US Naval Academy Candidate Fitness Assessment (CFA)

http://www.usna.edu/admissions/cfainstructions.htm

The six test events of the CFA are administered consecutively in less than a 40-minute time period. Candidates should attempt to do their best on all six events, keeping in mind that the events are sequenced to produce a cumulative loading effect. In other words, after completing the first five events, it is doubtful that a candidate will score his/her best on the 1-mile run. This has been considered in the development of the criterion-referenced standards, which will be used to evaluate performance in each of the six events. Candidates’ raw scores will be converted to scale scores (0-100 points) based upon their performance on each event. The 100-point maximum score, by event and gender, are listed in the table below. A candidate who achieves the 100-point level on any of the first five events should not attempt further repetitions, as this will not improve his/her score.

<table>
<thead>
<tr>
<th></th>
<th>B-Ball Throw</th>
<th>Pull-Ups</th>
<th>Shuttle Run</th>
<th>Crunches</th>
<th>Push-Ups</th>
<th>1-Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td>102</td>
<td>18</td>
<td>7.8</td>
<td>95</td>
<td>75</td>
<td>5:20</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>66</td>
<td>7</td>
<td>8.6</td>
<td>95</td>
<td>50</td>
<td>6:00</td>
</tr>
</tbody>
</table>

**Testing Sequence**
The test sequence will follow the order listed below. This order cannot be modified. There are no exceptions to this sequence or timing.

<table>
<thead>
<tr>
<th>Events</th>
<th>Test Start Time</th>
<th>Testing Time</th>
<th>Rest</th>
<th>Total Elapsed Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball Throw</td>
<td>0:00</td>
<td>2 minutes</td>
<td>3 minutes</td>
<td>5:00</td>
</tr>
<tr>
<td>Pull-Ups</td>
<td>5:00</td>
<td>2 minutes</td>
<td>3 minutes</td>
<td>10:00</td>
</tr>
<tr>
<td>Shuttle Run</td>
<td>10:00</td>
<td>2 minutes</td>
<td>3 minutes</td>
<td>15:00</td>
</tr>
<tr>
<td>Crunches</td>
<td>15:00</td>
<td>2 minutes</td>
<td>3 minutes</td>
<td>20:00</td>
</tr>
<tr>
<td>Push-Ups</td>
<td>20:00</td>
<td>2 minutes</td>
<td>3 minutes</td>
<td>25:00</td>
</tr>
<tr>
<td>1-Mile Run</td>
<td>30:00</td>
<td>10 minutes</td>
<td>5 minutes*</td>
<td>40:00</td>
</tr>
</tbody>
</table>
Testing Instructions
The following paragraphs describe the equipment, facilities, personnel, instructions, administration, timing techniques, and scorers’ duties for each event.

**Kneeling Basketball Throw:** measures ability to generate shoulder girdle power and total coordination/balance in a stationary position.
The candidate must:
- Keep his/her knees parallel to and behind the baseline and on the floor during the event.
- May use a 1-inch mat to cushion the knees.
- Execute three trials in a 2-minute time period.
- May use the non-throwing hand to steady the ball.
- Not touch the floor beyond the baseline with any part of the body until the basketball has landed.
The scorer will:
- Note the event start time (should be 0:00).
- Extend the 100-foot tape measure the length of the testing area, perpendicular to the throwing baseline.
- Mark the point of impact with a pointer/yardstick for all three trials.
- Measure the perpendicular distance from the marked point of impact to the baseline.
- Record the event score for each trial to the nearest foot.
**Cadence Pull-Ups**: (Female candidates should take this exam unless unable to execute 1 cadence pull-up) measures muscular strength and endurance of the shoulder, back, and arms and is an indicator of the ability to lift one's body weight in a pulling motion.

The candidate must:
- Mount the bar with a pronated grip (back of the hands facing the candidate) with arms fully extended in a static hang.
- Not swing, kick, or bicycle legs during upward movement.
- Raise the body until the jaw line is above the bar and parallel to the ground.
- Execute each repetition on cadence (command).
- Return to a fully-extended static hang position to complete each repetition.

The scorer will:
- Note the event start time (should be 5:00 elapsed).
- Before giving the "GO" command, ensure the candidate's elbows are fully extended and shoulders are relaxed in a "dead hang". If a candidate needs to use a chair to grip the bar, pull the chair away and take the time to ensure the candidate is in a straight-armed, relaxed shoulder "dead hang" before beginning. Do not allow the candidate to jump off the ground or a chair to gain momentum for the first repetition. Require a short fully-extended period before giving the "GO" command.
- On the command "GO" start the event. When the candidate's chin rises above the bar, command "DOWN". When the candidate reaches the starting position with arms fully extended, command "UP". At the end of 2 minutes, command "STOP", and record the number of correctly executed repetitions.
- May steady the candidate by extending an arm in front of him/her on each repetition.
- Monitor each repetition to determine that the candidate's chin is parallel to the ground and over the bar in the up position and that arms are fully extended in the down position.
- When a candidate reaches the maximum number of repetitions in under the 2-minute period (18 for men; 7 for women), the command "STOP" will be given.

