise in the Preparation Drill (see figure A-4). This exercise promotes correct jumping, landing, balance, and coordination, and prepares the Soldier to build explosive strength. Soldiers conduct the movement in formation at a moderate cadence:

- The starting position for the High Jumper is the forward leaning stance, 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.



**Figure A-4. PD3 High Jumper**

## 4. ROWER

A-5. The Rower is the fourth exercise in the Preparation Drill (see figure A-5 and figure A-6). This exercise improves abdominal strength and total body coordination. It prepares the Soldier to move from supine to seated positions and for exercises in Conditioning and Climbing Drills. Soldiers conduct the movement in formation 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 1–2 inches off the ground to work muscles in the front of the neck. Arms are overhead with hands at shoulder width, palms facing inward with 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 5–10 repetitions.



Figure A-5. PD4 Rower

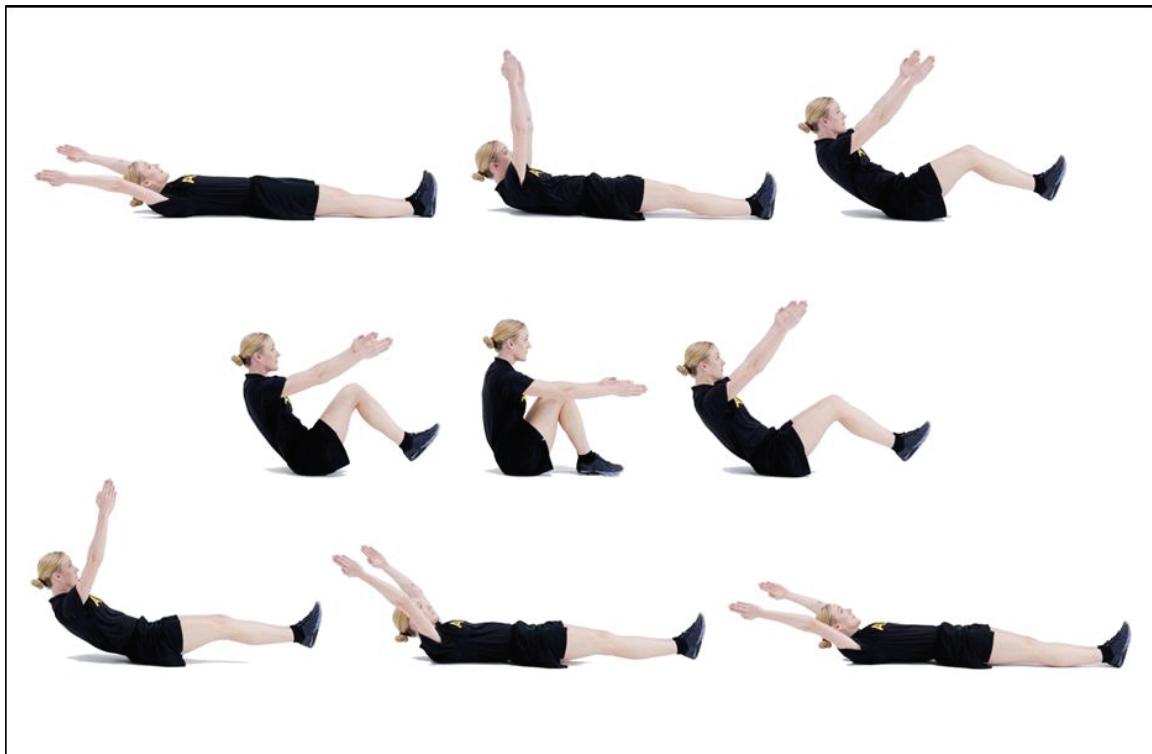
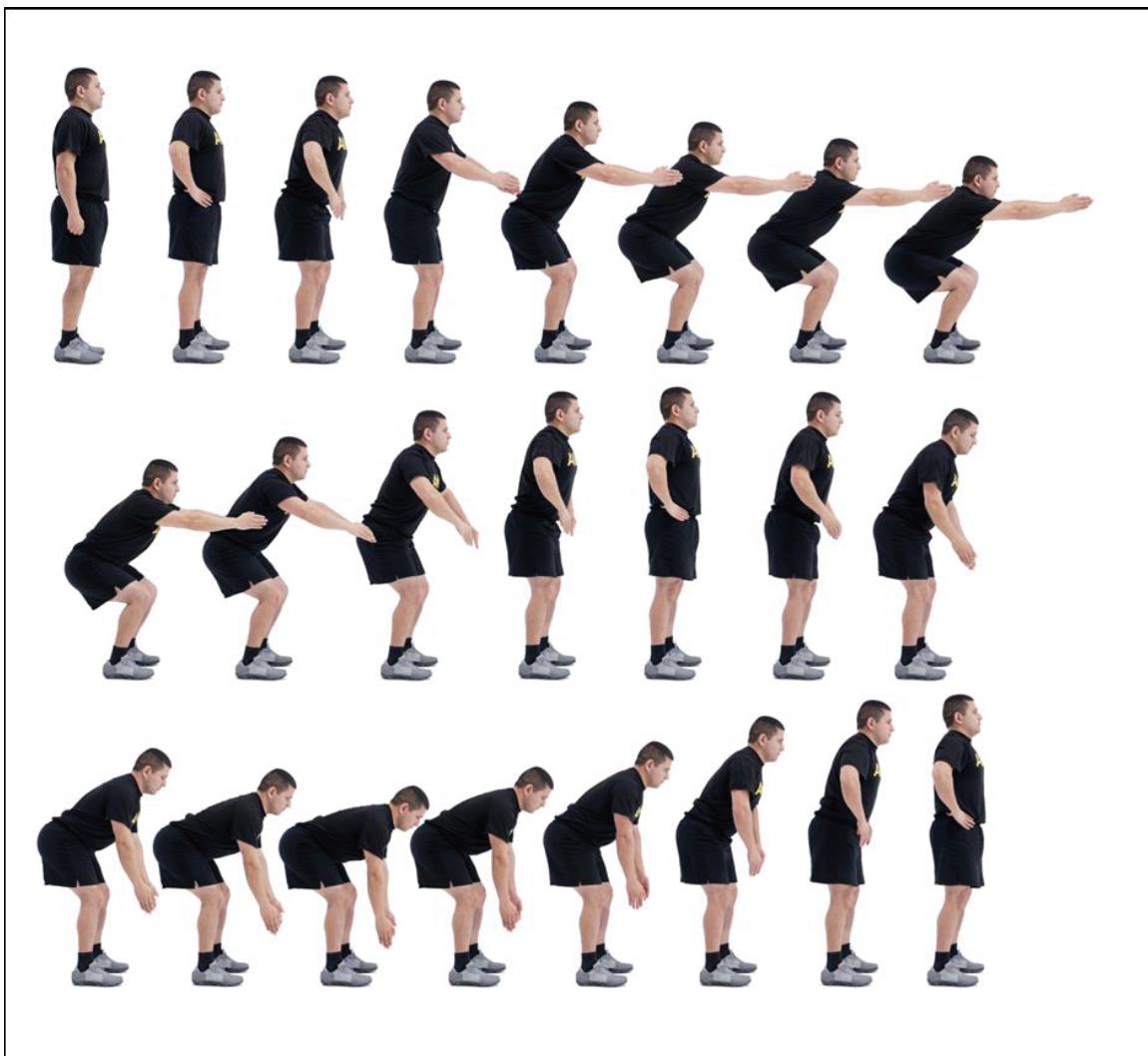


Figure A-6. PD4 Proper technique to execute the Rower

## **5. SQUAT BENDER**

A-6. The Squat Bender is the fifth exercise in the Preparation Drill (see figure A-7). 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. Soldiers conduct the movement 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. Keep the head aligned 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 5–10 repetitions.



**Figure A-7. PD5 Squat Bender**

## 6. WINDMILL

A-7. The Windmill is the sixth exercise in the Preparation Drill (see figure A-8 and figure A-9). 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. Soldiers conduct the movement 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 5–10 repetitions.



Figure A-8. PD6 Windmill



Figure A-9. PD6 Proper technique to execute the Windmill

## **7. FORWARD LUNGE**

A-8. The Forward Lunge is the seventh exercise in the Preparation Drill (see figure A-10). This exercise develops balance and leg strength. It prepares Soldiers to use proper movement technique to perform lifts such as a litter carry. Soldiers conduct the movement 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 3–6 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.
- Perform 5–10 repetitions.



**Figure A-10. PD7 Forward Lunge**

## 8. PRONE ROW

A-9. The Prone Row is the eighth exercise in the Preparation Drill (see figure A-11). 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. Soldiers conduct the movement 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 1–2 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.
- Perform 5–10 repetitions.

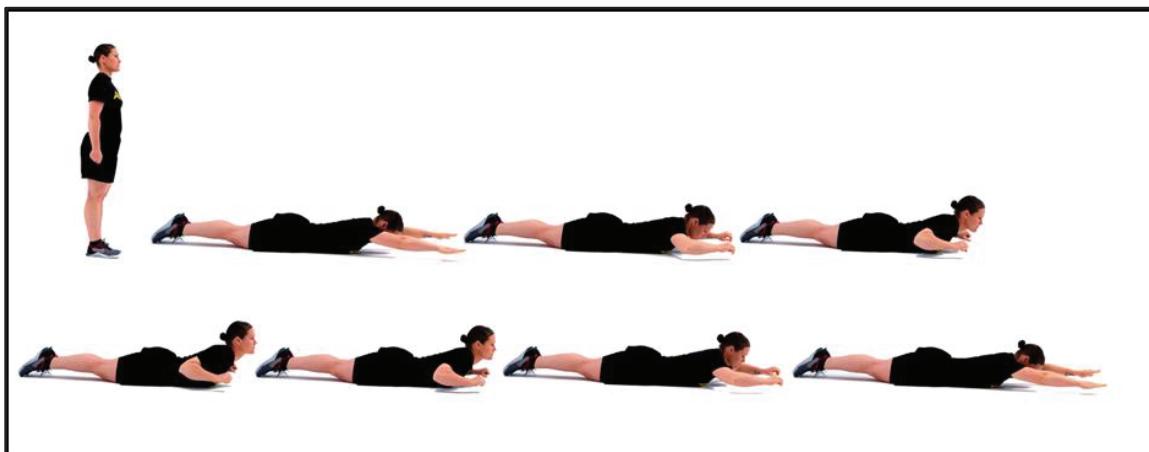
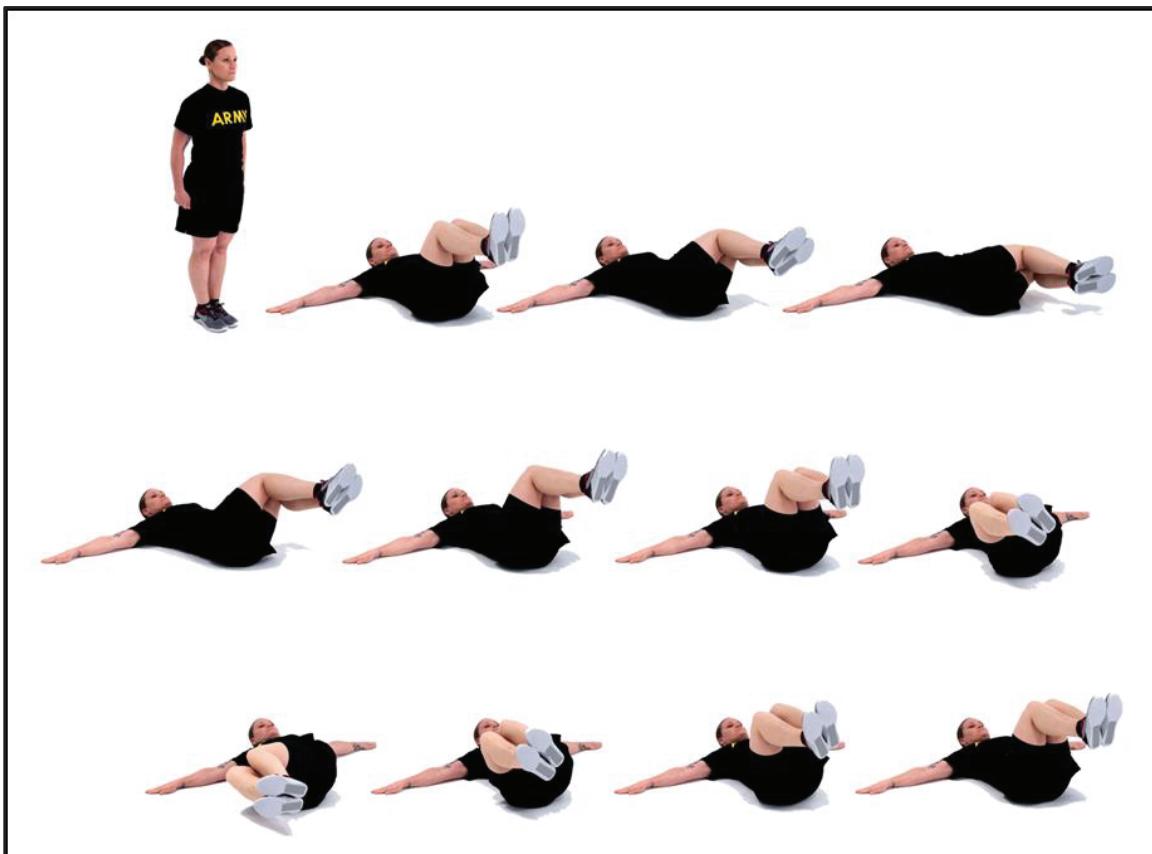


