Fayetteville Fire/Emergency Management

Physical Agility Test

Fayetteville Fire E/M
Agility Test
Candidate Orientation Guide

Overview

This Fayetteville Fire E/M test was designed based on the need for consistent test administration that is fair to all candidates. The test consists of 7 separate events. The test is a sequence of events that requires the candidate to progress from event to event in a continuous manner. Successful completion of the test allows the department to obtain a pool of trainable candidates who are physically able to perform essential job tasks at fire scenes.

This is a Pass/Fail test with a maximum total time of 10 minutes and 20 seconds.

In these events a 50lb weight vest is worn for the entire duration. This weight vest simulates the weight of self-contained breathing apparatus (SCBA) and firefighter turnout gear.

Candidates are encouraged to wear athletic type clothing and footwear with no open heel or toe. Watches and loose or restrictive jewelry are not permitted. Additionally, candidates must wear a hard hat/helmet with a chin strap and work gloves, both of which are provided on site, by the department.

All props were designed to obtain the necessary information regarding your physical ability. The tools and equipment were chosen to provide the highest level of consistency, safety and validity in measuring your physical abilities. A schematic drawing of the test is included in this orientation material; however, the course layout may vary in order to conform to the fire departments test area. However, the events are always the same.

The events are placed in a sequence that simulates their use in a fire scene. The test allows for a walk/cool down period in between each event. To provide the highest level of safety, no running is allowed in between events. The walk allows the candidate approximately 20 seconds to recover and regroup before each event.

To ensure accuracy, two stopwatches are used for each candidate. One stopwatch is designated as the official test time stopwatch. The second is designated as the back up stopwatch. In the event of failure on the part of the official stopwatch, the time on the back up stopwatch is used. The total allowable time for the completion of the entire test is 10 minutes and 20 seconds. If the time elapses prior to completion of the test, the test is concluded and the candidate fails the test.

The Fayetteville Fire E/M Agility Test consists of the following sequential events:

Stair Climb
Search
Hose Drag and Pull
Forcible Entry/Ventilation
Ladder Extension
Ceiling Breach and Pull
Rescue

STEP 1: Stair Climb

Equipment
Hi Rise pack (hose bundle) consisting of 50 ft of 1 ¾ hose line secured into a carrying bundle.
Purpose
This event is designed to simulate the critical task of climbing stairs in full protective clothing while carrying a high-rise pack (hose bundle). This event challenges the candidates' aerobic capacity, lower body muscular endurance and ability to balance. In addition to the aerobic energy system, the following muscle groups are affected: Quadriceps, hamstrings, glutes, calves, lower back stabilizers
Event
For this event a hi-rise pack (hose bundle) will be placed on the candidates shoulder. The candidate must carry the hi-rise pack for the duration of this event only.
The timing of the test begins after the hi-rise pack is placed over the candidates shoulder and the proctor calls out "START".
Climb the stairs to the 4th floor and back down to the 1st floor two times. After the 2nd time down, place the hi-rise pack where it was picked up, Then:
Climb the stairs to the 4th floor and back down to the 3rd floor, ending at the attic entrance
Failures
During the climbs the candidate must use each step. Skipping steps, climbing 2 or 3 at a time is not permitted. Only 2 warnings are given. The third infraction constitutes a failure, the test is stopped and the candidate fails the test.
NOTE: For safety reasons, the handrail can be used as much as needed by the candidate.

STEP 2: Search

Equipment
Search rope
Bell/buzzer
Purpose
This event is designed to simulate the critical task of searching for a fire victim with limited visibility in an unpredictable area. This event challenges the candidate's aerobic capacity, upper body strength and endurance, anaerobic endurance and kinesthetic awareness. In addition to the aerobic energy system, the following muscle groups are affected: chest, shoulder, triceps, quadriceps, abdominals and lower back.

Event
Enter the attic and crawl, following a rope which is tied off. The candidate will crawl down the center of the attic to the other end (35 feet), and back to the entrance (35 feet), for a total of a 70 foot crawl with limited visibility. When the candidate reaches the far end of the attic, they will ring the bell to notify proctors that they have reached the wall. They will then turn around and crawl back.
Exit the attic and return to the 1st floor via the stairs used in STEP 1
Failures
The candidate requests assistance requiring assistance out of the limited visibility area, requiring lights and/or guidance: the test is stopped and the candidate fails the test.