![Correct execution- chin is over but not touching the bar. Assistant may steady swing.](image.png)
**Flexed-Arm Hang:** (Required for female candidates who are unable to execute 1 pull-up) an alternative measure of muscular strength and endurance. If a woman can successfully perform 1 correct cadence pull-up, it is to her advantage on the scoring scale to use the pull-up result instead of a flexed-arm hang. The scale score (0-100) for 1 cadence pull-up is higher than the highest scale score for a maximum score on the flexed-arm hang.

The candidate must:
- Stand on a chair, steps, box, or ladder or be boosted up to the bar by an assistant until her chin is above the bar.
- Mount the bar with a pronated grip (back of the hands facing the candidate) with chin parallel to the floor and above the bar.
- Step off from the platform or assistance device.
- Not swing, kick, or bicycle legs during the event.
- Maintain a flexed-arm position with chin above the bar and jaw line parallel to the ground throughout the event.

The scorer will:
- Note the event start time.
- Give the “GO” command to start the event and the stopwatch.
- Monitor body position to determine that the chin remains above the bar and the jaw line is parallel to the floor.
- Record the score in seconds.

Stopwatch is started when arms are fully flexed and chin is leveled above bar. "GO" command is given.
**Shuttle Run**: measures the ability to move rapidly while changing directions. Indicator of anaerobic power, agility, and quickness.

The candidate must:
- Begin the test with his/her entire body behind the start/finish line.
- On the "GO" command, sprint 30 feet to the turn-around line. His/her foot and hand must simultaneously touch the floor on or beyond the turn-around line. Candidate will then sprint back to the start/finish line, touch on or beyond the start/finish line, sprinting back to the 30-foot line. Candidate touches on or beyond the turn-around line and then sprints back across the start/finish line to complete the trial.
- Execute two trials with a 1-minute rest between trials.

The scorer will:
- Note the event start time (Should be 10:00 elapsed).
- Measure the shuttle run course of 30 feet from a baseline.
- Give the "GO" command to start the event; start stopwatch.
- Monitor the candidate to determine that he/she places hand and foot beyond the measured line on each turn.
- Record the best of the two trials in seconds/tenths of seconds.
Abdominal Crunches: measures abdominal/core body muscular endurance.
The candidate must:
- Assume a supine (back on floor), bent-knee position (approximately 90-degree bend) on a mat with arms crossed, fingers extended, touching the top of the shoulders, with shoulder blades touching the floor/mat.
- Upon the command "GO", flex from the hip, raising the elbows so that they touch the front midpoint (or higher) of the thigh without finger tips losing contact with the top of the shoulders; extend from the hip until the shoulder blades touch the floor/mat.
- Candidates cannot rest in the down position. Resting is only permitted in the up position. Fingers must stay in contact with the top of the shoulders while resting, and candidates cannot grab their legs or touch the ground with their hands.
The scorer will:
- Note the event start time (should be 15:00 elapsed).
- Monitor the start position to determine that the candidate’s shoulder blades are touching the mat, fingers are touching the shoulders, knees are bent approximately 90 degrees, and an assistant is properly holding the candidate’s feet (hands only on top of each ankle or foot).
- Give the command "GO" and start a stopwatch for the 2-minute trial.
- Count one repetition each time the candidate’s shoulder blades touch the floor/mat.
- Monitor body position making sure during each repetition that the buttocks stay in contact with the mat, knees are bent appropriately, hands remain in contact with the shoulders, elbows make contact with the mid-thigh, and shoulder blades touch the floor/mat.
- Verbalize "NO" for any repetition that does not meet the criteria listed above.
- Stop the test at the 2-minute mark and record the number of repetitions.
Push-ups: measures upper body muscular endurance.
The candidate must:
- Assume a prone (abdomen toward the ground) position supported on one knee on a 1-inch mat or a hard surface floor.
- On the command "READY POSITION", assume the front-leaning rest position (arms extended) by placing your hands where they are comfortable (Width is variable). Feet may be together or up to 12 inches apart. When viewed from the side, your body should form a straight line from your shoulders to your ankles.
- On the command "GO", begin the push-up event by bending elbows and lowering entire body as a single unit until your upper arms are at least parallel to the ground (90-degree bend). Return to the starting position by extending arms and raising entire body as a single unit until arms are fully extended.
- May rest in the up position, flexing or bowing the back as long as hands and feet remain in contact with the floor, and no other body part touches the floor. Must return to the generally straight body position before attempting another repetition.
The scorer will:
- Note the event start time.
- Give the command "GO" and start a stopwatch for a 2-minute trial.
- Monitor each repetition, making sure body remains straight, moving as a single unit, upper arm is parallel to the floor in the down position, and the arms come to full extension in the up position.
- Verbalize "NO" for any repetition that does not meet the criteria listed above.
- Stop the test at the 2-minute mark and record the number of repetitions.
- Terminate the event if the candidate lifts a hand or foot off the ground or touches the ground with any body part other than the hands or feet.
1-Mile Run: measures aerobic capacity and endurance.

The candidate must:
- Run continuously for one mile (walking is allowed although strongly discouraged).

The scorer will:
- Certify the 1-mile run distance.
- Note the start time (should be 30:00 elapsed)
- Give the command “GO” and start a stopwatch.
- Monitor the candidate to make sure that he/she does not:
  - Receive physical help during the event.
  - Leave the designated running course for any reason.
  - Receive pacing by another person.
- Stop the watch as the candidate crosses the finish line, and record the score in minutes and seconds.