Figure A-11. PD8 Prone Row

## **9. BENT-LEG BODY TWIST**

A-10. The Bent-Leg Body Twist is the ninth exercise in the Preparation Drill (see figure A-12). This exercise strengthens the trunk and hip muscles while promoting control of trunk rotation. It prepares Soldiers for loaded trunk movements in more vigorous training, testing, and combat tasks. Soldiers conduct the movement 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.
- Perform 5–10 repetitions.



**Figure A-12. PD9 Bent-Leg Body Twist**

## 10. PUSH-UP

A-11. The Push-Up is the final exercise in the Preparation Drill (see figure A-13). This exercise strengthens the muscles of the chest, shoulders, arms, and trunk. When conducted to standard, this exercise prepares Soldiers for more vigorous pushing motions required in training, testing, and combat tasks. Soldiers conduct the movement 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. 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.
- Perform 5–10 repetitions.

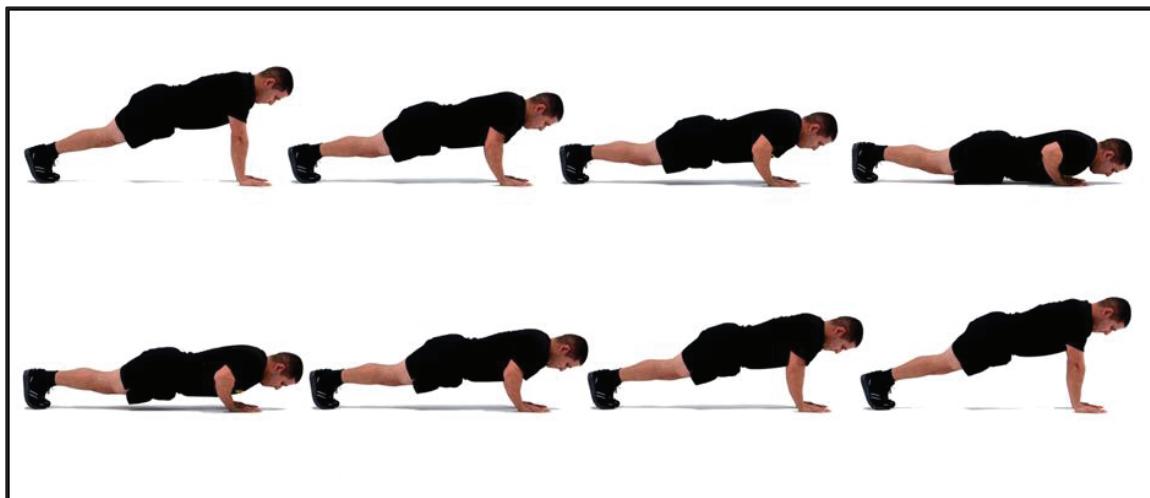


Figure A-13. PD10 Push-Up

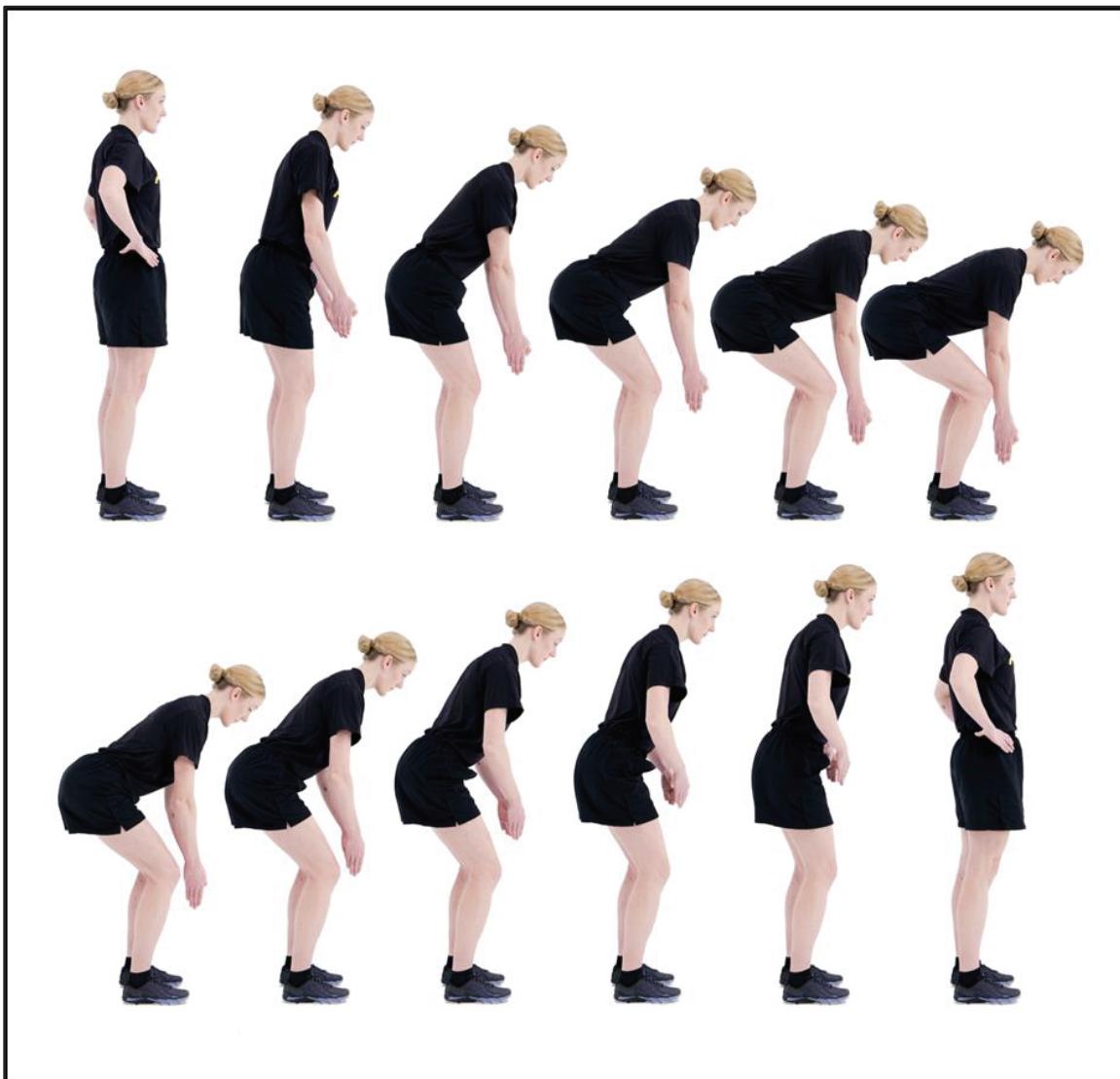
## PREPARATION DRILL (MODIFIED)

A-12. Each physical training exercise may be modified to accommodate a variety of physical limitations. By following their profiles and the principle of progression, Soldiers can gradually re-condition themselves to the standard range of motion and repetitions required for a return to full duty. Soldiers who know the standard for each exercise can modify it in more ways than can be illustrated here. When a Soldier cannot perform an exercise at all (it is restricted on the profile), the Soldier should select an alternative exercise with the same cadence. In a formation, the Soldier can perform the alternative exercise, modifying as necessary, but using the same cadence as the rest of the formation. Paragraphs A-13 through A-22 provide Preparation Drills (Modified) (known as PD MODs) for Soldiers with restricted profiles. Soldiers can use a Preparation Drill (Modified) to properly prepare to attempt the ACFT.

## **1. BEND AND REACH (MODIFIED)**

A-13. The modified Bend and Reach can amend the exercise by decreasing the range of motion of the spine and the squat and by limiting the use of one or both arms (see figure A-14). This particular example modifies the movement Soldiers conduct at a slow cadence:

- The starting position for the modified Bend and Reach is the straddle stance with hands on hips.
- On count 1, move from the starting position into a partial squat with the heels remaining on the ground. Lean forward at the waist, keeping the spine straight and reaching to the ground with straight arms.
- On count 2, return to the starting position.
- On count 3, repeat count 1.
- On count 4, return to the starting position.



**Figure A-14. PD MOD1 Bend and Reach (modified)**

## 2. REAR LUNGE (MODIFIED)

A-14. The modified Rear Lunge (see figure A-15) can amend the exercise by decreasing the range of motion of the lunge and knee bend, by stepping back with only one leg, or by widening or narrowing the stance. This particular example modifies the movement Soldiers conduct at a slow cadence:

- On count 1, keeping hands on hips, take a step backwards with the left or right leg. Touch down with the ball of the foot placed directly back from the starting position or wider to improve balance. The heel may be on the ground. Lower the body into the lunge position while controlling the knee bend.
- 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 or left leg.
- On count 4, return to the starting position. Over several repetitions, or physical training sessions, progress to a deeper rear lunge.