STEP 3: Hose Drag and Pull

Equipment
200 feet of double jacketed 1 ½ hose. Hose will be marked at 8 feet past the nozzle to indicate the maximum amount of hose the candidate is permitted to drape across the shoulder or chest. The hose is also marked at 50 feet past the nozzle to indicate the amount of hose that the candidate must pull into the marked boundary box before completing the test.
Automatic fog nozzle with pistol grip

Purpose
This event is designed to simulate the critical tasks of dragging an uncharged hose line from the fire apparatus to the fire occupancy and pulling an uncharged line around obstacles while remaining stationary. This event challenges the candidates aerobic capacity, lower body muscular strength and endurance, upper back muscular strength and endurance, grip strength and endurance and anaerobic endurance. In addition to aerobic and anaerobic energy systems, the following muscle groups are affected: quadriceps, hamstrings, glutes, calves, lower back stabilizers, biceps, deltoids, upper back and muscles of the forearm and hand.

Event
Grasp the automatic nozzle, attached to 200 ft of 1 ½ hose. Place the hose line over the shoulder or across the chest, not exceeding the 8 ft. mark. Drag the hose 85 feet to a prepositioned drum, make a 90 degree turn around the drum, while staying within the boundary area and continue an additional 25 feet. Stop within the marked 5x5 foot area, drop to at least one knee and pull the hose line until the 50 foot mark is across the finish line. During the hose pull, the candidate must keep at least one knee in contact with the ground and both knees must remain within the marked boundary lines.

Failures
During the hose drag if the candidate fails to go around the drum or goes outside of the marked path the test is stopped and the candidate fails the test.
During the hose pull the candidate is warned once if the knees go outside the marked boundary. The second infraction constitutes a failure, the test is stopped and the candidate fails the test.

STEP 4: Forcible Entry/Ventilation

Equipment
Kaiser sled (150 lb weight on a metal sled)
10lb dead blow sledge

Purpose
This event simulates the critical task of using force to open a locked door or cut a hole in a roof for the purpose of ventilation. This event challenges the candidate's aerobic capacity, upper body muscular strength and endurance, balance, grip strength and endurance and anaerobic endurance. In addition to aerobic and anaerobic energy systems the following muscle groups are affected: quadriceps, glutes, triceps, upper back, trapezius and muscles of the forearm and hand.

Event
While standing atop the sled, with feet placed on the diamond plate tread, the candidate uses a 10lb dead blow sledge and strikes sled in the target area until the opposite end reaches its designated point. Once the proctor indicates the sled has reached its end point, the candidate will place the sledgehammer on the ground.

Failures
If the candidate does not maintain control of the sledgehammer and releases it from both hands while swinging, it constitutes a failure, the test is stopped and the candidate fails the test.

STEP 5: Ladder Extension

Equipment
35ft extension ladder with halyard, secured in a vertical position
Purpose
This event is designed to simulate the critical task of extending a ladder to the roof or window. This event challenges the candidate's aerobic capacity, upper body muscular strength, lower body muscular strength, balance, grip strength and anaerobic endurance. In addition to aerobic and anaerobic energy systems, the following muscle groups are affected: biceps, deltoids, upper back, trapezius, muscles of the forearm and hand, glutes, quadriceps and hamstrings
Event
Standing in a 3 ft. x 3ft marked area, the candidate will extend the fly section hand over hand until it hits the stop. The candidate then lowers the fly section in a controlled fashion to the starting position.
Failures
If the candidate's feet do not remain within marked boundary lines, one warning is given. The second infraction constitutes a failure, the test is stopped and the candidate fails the test.
If the candidate fails to maintain control of the ladder in a hand over hand manner or lets the rope halyard slip in an uncontrolled manner, the test is stopped and the candidate fails the test.

STEP 6: Ceiling Breach and Pull

Equipment
Ceiling breach and pull device
10 foot pike pole
Purpose
This event is designed to simulate the critical task of breaching and pulling down a ceiling to check for fire extension. This event challenges the candidates aerobic capacity, upper and lower body muscular strength and endurance, grip strength and endurance and anaerobic endurance. In addition to aerobic and anaerobic energy systems, the following muscle groups are affected: quadriceps, hamstrings, glutes, abdominals, torso rotators, lower back stabilizers, deltoids, trapezius, triceps, biceps and muscles of the forearm and hand.
Event
The candidate removes the pike pole from the bracket and stands within the boundary, marked on the floor. The candidate places the tip of the pole on the marked area of the hinged door in the ceiling. The candidate fully pushes up the hinged door in the ceiling with the pike pole three times.
The candidate then hooks the pike pole to the ceiling device and fully pulls down five times.
Each set consists of 3 pushes and 5 pulls. The candidate must complete two sets.
The candidate is permitted to stop and if needed adjust the grip on the pike pole. Releasing the grip or hands slipping from the pike pole, without the pike pole falling to the ground does NOT result in a warning or constitute a failure. The candidate may re-establish a grip and resume the event. If the candidate does not successfully complete a repetition, the proctor calls out "MISS" and the candidate must push or pull the apparatus again to complete the repetition.
Once the candidate successfully completes two sets of breach and pull, they will set the pike pole on the ground.
Failures