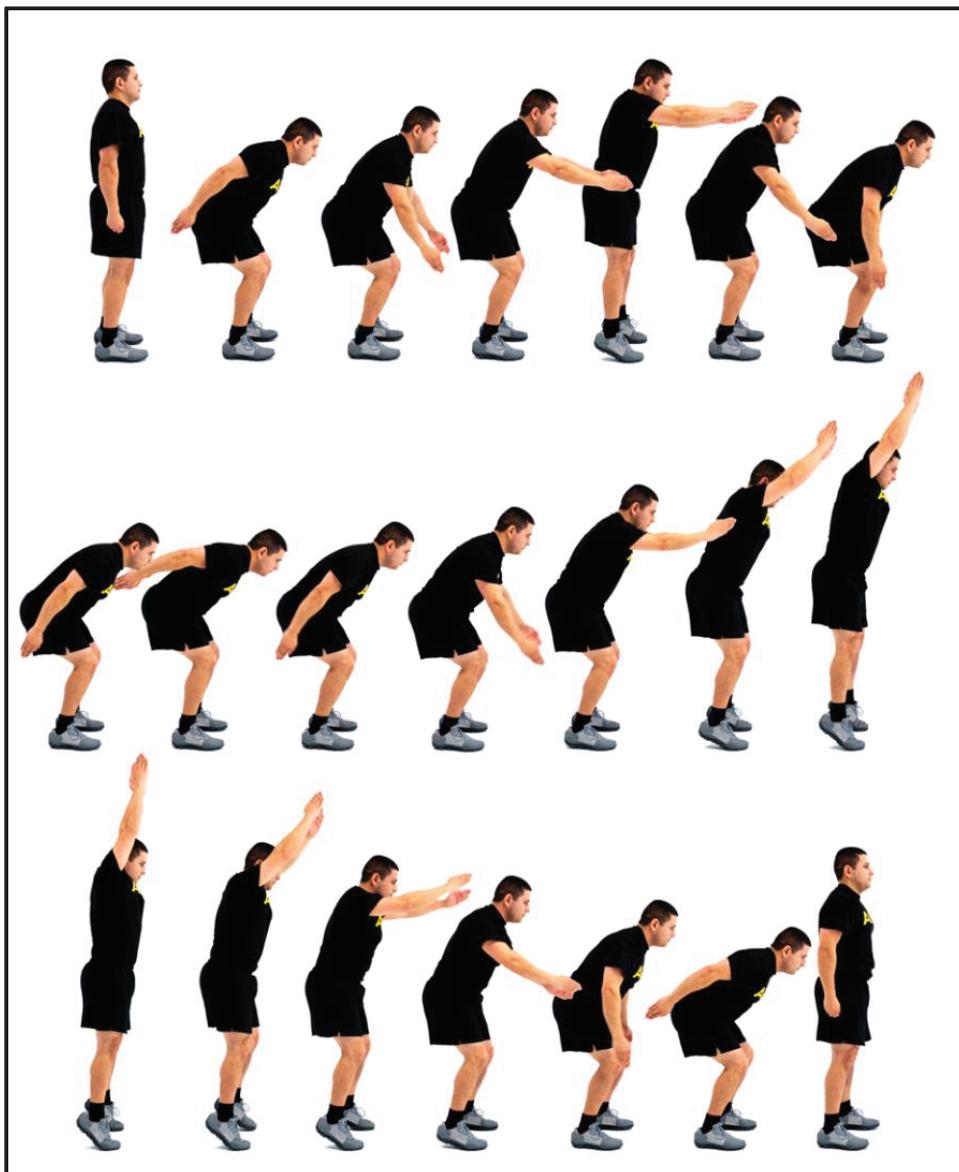


Figure A-15. PD MOD2 Rear Lunge (modified)

### **3. HIGH JUMPER (MODIFIED)**

A-15. The modified High Jumper can amend the exercise by decreasing the range of motion of one or both arms, by decreasing the height of the jumps, and changing the cadence (see figure A-16). This particular example modifies the cadence of movement Soldiers conduct from moderate to slow:

- The starting position for the modified High Jumper is the forward leaning stance with a reduced squat, palms facing inwards, and fingers and thumbs extended and joined.
- On count 1, swing the arms forward until they are parallel to the ground. At the same time lift the heels off the ground a few inches without jumping.
- On count 3, swing the arms as far overhead as possible. At the same time lift the heels off the ground a few inches without jumping.
- On count 4, return to the starting position by lowering the heels back to the floor.



**Figure A-16. PD MOD3 High Jumper (modified)**

#### 4. ROWER (MODIFIED)

A-16. The modified Rower can amend the exercise by decreasing the use of one or both arms, decreasing the use of one or both legs, by decreasing the range of trunk flexion, or by keeping the head on the ground (see figure A-17). This example modifies the movement range. Soldiers conduct this modification at a slow cadence:

- The starting position for the modified Rower is the supine position with arms crossed over the chest, knees flexed, and head resting on the ground.
- On count 1, sit up and reach to the knees.
- 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.

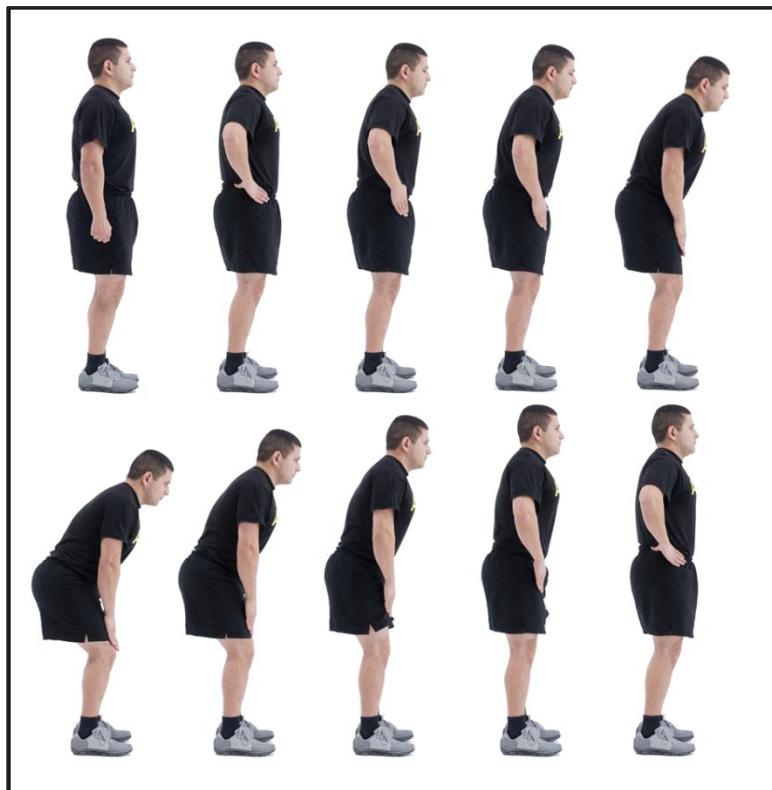


**Figure A-17. PD MOD4 Rower (modified)**

## **5. SQUAT BENDER (MODIFIED)**

A-17. The modified Squat Bender can adjust the exercise by reducing the motion of the knee and trunk flexion and by reducing movement of the arms (see figure A-18). This particular example modifies the motion of the knee and trunk. Soldiers conduct this modification at a slow cadence:

- The starting position for the modified Squat Bender is the straddle stance with hands on hips.
- On count 1, squat slightly while leaning forward from the waist, keeping the head up and moving one or both arms toward the knees. Palms face inwards.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1, attempting to progress the range of motion of the trunk, arms, and legs.
- On count 4, return to the starting position.



**Figure A-18. PD MOD5 Squat Bender (modified)**

## **6. WINDMILL (MODIFIED)**

A-18. Figure A-19 and figure A-20 show the modified Windmill. The starting position for the modified Windmill is the straddle stance with hands on hips or with arms straight out to the sides at 90 degrees to the trunk. The figures demonstrate modified movement with two alternative arm positions. The movement is conducted at a slow cadence:

- 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 stays in its starting position, with hand on hip. Alternatively, with arms out to the side, rotate the trunk to the left, avoiding any hip or knee flexion.
- 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.



Figure A-19. PD MOD6 Windmill (modified)



Figure A-20. PD MOD6 Alternate Windmill (modified)

## **7. FORWARD LUNGE (MODIFIED)**

A-19. The modified Forward Lunge can amend the exercise by decreasing the range of motion, by keeping the feet closer together, or by moving just one foot (see figure A-21). This particular example modifies the range of motion. Soldiers conduct this modification at a slow cadence:

- The starting position for the modified Forward Lunge is the straddle stance with hands on hips.
- On count 1, take a step forward with the left or right leg until the forward heel is 3 to 6 inches ahead of the rear foot. At the same time, bend at the hips and knees to lunge forward, keeping the back straight. Bring the feet closer together if necessary.
- On count 2, reverse the movement performed in count 1 to return to the starting position.
- On count 3, repeat count 1, switching foot movement.
- On count 4, return to the starting position.



**Figure A-21. PD MOD7 Forward Lunge (modified)**

## 8. PRONE ROW (MODIFIED)

A-20. The modified Prone Row can adjust the exercise by decreasing the range of motion of the arms, by moving only one arm to standard, or by performing the arm movements while remaining standing, using the starting position for the Bend and Reach. Figure A-22 modifies the arm movement. Figure A-23 modifies position from prone to standing. Soldiers conduct these modifications at a slow cadence:

- The starting position is the same as the Bend and Reach, arms overhead, palms forward, fingers and thumbs extended and joined.
- On count 1, raise the chin, head and chest slightly while moving the arms down to the sides of the trunk while flexing the elbows. The hands are made into fists as they move toward the shoulders.
- On count 2, return to the starting position.
- On count 3, repeat count 1.
- On count 4, return to the starting position.

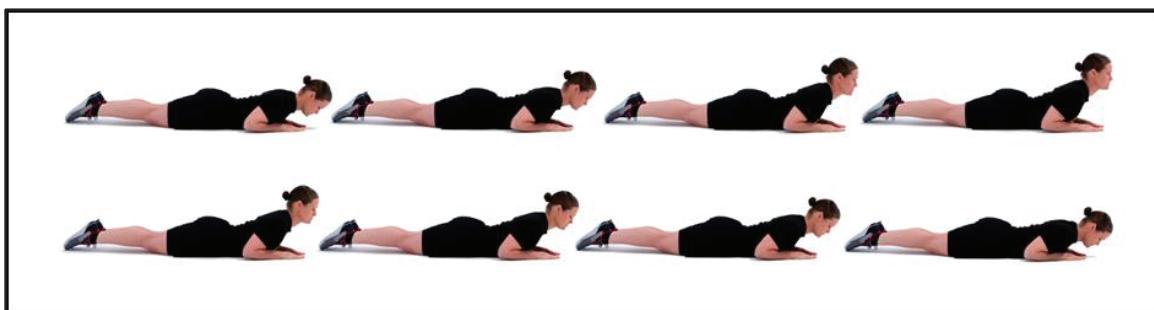


Figure A-22. PD MOD8 Prone Row (modified)



Figure A-23. PD MOD8 Alternate Prone Row (modified)

## **9. BENT-LEG BODY TWIST (MODIFIED)**

A-21. The modified Bent-Leg Body Twist can adjust the exercise by changing the arm position, by resting the head on the ground, by keeping the feet on the ground, by reducing the range of rotation, and by moving only one leg from the starting position. Figure A-24 illustrates modified head position, feet position, and range of motion. Soldiers conduct this modification at a slow cadence:

- The starting position for the modified Bent-Leg Body Twist is the supine position with head on the ground, arms at 45 degrees out from the trunk, hips and knees bent with feet 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.

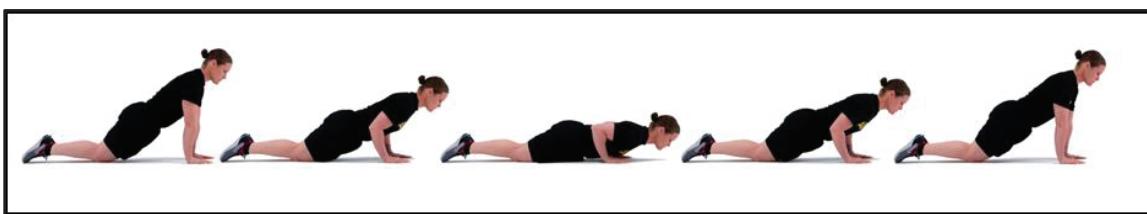


**Figure A-24. PD MOD9 Bent-Leg Body Twist (modified)**

## **10. PUSH-UP (MODIFIED)**

A-22. The modified Push-Up can adjust the exercise by moving to the six-point position during the Preparation Drill. This modified exercise limits the range of motion and weight on the ankles, shoulders, arms and wrists (see figure A-25). Soldiers conduct this modification at a moderate cadence:

- The starting position for the modified Push-Up is the six-point position. Hands are directly beneath the shoulders with fingers spread. The body forms a straight line from the head to the knees. Feet point to the rear.
- On count 2, return to the starting position. If necessary, reduce the range of motion of the elbow to accommodate for the injury.
- On count 3, repeat count 1, reducing the range of motion if necessary.
- On count 4, return to the starting position.



**Figure A-25. PD MOD10 Push-Up (modified)**

## Appendix B

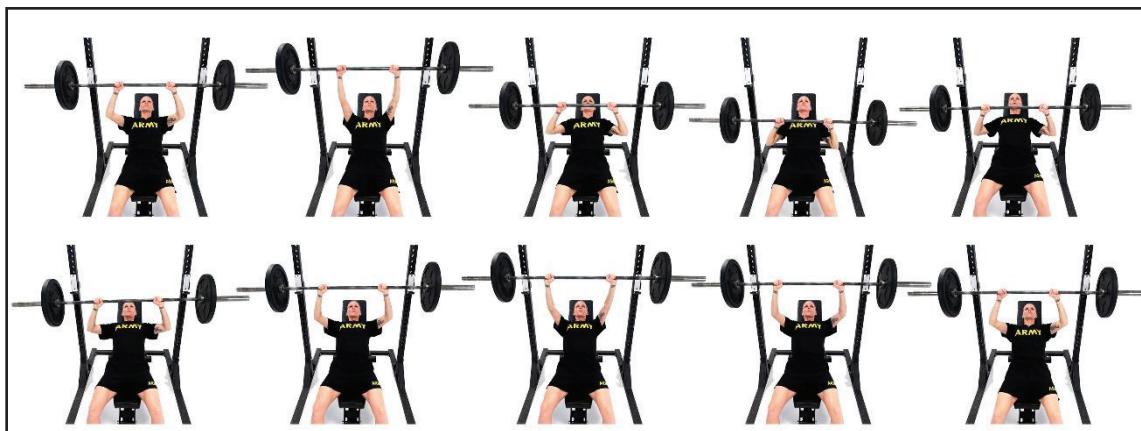
# OPAT Improvement

Occupational Physical Assessment Test improvement (known as OPAT-I) is designed to increase the physical readiness of Army recruits so that they can attempt and pass the OPAT. The exercises in OPAT improvement focus on improving physical strength and endurance. The four OPAT graded events include the Standing Long Jump, Standing Power Throw, Strength Deadlift, and Interval Aerobic Run. This appendix provides exercises that recruits may use to train for these test events.

### INCLINE BENCH

B-1. The Incline Bench is a free-weight exercise to improve upper body muscular strength and endurance (see figure B-1). This lift requires trunk and shoulder stability and strength. Recruits can use it to improve training and testing performance that supports a wide range of combat and occupational physical tasks. Many modifications for the Incline Bench involve different positions and equipment. An individual recruit using a straight bar conducts the exercise in the following manner:

- 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 this 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.



**Figure B-1. OPAT-I Incline Bench**

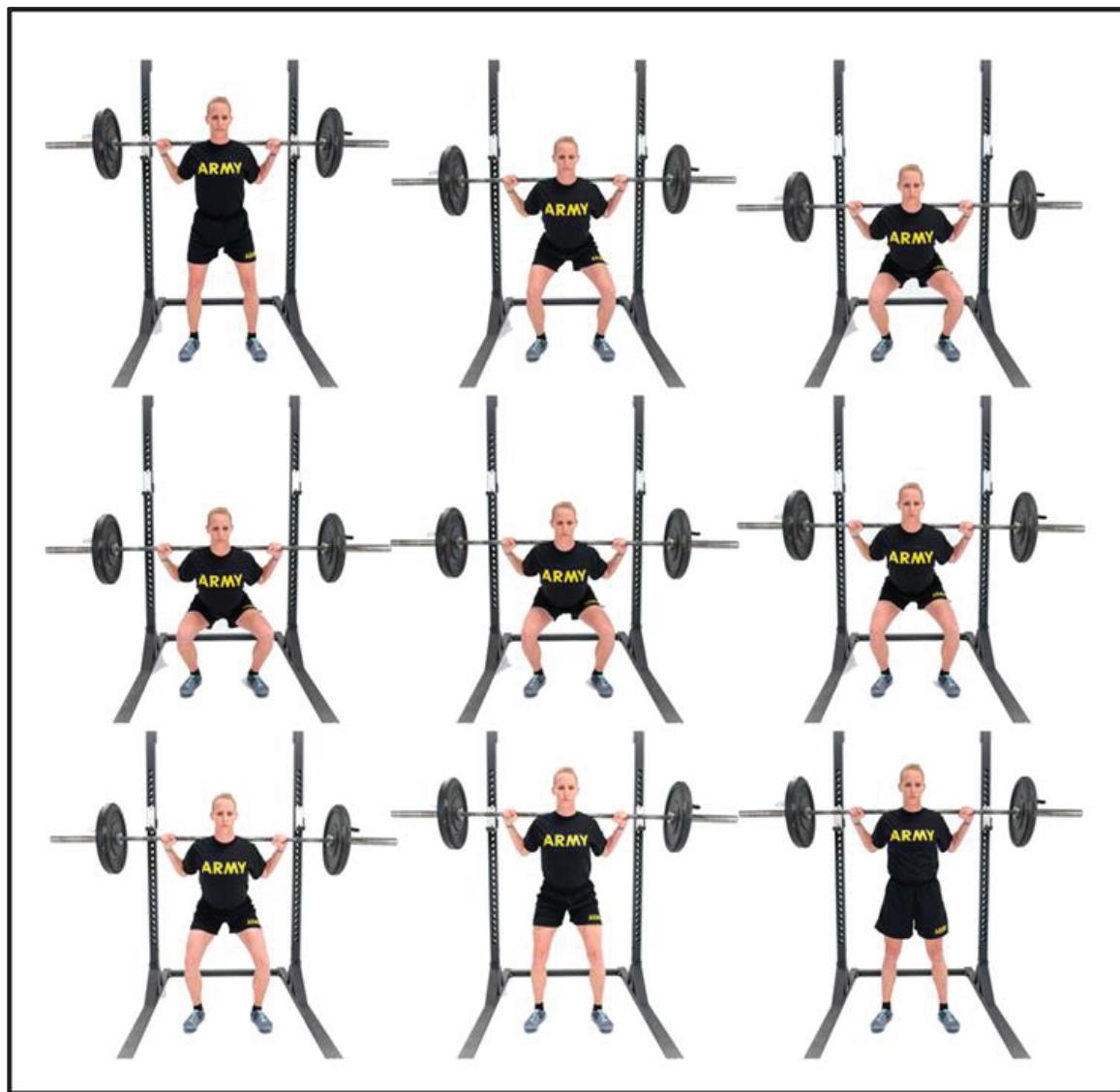
B-2. For the Incline Bench the spotter stands at the head of the bench in the straddle stance with feet slightly staggered. The spotter grasps the bar with a closed alternating grip in between the lifter's hands. On a signal from the lifter, the spotter assists the lifter with moving the bar from the supports to guide it over the lifter's chest. The spotter assists in the following manner:

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

## **SQUAT**

B-3. The Squat is a free-weight exercise to improve lower body muscular strength and endurance (see figure B-2). Recruits can use it to improve training and testing performance that supports a wide range of combat and occupational physical tasks. Modifications for the Squat vary positions and equipment (straight bar or barbell, kettlebells, and dumbbells). An individual recruit using a straight bar conducts the exercise in the following manner:

- The starting position for the Squat is the straddle stance. A recruit can perform the Back Squat with the bar across the upper back (as shown in figure B-2).
- A Front Squat uses the same actions as the Back Squat but the recruit holds the bar across the top of the chest just below the collar bones using the crossed arm or pronated grip.
- When performing the Squat with dumbbells or kettlebells, start in the straddle stance with one weight at each side using a neutral grip.
- From the starting position, bend the knees and slowly lower the body downward until there is a 90-degree angle between the upper and lower leg. Return to the starting position.
- Repeat this movement for the correct number of repetitions and sets required to meet the goal of the free weight session.
- Maintain a natural arch in the lower back with the head and neck staying in alignment to avoid extending the neck. Do not round out the upper back.
- The knees stay aligned over the feet and the heels stay on the ground.
- Initially do not squat deeper than 90 degrees. Progress to deeper positions as strength improves. Always lift a weight that can be controlled.



**Figure B-2. OPAT-I Squat**

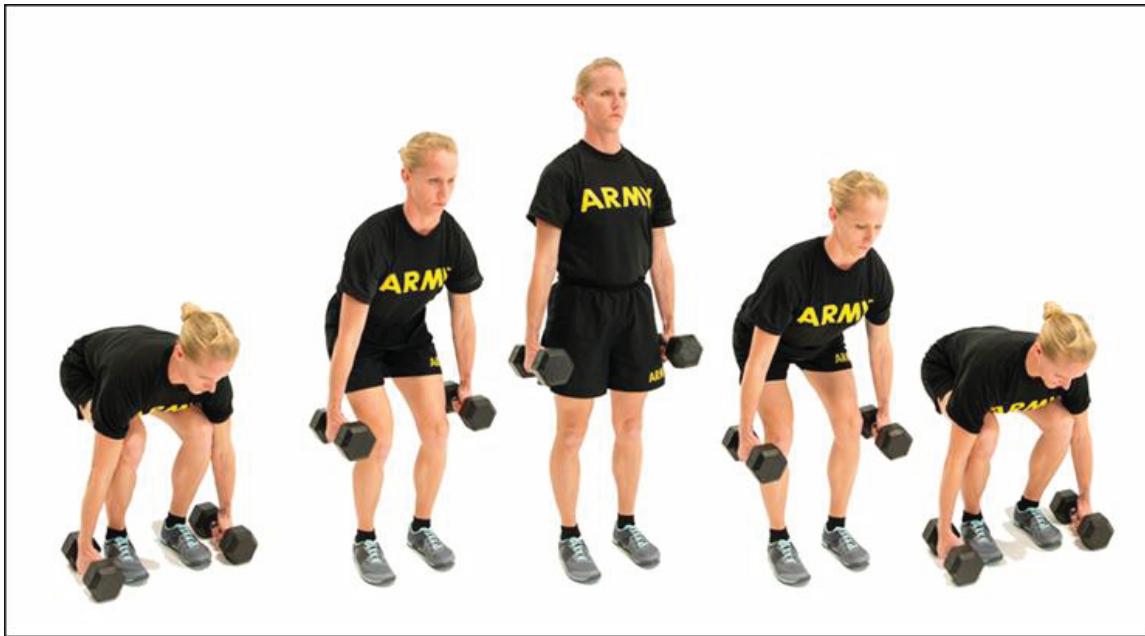
B-4. The starting position for the spotter with a Squat is the straddle stance behind the lifter with hands close to but not touching each side of the body between the waist and the underarms. The spotter assists in the following manner:

- Assist the lifter as needed in un-racking the weight and moving to the starting position.
- During the squat movement, move with the lifter until the lifter has racked the weight after completing the last repetition. Always be prepared to assist if the lifter becomes unstable.
- Spot with the hands under the chest.
- Be especially cautious when the lifter is conducting a power or muscular strength set when the weight is likely to be heavy.