One warning is given if the candidate drops the pike pole to the ground. If the candidate does drop the pike pole, it must be picked up without proctor assistance and the event is resumed. The second infraction constitutes a failure, the test is stopped and the candidate fails the event.

STEP 7: Rescue

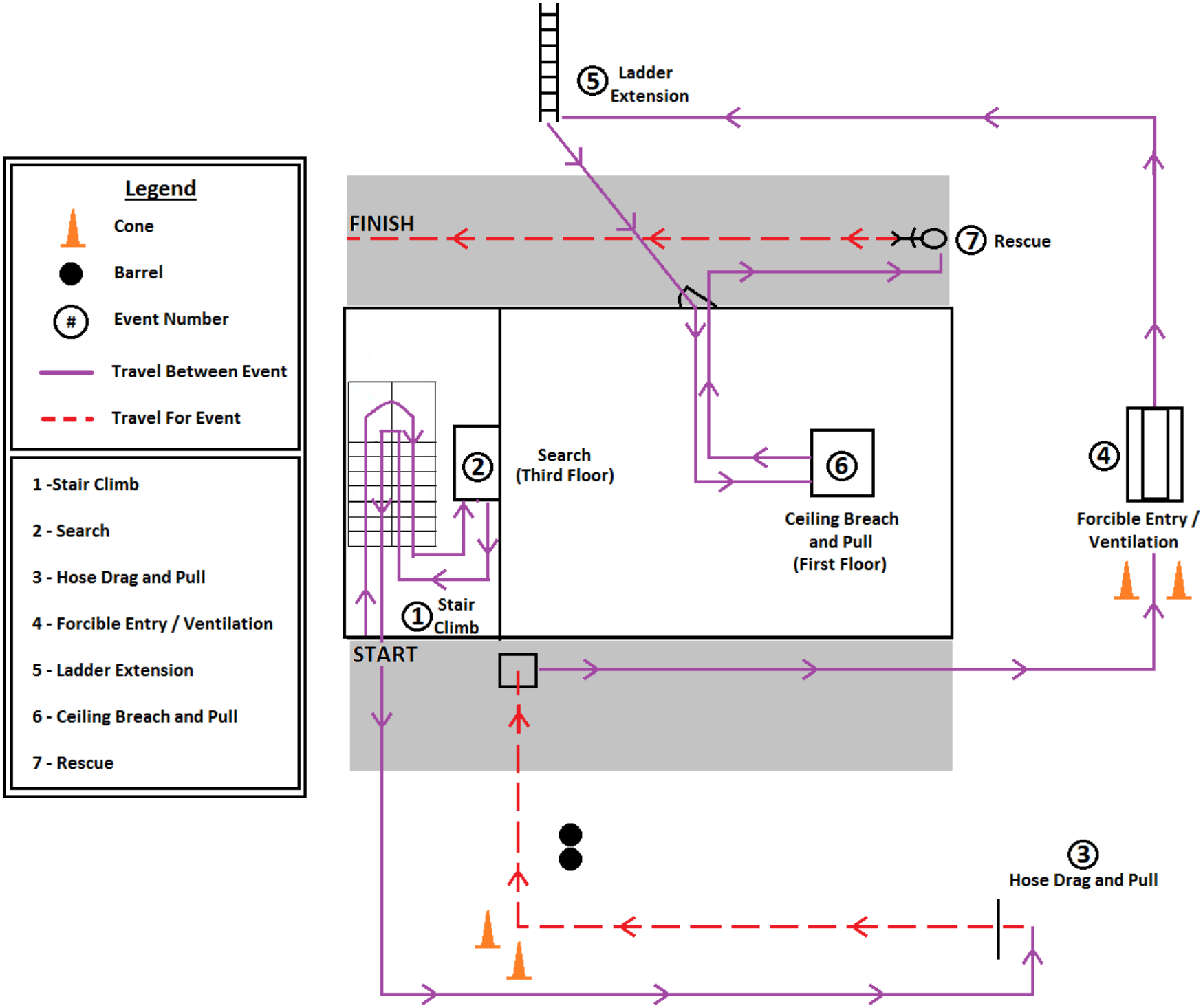
Equipment
165lb mannequin
Mannequin harness
Purpose
This event is designed to simulate the critical task of removing a victim or injured partner from a fire scene. This event challenges the candidates aerobic capacity, upper and lower body muscular strength and endurance, grip strength and endurance and anaerobic endurance. In addition to aerobic and anaerobic energy systems, the following muscle groups are affected: quadriceps, hamstrings, glutes, abdominals, torso rotators, lower back stabilizers, trapezius, deltoids, latissimus dorsi, biceps and muscles of the forearm and hand.
Event
The candidate grasps a 165lb mannequin by the handle of the harness or under the arms of the mannequin and drags/carries it 85 feet to the finish line. The candidate is permitted to drop and release the mannequin and adjust the grip. The entire mannequin must be dragged/carried past the marked finish line.