## **DEADLIFT**

B-5. The Deadlift is a free-weight exercise to improve lower body muscular strength and endurance (see figure B-3). This lift requires trunk and shoulder stability and strength. Recruits can use it to improve training and testing performance that supports a wide range of combat and occupational physical tasks. The Deadlift modifications alter positions and equipment. An individual recruit using three types of free weights—straight bar or barbell, kettlebells, and dumbbells—conducts this exercise in the following manner:

- The starting position for the Deadlift is the forward leaning stance. Grasp the barbell below the knees and near the shins with the arms fully extended using a closed overhand or alternating grip.
- When lifting with a hex bar, the bar requires a neutral grip.
- When performing the Deadlift with dumbbells or kettlebells, start in the forward leaning stance with one weight at each side using a neutral grip.
- From the starting position, extend the hips and knees while keeping the spine straight and arms extended. As the barbell lifts from the ground move the hips forward to meet it. Pause in an upright posture before returning the weight to the starting position under control. Do not drop the weight. Throughout the lift, do not let the spine or shoulders round forward.
- Knees stay in line over the feet.
- Repeat this movement for the correct number of repetitions and sets required to meet the goal of the free weight session.



**Figure B-3. OPAT-I Deadlift**

## QUADRAPLEX

B-6. The Quadraplex improves balance, coordination, and strength of core muscles in the back of the body: the so-called posterior chain (see figure B-4). These muscles support the Strength Deadlift and balance and coordination during the Standing Long Jump. An individual recruit performs the Quadraplex for a count of 60 seconds in the following manner:

- The starting position for the Quadraplex is 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. Head stays aligned with the spine. Do not let the low 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 3–5 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.
- Hold this position for 60 seconds.
- To rest, return to the starting position for 3–5 seconds until resuming the effort.
- On the command, “STARTING POSITION, MOVE,” return to the starting position to complete the exercise.

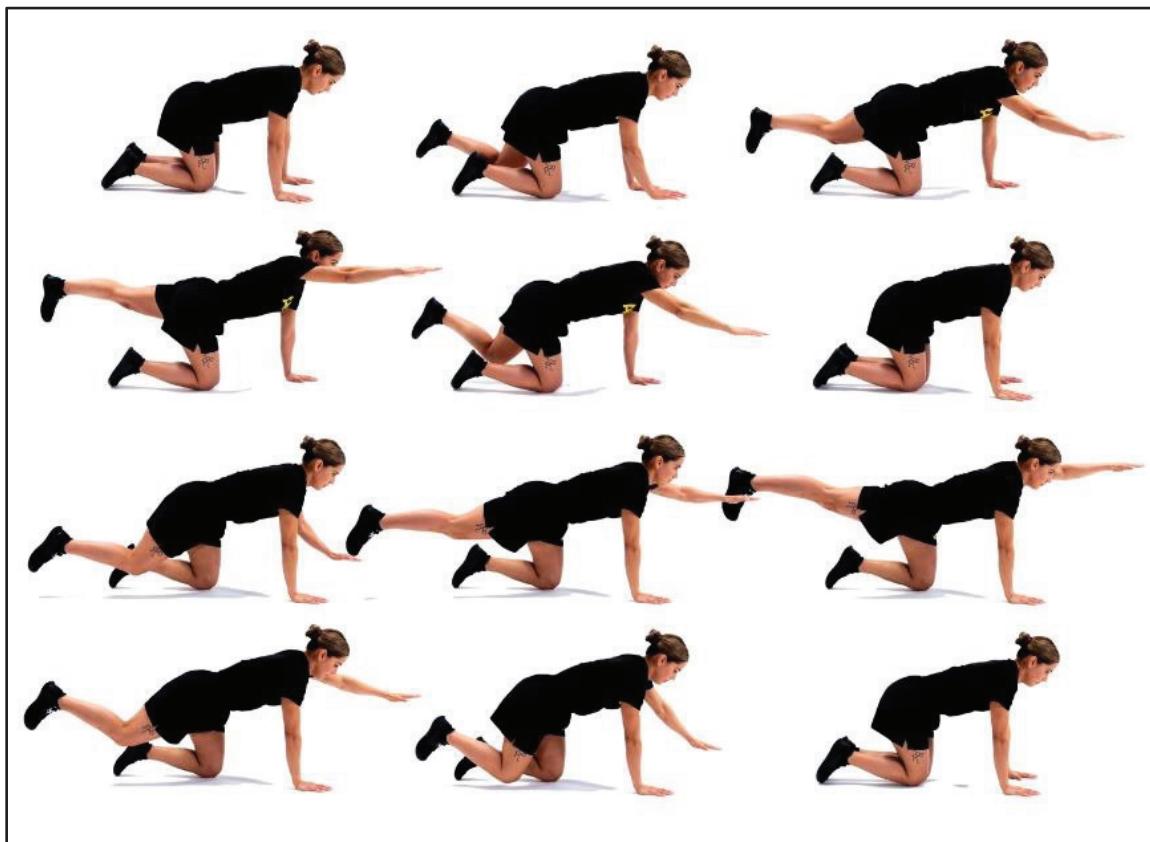


Figure B-4. OPAT-I Quadraplex

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## Appendix C

# Recovery Drills

This appendix covers Recovery Drills. It has two parts: Recovery Drills and Recovery Drills (Modified). Each part of this appendix provides movements and exercises designed to strengthen, stabilize, build flexibility, and improve mobility to a recovering Soldier or recruit.

### **THE RECOVERY DRILL**

C-1. The Recovery Drill (known as RD) includes a wide variety of range of movements that require structural strength, stability, flexibility, and mobility. Positions include seated, standing, prone, and supine 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. See the discussion beginning in paragraph C-10 for modifications. The Army Combat Fitness Test website at <https://www.army.mil/acft> provides detailed descriptions and instructional videos for each testing event. The Central Army Registry website provides video demonstration drills by name at [https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect\\_date=5%2F1%2F2020&search\\_terms=CIMT](https://atiam.train.army.mil/catalog/search?current=true&filetype=mp4&respect_date=5%2F1%2F2020&search_terms=CIMT). (Copy and paste this address after accessing the Central Army Registry website if the demonstrations do not populate.)

### **1. OVERHEAD ARM PULL**

C-2. The Overhead Arm Pull is the first movement (see figure C-1). This movement develops the flexibility of joints in the arms, shoulders, and trunk. Soldiers conduct the movement in formation in the following manner:

- The starting position for the Overhead Arm Pull is the straddle stance with hands on hips. On the command, “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 20–30 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.



**Figure C-1. RD1 Overhead Arm Pull**

## **2. REAR LUNGE**

C-3. The Rear Lunge is the second movement (see figure C-2). Soldiers conduct the movement in formation in the following manner:

- 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. Back remains straight and gaze remains forward. Hold the position for 20–30 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 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

## **3. EXTEND AND FLEX**

C-4. The Extend and Flex is the third movement (see figure C-3). Soldiers conduct the movement in formation in the following manner:

- 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. Gaze remains straight ahead—do not look up. This creates a stretch sensation in the hip and abdominal muscles. The legs and low back should be relaxed with toes on the ground and pointing to the rear. Hold the position for 20–30 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 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

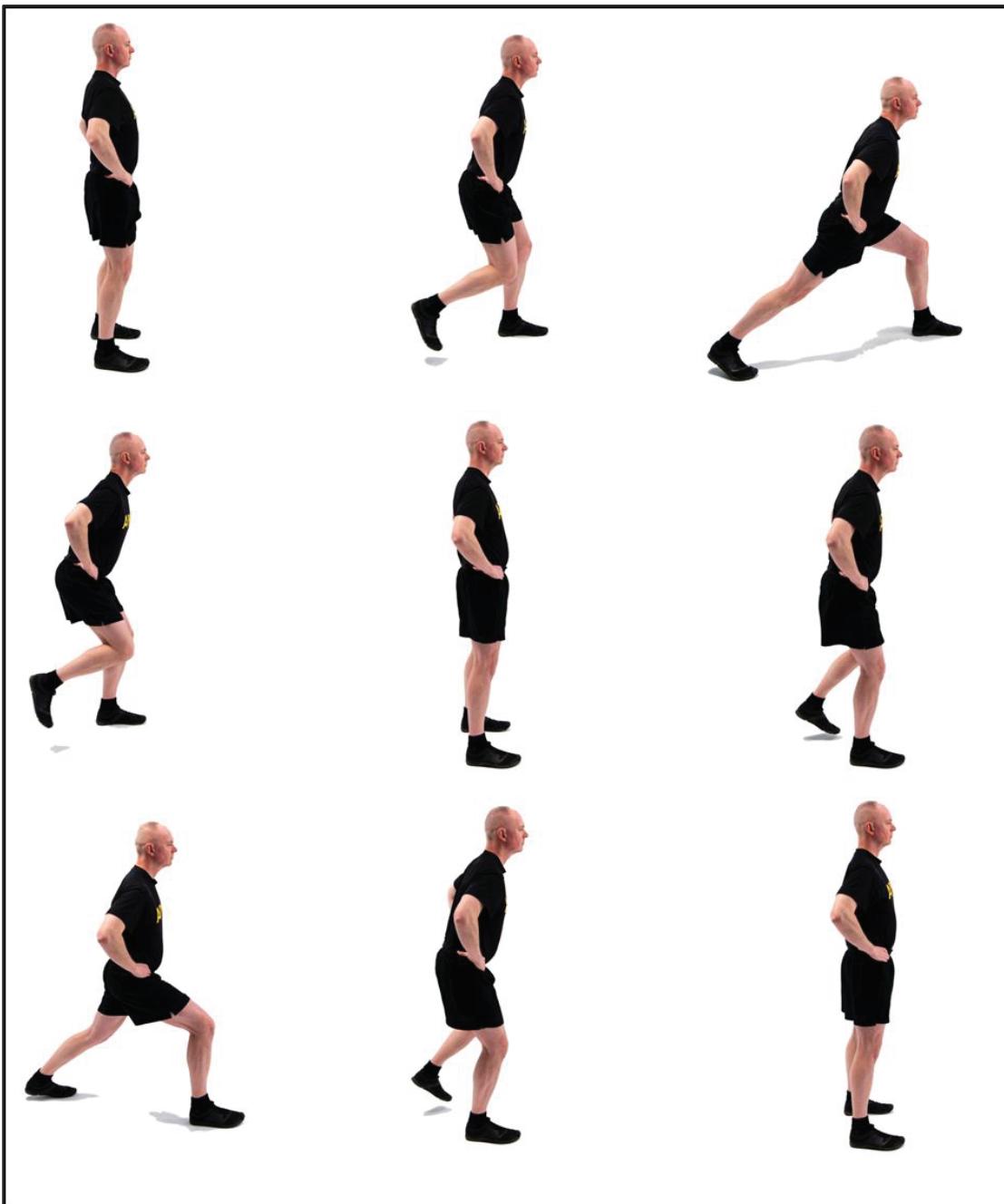


Figure C-2. RD2 Rear Lunge



Figure C-3. RD3 Extend and Flex

## **4. THIGH STRETCH**

C-5. The Thigh Stretch is the fourth exercise (see figure C-4). It develops flexibility in the hip and knee joints. Soldiers conduct the movement in formation in the following manner:

- 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 20–30 seconds.
- On the command, “CHANGE POSITION, READY, STRETCH,” move back through the starting position before changing sides to stretch the right leg. Hold for 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

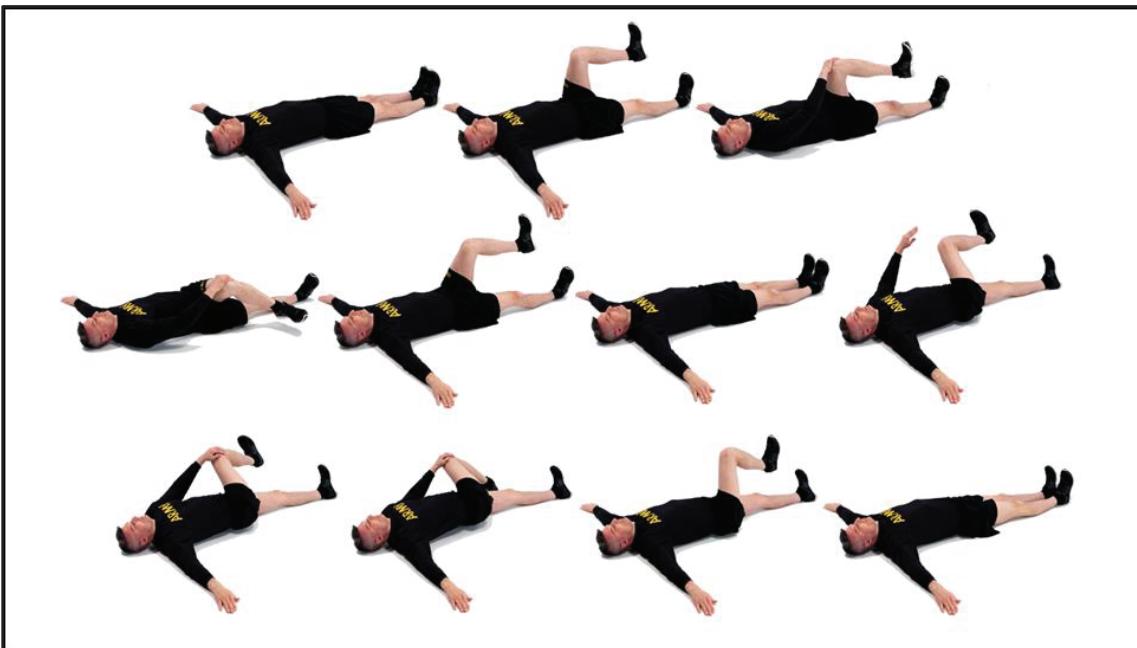


**Figure C-4. RD4 Thigh Stretch**

## **5. SINGLE-LEG OVER**

C-6. The Single-Leg Over is the fifth movement (see figure C-5). This exercise develops flexibility of the hip and low back. Soldiers conduct the movement for 30–60 seconds in formation in the following manner:

- The starting position for the Single-Leg Over is the supine position with arms straight out to the side on ground with palms down with fingers and thumbs extended and joined. 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 20–30 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 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.

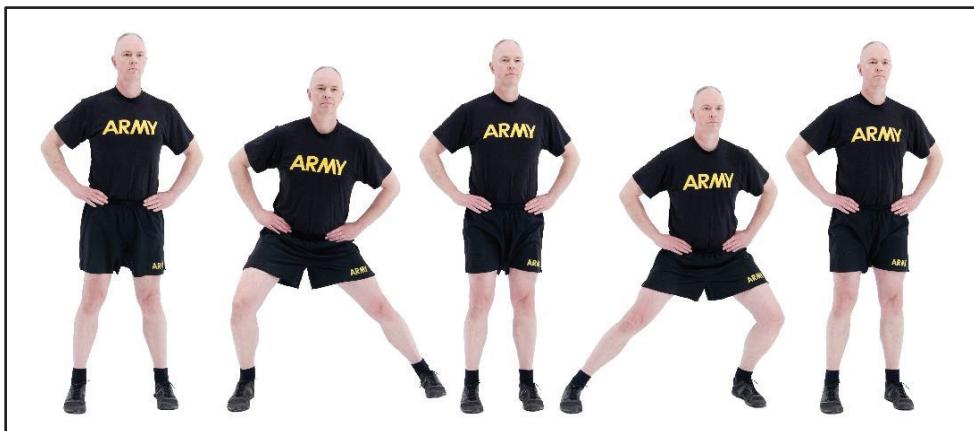


**Figure C-5. RD5 Single-Leg Over**

## 6. GROIN STRETCH

C-7. The Groin Stretch is the sixth movement (see figure C-6). This exercise increases flexibility in the hip joint. Soldiers conduct the movement in formation in the following manner:

- 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. 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 20–30 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. 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 20–30 seconds.
- On count 4, return to the starting position.



**Figure C-6. RD6 Groin Stretch**

## **7. CALF STRETCH**

C-8. The Calf Stretch is the seventh exercise (see figure C-7). This stretch increases flexibility of the ankle. Soldiers conduct the movement in formation in the following manner:

- 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 1–2 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 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.



**Figure C-7. RD7 Calf Stretch**

## **8. HAMSTRING STRETCH**

C-9. The Hamstring Stretch is the final exercise (see figure C-8). This stretch increases flexibility of the knee and hip. Soldiers conduct the movement in formation in the following manner:

- 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 20–30 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.



**Figure C-8. RD8 Hamstring Stretch**

### RECOVERY DRILL (MODIFIED)

C-10. The Recovery Drill (Modified) (known as RD MOD) includes the same exercises as those described in the Recovery Drill but with restricted ranges of motion to accommodate for injury. Positions include modified seated, standing, prone, and supine supported by one or both upper and lower extremities. These modified exercises are ideal for Soldiers who are reconditioning from injury, who are deconditioned, or who are new to the Army.

#### 1. OVERHEAD ARM PULL (MODIFIED)

C-11. The Overhead Arm Pull can be modified by stretching the arms across the upper body instead of overhead (see figure C-9). If possible, perform the standard stretch on the uninjured arm. Soldiers conduct the modified movement in formation in the following manner:

- The starting position for the modified Overhead Arm Pull is the straddle stance with hands on hips.
- On the command, “READY, STRETCH,” raise the left arm across the front of the chest. 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 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.
- 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, and then the position of attention.



**Figure C-9. RD MOD1 Overhead Arm Pull (modified)**

## **2. REAR LUNGE (MODIFIED)**

C-12. The Rear Lunge can be modified by reducing the range of motion for the lunge or by stepping forward into the lunge (see figure C-10). If possible, perform the standard stretch on the uninjured leg. Soldiers conduct the modified movement in formation in the following manner:

- The starting position for the modified Rear Lunge is the straddle stance with hands on hips.
- On the command, “READY, STRETCH,” take a step backward with the left leg, touching down with the ball of the foot directly behind the starting position. Keep the trunk erect and move the pelvis forward. 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 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position.
- On the command, “READY, STRETCH,” repeat the first movement on the right side.
- On the command, “STARTING POSITION, MOVE,” return to the starting position, and then the position of attention.



**Figure C-10. RD MOD2 Rear Lunge (modified)**

## **3. EXTEND AND FLEX (MODIFIED)**

C-13. The Extend and Flex can be modified by reducing weight placed on the arms, by limiting the range of motion, or by remaining standing and arching the spine forward and backward (see figure C-11 and figure C-12). Soldiers conduct the modified movement in formation in the following manner:

- The starting position for the modified Extend and Flex is the front leaning rest position.
- On the command, “READY, STRETCH,” lower the body toward the ground, sagging in the middle and bending the elbows so that the forearms rest on the ground. The gaze remains straight.

ahead—do not look up. The legs and low back should be relaxed with toes on the ground and pointing to the rear. Hold the position for 20–30 seconds.

- On the command, “STARTING POSITION, MOVE,” return to the starting position.
- On the command, “CHANGE POSITION, READY, STRETCH,” keep the hands in place on the ground and slide the trunk and pelvis rearward. Let the knees bend until the buttocks rest on the back of the legs. Keep the head near to the ground to flex the spine and upper back while the arms remain overhead on the ground. Hold the position for 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position and then the position of attention.
- The standing position for the modified Extend and Flex avoids weight bearing on the arms but should not be used in cases of injury to the low back. Hands should be placed on the low back prior to bending backward and on the front of the thighs prior to bending forward. Move in and out of this position for 20–30 seconds or hold for 10–15 seconds and repeat one time.

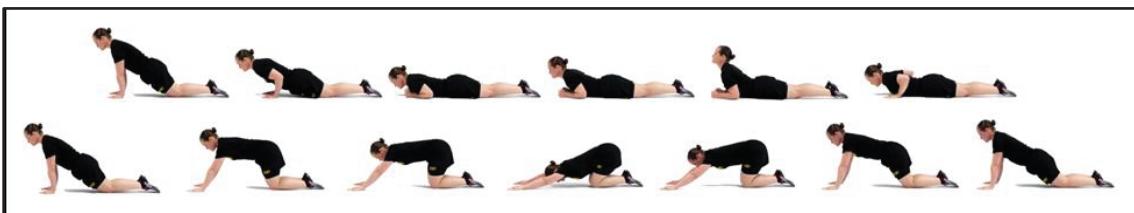


Figure C-11. RD MOD3 Extend and Flex (modified)

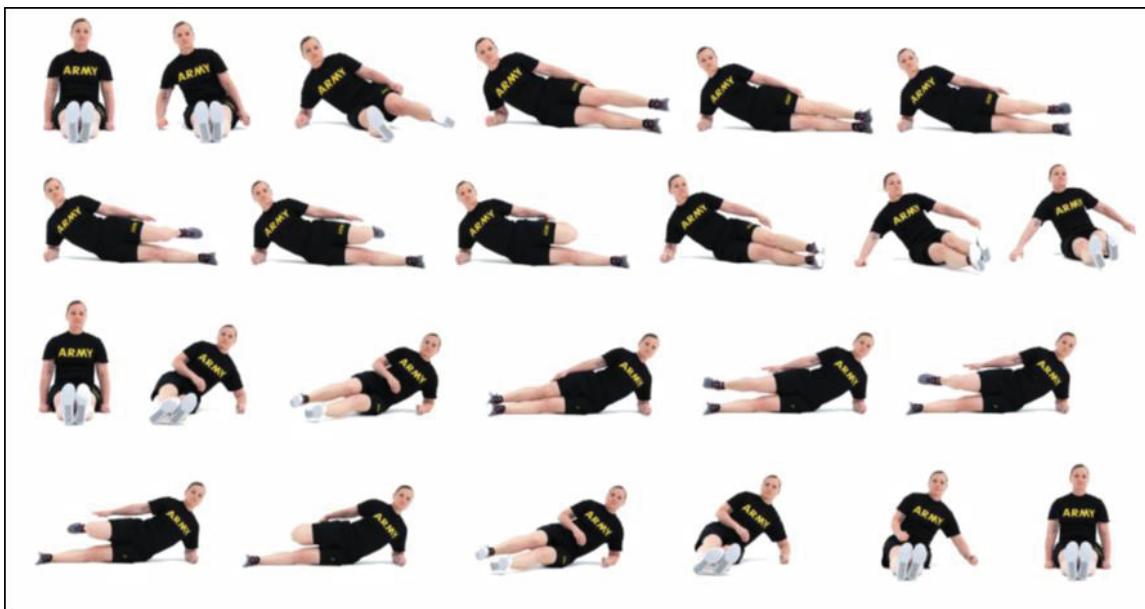


Figure C-12. RD MOD3 Extend and Flex (modified)—standing

## **4. THIGH STRETCH (MODIFIED)**

C-14. The Thigh Stretch can be modified by reducing the knee range of motion (see figure C-13). Soldiers conduct the modified movement in formation in the following manner:

- The starting position for the modified 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 up. Grasp the left ankle and pull toward the left buttock. Ensure the right leg remains straight. Hold this position for 20–30 seconds.
- On the command, “CHANGE POSITION, READY, STRETCH,” move back through the starting position before changing sides to stretch the right leg. Hold for 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position, and then the position of attention.



**Figure C-13. RD MOD4 Thigh Stretch (modified)**

## **5. SINGLE-LEG OVER (MODIFIED)**

C-15. The Single-Leg Over can be modified by decreasing the range of motion, by stretching only one leg, or by modifying the position of the stretch (see figure C-14). Soldiers conduct the movement for 30 to 60 seconds in formation in the following manner:

- The starting position for the modified Single-Leg Over is the supine position with the head on the ground, arms at a 45-degree angle, hips and knees bent with feet on the ground. The knees are bent at 90 degrees and the feet are together.
- On the command, “READY, STRETCH,” rotate the hips to the right and lower the knees toward the ground. Keep the left shoulder and arm on the ground. Hold this position for 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” assume the starting position.
- On the command, “CHANGE POSITION, READY, STRETCH,” rotate the hips to the left and lower the knees toward the ground. Keep the right shoulder and arm on the ground. Hold this position for 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position, and then the position of attention.

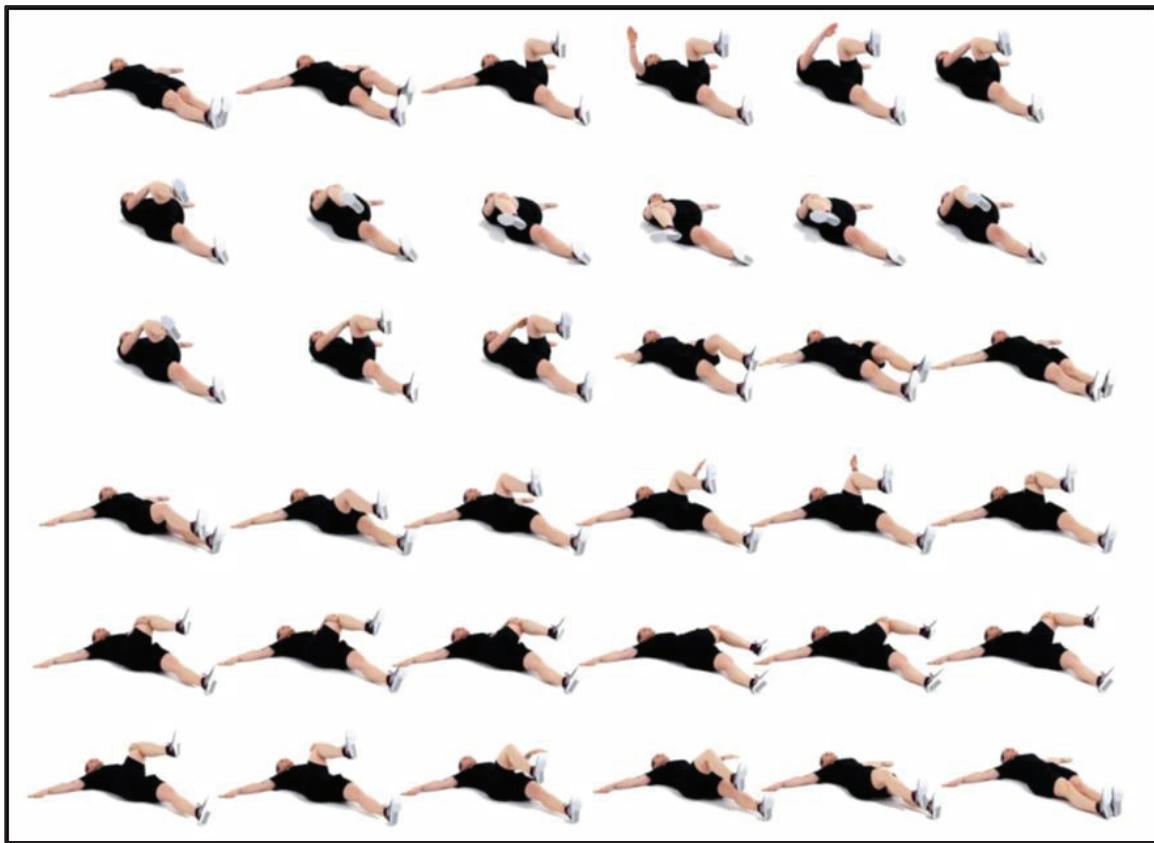


Figure C-14. RD MOD5 Single-Leg Over (modified)

## 6. GROIN STRETCH (MODIFIED)

C-16. The Groin Stretch can be modified by using smaller movements to help increase flexibility in the hip joint (see figure C-15 on page C-12). Soldiers conduct the movement in formation in the following manner:

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



**Figure C-15. RD MOD6 Groin Stretch (modified)**

## 7. CALF STRETCH (MODIFIED)

C-17. The modified Calf Stretch increases flexibility of the ankle (see figure C-16). Soldiers conduct the movement in formation in the following manner:

- The starting position for the modified 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 1–2 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. Keep the right foot pointing forward throughout the stretch. Hold either stretch position for 20–30 seconds.
- On the command, “STARTING POSITION, MOVE,” return to the starting position and then the position of attention.



**Figure C-16. RD MOD7 Calf Stretch (modified)**

## 8. HAMSTRING STRETCH (MODIFIED)

C-18. The modified Hamstring Stretch is the final exercise for recovery (see figure C-17). This stretch increases flexibility of the knee and hip. Soldiers conduct the movement in formation in the following manner:

- The starting position for the modified Hamstring Stretch is the seated position, arms at the sides and palms on the floor.
- On the command, “READY, STRETCH,” reach forward with both hands until a stretch is felt in the back of the thigh. Keep the knees straight without locking them. Hold this stretch position for 20–30 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.
- A modification of this stretch is the single-leg hamstring stretch (see figure C-18). The Soldier bends one knee while keeping the other straight and reaches toward the foot until a stretch is felt in the back of the thigh. Hold this stretch position on each side for 20–30 seconds.

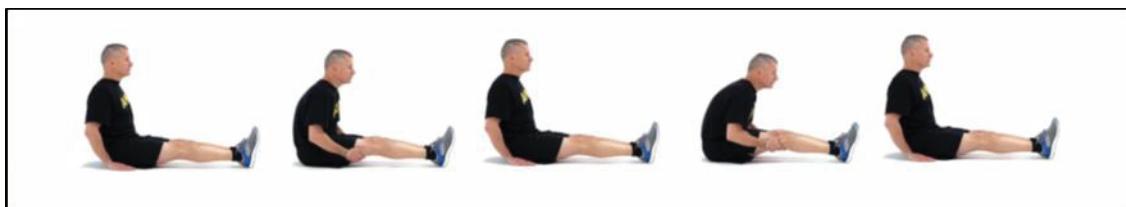


Figure C-17. RD MOD8 Hamstring (modified)

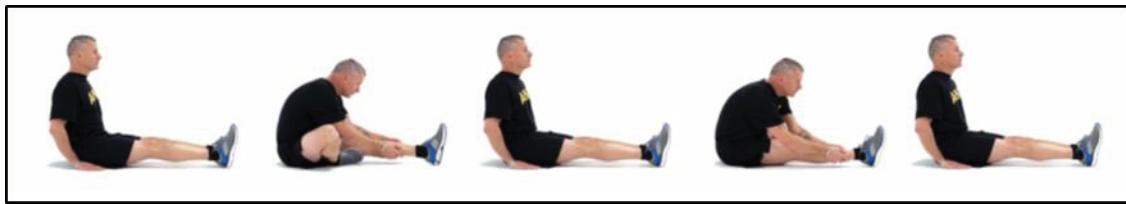


Figure C-18. RD MOD8 Hamstring (modified)—single leg

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## Appendix D

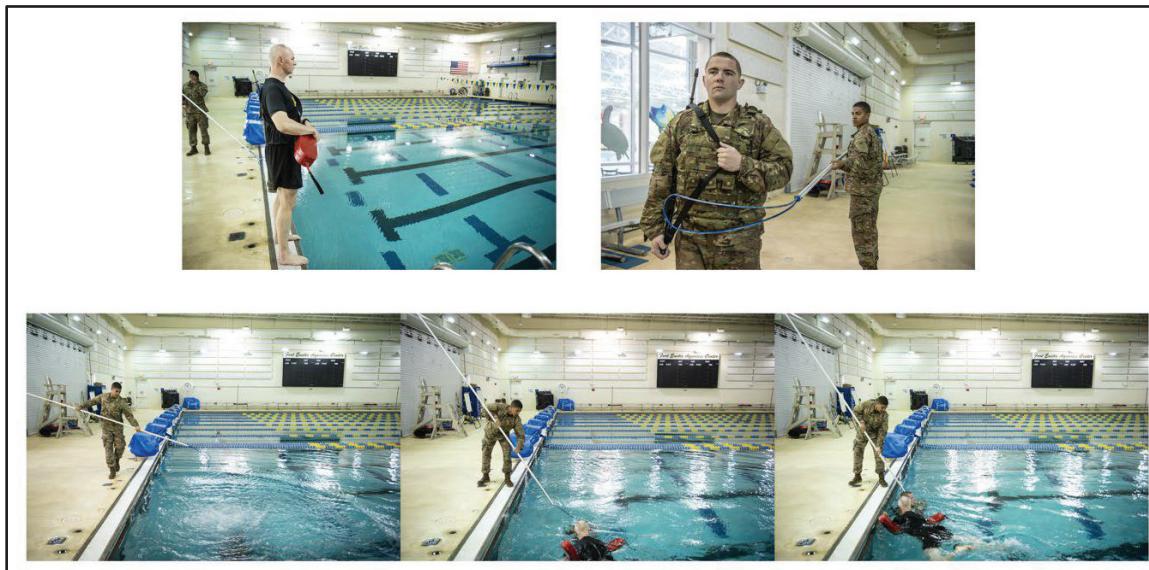
# Army Water Survival Training

Army Water Survival Training (AWST) builds Soldier confidence and survivability in and around water. AWST teaches the skill, endurance, strength, and mental toughness required for waterborne field training and combat environments. For all tasks and tests, Soldiers will be prepared to wear ACUs, boots, and their own IOTV without plates or neck collar. For certain tasks, Soldiers will use an M16- or M4-series training aid. This appendix discusses the shepherd's crook rescue and basic survival swimming. Chapter 7 of FM 7-22 addresses safety guidance during planning, preparation, and execution of water survival training.