The event and total test time ends when the candidate completely gets the mannequin across the marked finish line as indicated by the proctor who calls out "TIME"

This completes the timed portion of the test.
Max allowable time: 10 minutes and 20 seconds

Test Forms

You must present valid identification and sign a number of forms before taking the physical agility test. You are provided an opportunity to review a video detailing the agility test and failure points. It is your responsibility to ask questions if you do not understand any parts of the test events or procedures.
You are required to complete the waiver and release form. At the conclusion of the test, you must sign the Evaluation Form.


Legend
Cone
Barrel
Event Number
Travel Between Event
Travel For Event
1 -Stair Climb
2 - Search
3 - Hose Drag and Pull
4 - Forcible Entry / Ventilation
5 - Ladder Extension
6 - Ceiling Breach and Pull
7 - Rescue
5 Ladder Extension
FINISH
7 Rescue
2
Search (Third Floor)
6
Ceiling Breach and Pull (First Floor)
4
Forcible Entry / Ventilation
1 Stair Climb
START
3
Hose Drag and Pull

Fayetteville Fire / Emergency Management
Physical Agility Test Evaluation Form

CANDIDATE NAME (Please Print)			Date:
Last:	First:	Middle Initial:	SSN: _ _ _ / _ _ / _ _ _ _

Time on Clock at Finish: Min._____ Sec._____

Pass / Fail (Circle One)

EVENT 1 STAIR CLIMB	Check all boxes that apply		
☐ 1st Warning skipped a step/steps	☐ 2nd Warning skipped a step/steps	☐ Failure skipped a step/steps	Elapsed Time at Failure:

EVENT 2 SEARCH	Check all boxes that apply
☐ Failure (Requested assistance requiring lights and/or guidance out of the area)	Elapsed Time at Failure:

EVENT 3 HOSE DRAG AND PULL	Check all boxes that apply		
☐ Failure (Fails to go around drum or goes outside marked path)			Elapsed Time at Failure:
☐ 1st Warning (No knee contact with ground)		☐ Failure (No knee contact with ground)	Elapsed Time at Failure:
☐ 1st Warning (Knees outside boundary)		☐ Failure (Knees outside boundary)	Elapsed Time at Failure:

EVENT 4 FORCIBLE ENTRY / VENTILATION	Check all boxes that apply
☐ Failure (Does not maintain control of sledgehammer so that it is released from both hands while swinging)	Elapsed Time at Failure:

EVENT 5 LADDER RAISE AND EXTENSION	Check all boxes that apply		
☐ Failure (Does not maintain control of rope halyard, allowing rope halyard to slip in an uncontrolled manner)			Elapsed Time at Failure:
☐ 1st Warning (Steps outside boundary)		☐ Failure (Steps outside boundary)	Elapsed Time at Failure:

EVENT 6 CEILING BREACH AND PULL	Check all boxes that apply		
☐ 1st Warning (Drops pike pole to the ground)		☐ Failure (Drops pike pole to the ground)	Elapsed Time at Failure:

EVENT 7 RESCUE	Check all boxes that apply	
		Elapsed Time at Failure:

	Use this column if a candidate fails an Event
Lead Proctor's Name	Event # _____
Lead Proctor's Signature	Lead Proctor's Name
Candidates Signature	Signature