### SHEPHERD'S CROOK RESCUE

D-1. The Shepherd's Crook Rescue is the recommended technique for bringing a Soldier to the edge of the pool for recovery or extraction. This technique avoids dependence on ropes tied to the Soldier which can become entangled in the Soldier's equipment. If no rescue swimmer is present, this technique can be conducted by a member of the AWST personnel working on his or her own (see figure D-1 on page D-2). Soldiers conduct the Shepherd's Crook Rescue on a Soldier who has submerged to the bottom of the deep end of the pool in the following manner:

- The shepherd's crook device is lowered into the water by a member of on-deck AWST personnel.
- The rescue swimmer remains at the surface and avoids obstructing the on-deck personnel.
- The second swimmer submerges to the bottom of pool.
- The on-deck personnel maneuver the crook around the front of the submerged Soldier, hooking him or her at the waistline.
- The on-deck personnel use the crook to pull the submerged Soldier to the surface, and then to the edge of the pool.
- The rescuer swimmer may assist in bringing the Soldier to the edge of the pool and securing him or her there.



**Figure D-1. AWST Shepherd's crook rescue**

## **BASIC SURVIVAL SWIMMING**

D-2. Basic survival swimming (known as BSS) develops elementary skills to help Soldiers survive in water. Water survival skills are critical for conducting operations in and around aquatic environments. Paragraphs D-3 through D-8 list basic survival swimming tasks leaders can incorporate into physical training schedules or treat as a special training events.

### **1. TROUSER INFLATION AND FLOAT**

D-3. Figure D-2 shows the Trouser Inflation and Float. The Trouser Inflation and Float is the first skill in the Basic Survival Swimming Training. Soldiers wear ACUs, boots, and IOTV. They do not carry a weapon. Soldiers conduct the Trouser Inflation and Float in the following manner:

- Perform a stride entry from the edge of the pool, bringing the legs together as they contact the water. Simultaneously, slap the water with the arms, palms down. This technique keeps the head above or closer to the surface of the water.
- Use the Emergency Quick Release on the IOTV to release it, rolling the body if necessary to allow the IOTV to drop to the bottom of the pool.
- Perform a hanging float.
- Remove one boot at a time, tucking the first boot under the armpit.
- Tie the boot laces together and put the boots around the neck.
- Remove the trousers, button the fly, and tie off each trouser leg using the drawstring to tie a bow. Next, tie the ankles together using a square knot.
- Inflate the trousers using either the Sling or Splash method.



Figure D-2. BSS1 Trouser Inflation and Float

D-4. For the Sling Method, place the trousers on top of the water, legs directed away from the body. Soldiers then do the following:

- Grasp the waistband with both hands to form a circular opening at the surface.
- Cross the left arm over the right before scissor-kicking while swinging the trousers behind and over the head.
- Quickly bring the trousers forward and down into the water, trapping air in the trouser legs.
- Immediately gather the waistband to keep the air in the legs.
- Grasp the waistband with one hand while bringing the other arm over the trouser leg.
- Float over the trousers, sculling with the free hand while grasping the waistband with the other.
- Switch hands and repeat as needed to stay afloat.

D-5. For the Splash Method, there are two options. For the first, place the trousers on top of the water, with the tied-off trouser legs directed away from the body. Soldiers then do the following:

- Grasp the waistband at the fly with one hand to hold it open.
- Immediately splash water and air into the opening with the free hand, stopping the motion at the opening.
- After trapping enough air to inflate the legs, grasp the waistband in one hand to maintain inflation of each trouser leg.
- Bring the other arm over the trouser leg.
- Float over the trousers, sculling with the free hand while grasping the waistband with the other.
- Switch hands and repeat the inflation as needed to stay afloat.

D-6. For the second Splash Method, place the tied-off legs over the head to rest against the back of the neck. Soldiers then do the following:

- Hold the waist open with one hand. Splash water and air into the opening with the free hand until enough air is trapped to inflate the legs.
- Float on the back, holding the waist closed with one hand, resting the head on the inflated trouser legs while floating.

## **2. BOB AND TRAVEL**

D-7. Figure D-3 demonstrates the Bob and Travel. Soldiers conduct the Bob and Travel without wearing the IOTV in the following manner:

- Sling the weapon over the right shoulder, grasping the sling close to the sling clamp with the left hand at the chest and the weapon butt plate in the right hand. The weapon is pulled tight to the back.
- Take a deep breath before stepping off the pool deck with knees slightly flexed.
- While submerging, exhale slowly through the nose, controlling the weapon.
- Drop to the pool floor, absorbing the impact with the knees.
- Place the weapon on the pool floor.
- Squat as deeply as needed to push off the bottom of the pool at a 45-degree angle to return to the surface. This is the Travel portion of the task.
- Move arms overhead while squatting, and keep them overhead until reaching the surface where they extend from the sides.
- Upon reaching the surface, take a full breath, and pull the knees toward the chest. This is the Bob portion of the task.
- Re-submerge by straightening the legs and bringing the arms forcefully overhead. As the palms move upwards to break the water surface, they generate downward force.
- After dropping to pool bottom, repeat the Travel and Bob tasks for 15 meters before exiting the pool.



Figure D-3. BSS2 Bob and Travel

### **3. TWO-STROKE TEST**

D-8. Figure D-4 and figure D-5 illustrate the Two-Stroke Test. The Two-Stroke Test is the third task in the Basic Survival Swimming Training. Soldiers may conduct this test in a pool (25 yards or 25 meters in length) in the following manner:

- Sling the weapon on the right shoulder and secure it by grasping the sling close to the sling clamp with the left hand at the chest and the weapon butt plate in the right hand. The weapon is pulled tight to the back.
- Perform the stride entry from the pool deck, bringing the legs together as they contact the water.
- Use the sidestroke to travel the length of the pool. The right shoulder and weapon stay close to the surface.
- Do not let feet touch the floor of the pool until reaching the end of the 25-meter length.
- Exit the pool before re-entering at the deep end to swim the same distance using the breaststroke.
- Sling the weapon across the back.

D-9. Soldiers use two swimming strokes for the Two-Stroke Test. The sidestroke is one of the most efficient strokes because it gives the Soldier the ability to rest on top of the water. It is also the stroke used in the Collar Tow. The breaststroke is the most useful stroke for military swimming. It is efficient when swimming through debris and in full clothing and gear, and it provides good visibility. During the Two-Stroke Test, Soldiers may submerge their head during the pull phase of the breaststroke (see figure D-5). The test ends when the Soldier has reached the end of the length.



**Figure D-4. BSS3 Two-Stroke Test, entry and sidestroke**



**Figure D-5. BSS3 Two-Stroke Test, breaststroke**

# Glossary

## SECTION I – ACRONYMS AND ABBREVIATIONS

<b>ACFT</b>	Army Combat Fitness Test
<b>ACFT MOD</b>	Army Combat Fitness Test (Modified)
<b>ACU</b>	Army combat uniform
<b>APPF</b>	Army physical fitness uniform
<b>AR</b>	Army regulation
<b>ATP</b>	Army techniques publication
<b>AWST</b>	Army Water Survival Training
<b>BSS</b>	basic survival swimming (figure caption)
<b>CIMT</b>	United States Army Center for Initial Military Training
<b>CWST</b>	Combat Water Survival Test
<b>DA</b>	Department of the Army
<b>DD</b>	Department of Defense (form)
<b>FM</b>	field manual
<b>H2F</b>	holistic health and fitness
<b>IOTV</b>	improved outer tactical vest
<b>MCTP</b>	Marine Corps techniques publication
<b>MOS</b>	military occupational specialty
<b>NCOIC</b>	noncommissioned officer in charge
<b>OIC</b>	officer in charge
<b>OPAT</b>	Occupational Physical Assessment Test
<b>OPAT-I</b>	Occupational Physical Assessment Test improvement (figure caption)
<b>Pam</b>	pamphlet
<b>PD</b>	Preparation Drill (figure caption)
<b>PD MOD</b>	Preparation Drill (Modified) (figure caption)
<b>RD</b>	Recovery Drill (figure caption)
<b>RD MOD</b>	Recovery Drill (Modified) (figure caption)
<b>TC</b>	training circular
<b>TRADOC</b>	United States Army Training and Doctrine Command
<b>U.S.</b>	United States

Terms included in the glossary are not codified Army terms. They are included for clarity for the reader.

## **SECTION II – TERMS**

**2-mile run**

The sixth and final event of the Army Combat Fitness Test.

**3 repetition maximum deadlift**

The first event in the Army Combat Fitness Test.

**aerobic endurance**

A component of fitness that involves long-duration, low-intensity physical activity.

**anaerobic endurance**

A component of fitness that involves short-duration, high-intensity physical activity.

**conditioning**

A state of health and well-being that enables the performance of daily activities including exercise and occupational tasks.

**coordination**

The ability to synchronize limb, torso, and head movements at varying speeds of motion.

**flexibility**

The range of motion across single or multiple joints that allows the body to be positioned for optimal movement.

**hand-release push-up**

The third event in the Army Combat Fitness Test.

**holistic health and fitness**

The Army's doctrinal system for physical and nonphysical readiness training of Soldiers.

**intensity**

The amount of effort exerted to complete an exercise.

**interval aerobic run**

The final of four events in the Occupational Physical Assessment Test.

**leg tuck**

The fifth event in the Army Combat Fitness Test.

**muscular endurance**

A component of fitness that involves sustained bouts of lower intensity strength.

**pace**

The ability to adjust the speed of an activity to manage fatigue.

**physical readiness**

The ability to meet the physical demands of any duty or combat position, move lethally on the battlefield, accomplish the mission and continue to fight, win, and come home healthy.

**power**

The component of fitness associated with short-duration, explosive movements performed with heavy loads and/or at high speeds.

**profile**

Official medical document (DA Form 3349) that describes which exercises, drills, and activities can be done to standard, must be modified, or cannot be performed are restricted.

**reconditioning**

Physical training regimens designed to improve or rehabilitate a certain part of the body to increase activity or to recover from illness or injury.

**recovery**

The period of four to eight weeks when the Soldier begins to prepare for the primary mission. It is characterized by low workloads and general adaptation and recuperation.

**rehabilitation**

The process of restoring health or conditioning through training and therapy after an illness, injury, or other debilitating event.

**running**

A recurring change of support from one foot to the other.

**seated power throw**

One of the first three events in the Occupational Physical Assessment Test.

**sprint-drag-carry**

The fourth event in the Army Combat Fitness Test.

**standards**

Something established by authority, regulation, policy, or doctrine as the accepted requirement.

**standing long jump**

One of the first three events in the Occupational Physical Assessment Test.

**standing power throw**

The second event in the Army Combat Fitness Test.

**strength deadlift**

One of the first three events in the Occupational Physical Assessment Test.

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*FM 1-02.1 Operational Terms*. 21 November 2019.

*FM 7-22. Holistic Health and Fitness*. 01 October 2020.

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Most Army doctrinal publications and Army regulations are available online:

<https://armypubs.army.mil/>.

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*FM 7-0. Train to Win in a Complex World*. 05 October 2016.

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Central Army Registry website. CIMT.

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Medical Readiness Portal.

<HTTPS://MEDPROS.MODS.ARMY.MIL/EPROFILE/DEFAULT.ASPX?RETURNURL=%2FPROFILE%2FADMIN%2FUSERSMANAGER.ASPX>.

### PRESCRIBED FORMS

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<https://armypubs.army.mil/>.

*DA Form 705. Army Combat Fitness Test Scorecard*.

*DA Form 7888. Occupational Physical Assessment Test Scorecard*.

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By Order of the Secretary of the Army:

**JAMES C. MCCONVILLE**  
*General, United States Army*  
*Chief of Staff*

Official:



**KATHLEEN S. MILLER**  
*Administrative Assistant*  
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