#### GWINNETT COUNTY DEPARTMENT OF FIRE AND EMERGENCY SERVICES

## Physical Performance Evaluation

Firefighting and rescue personnel are routinely expected to safely and effectively perform the following tasks under emergency conditions.

While wearing protective clothing and self-contained breathing apparatus (to protect the respiratory tract), which weighs 50-60 pounds, and operating in hot, humid, vision-obscured environments fire/rescue personnel are required to crawl on the ground to search for fire victims and then pull or carry the victim to an area of safety. Again with the protective clothing and equipment, our personnel are required to raise and climb ladders (up to 50 feet) and climb aerial ladders (up to 100 feet). It is frequently necessary to perform work while stationed <u>on</u> the ladder itself. Personnel are required to hoist heavy tools and equipment with rope as well as manually carry tools and equipment. It is also required of personnel that they climb stairs to reach upper floors of high-rise buildings (from 5-20 stories) while wearing protective clothing and carrying tools and equipment.

During outdoor firefighting and rescue operations our personnel participate in pulling fire hose, digging dirt with shovels, carrying equipment, etc....with protective clothing often in temperatures exceeding 90 degrees Fahrenheit and in very high humidity.

# The following eight tasks are required in the physical performance evaluation given during the hiring procedure.

# LADDER EXTENSION

**REQUIREMENT:** Fully raise (extend) the top (fly) section of a 35-foot, 2 section extension ladder and safely lower it completely by using the attached rope (halyard).

**JOB RELATEDNESS:** Extension ladders, 35 feet in length, are carried on all aerial apparatus. A firefighter must have the ability to safely and quickly raise (extend) and lower the top section of the 35-foot extension ladder at emergency and non-emergency scenes. This ladder extension evolution is performed by one person using the hand-over-hand method. Allowing the halyard to slip through the hands is unsafe and could result in personal injury and/or damage to the ladder.

**PROCEDURE:** The Firefighter shall fully raise (extend) and lower the top (fly) section of the permanently fixed 35-foot ladder by using either of the previously demonstrated hand-over-hand methods. Both of the Firefighter's feet must remain in contact with the ground at all times while raising and lowering the ladder. Allowing the rope (halyard) to slip through the hands is an unsafe practice and is unacceptable. If the Firefighter fails to raise the ladder fully, it will considered a failure.

## HOSE PACK ADVANCEMENT

**REQUIREMENT:** Carry a hose pack to the fourth floor, deposit it on the landing, and return to ground level.

**JOB RELATEDNESS:** In order to provide rescue and extinguishment procedures in high rise buildings; a firefighter must be able to move hose and equipment up several floors in order to gain access to the involved area of the building. The hose pack carried on ladder and engine companies contains similar equipment as that used for this evolution.

**PROCEDURE:** The Firefighter will pick up a hose pack, weighing approximately 50 pounds, from a starting point located 50 feet from the stairs then carry it up to the fourth floor landing and deposit it on the landing. The Firefighter will then return to the ground level. The hose pack will contain 150 feet of 1-3/4 inch hose with a nozzle. The Firefighter shall complete this exercise as quickly as possible and without stopping. If the Firefighter stops during the evolution, it will be considered a failure.

## **VENTILATION DRILL**

**REQUIREMENT:** Complete fifty(50) acceptable impacts with a six (6) pound sledgehammer.

**JOB RELATEDNESS:** In order to effectively ventilate the roof of a small 40' by 60' building, the firefighter would be required to strike the roof a minimum of 50 repetitions penetrating the roofing materials with each blow. This is normally accomplished using a six (6) pound pick head axe. As a safety measure, the evolution is performed using a six (6) pound sledgehammer in lieu of the axe.

**PROCEDURE:** The Firefighter will approach the roof simulator and pick up a six (6) pound sledgehammer resting on the ground. The Firefighter will strike the roof simulator with the hammer 50 repetitions as quickly as possible. The Firefighter shall bring the head of the sledgehammer above his/her head before each blow to the roof simulator. If any repetition does not register on the simulator meter, that strike or blow will not be counted and will have to be repeated.

# **HOSE PULL**

**REQUIREMENT:** Extend 150 feet of dry 1-3/4 inch fire hose with nozzle, and 100 feet of dry 3-inch fire hose coupled to a water thief appliance.

**JOB RELATEDNESS:** Attack lines of 1-3/4 inch fire hose is carried on engine companies in lengths up to 200 feet for attack line. Three (3) inch fire hose is carried on engine companies in lengths up to 1,500 feet as supply lines. A firefighter occupying the nozzle position on an engine company is responsible for extending the line to the point of attack. One of the hose loads utilized by Gwinnett fire companies consists of 150 feet of 1-3/4 inch hose with nozzle connected to a water thief appliance, which is connected to the 3-inch supply hose.

**PROCEDURE:** The Firefighter will approach the 150 feet of dry 1-3/4 inch fire hose with nozzle, and 100 feet of dry 3-inch fire hose coupled to a water thief appliance. The hose will be in an extended accordion fold. The nozzle end of the 150 feet of dry 1-3/4 inch fire hose with nozzle will be placed onto the Firefighter's left shoulder. The Firefighter will grasp the water thief, which is attached to the 100 feet of 3-inch hose, with the right hand. The Firefighter advances forward until they cross the first line and place the water thief on the ground. The Firefighter then continues forward to the second line and places the nozzle on the ground. This is completed as quickly as possible, and without stopping. If the Firefighter stops during the evolution, it will be considered a failure.

## LADDER HANDLING

**REQUIREMENT:** Remove a fourteen (14) foot ladder from a rack, carry it a short distance and replace it on an identical rack.

**JOB RELATEDNESS:** Ground ladders carried on engine companies are mounted an average of 80 inches off of the ground. A firefighter must have the ability to reach, maneuver, and place these ladders in order to provide points for rescue of victims and to provide a point of accessibility for rescuers during emergency operations.

**PROCEDURE:** The Firefighter will approach a fourteen (14) foot ladder that is hanging on a horizontal ladder rack mounted 80 inches above the ground. The ladder must be removed from the rack, carried approximately twenty (20) feet, and replaced on an identical horizontal rack as quickly as possible. If the ladder is dropped or touches the ground, it will be considered a failure.

## **MAZE DRILL**

**REQUIREMENT:** Locate designated exit in search and rescue maze with the aid of natural light.

**JOB RELATEDNESS:** Firefighters are required to operate in environments that have little or no light and restricted space to perform rescue of victims and extinguishment of fires. In order for firefighters to perform their duties they cannot have a fear of confined or darkened spaces, or they must be able to control their fear of working in confined and/or darkened space.

**PROCEDURE:** Upon entering the second floor maze, the Firefighter will crawl on hands and knees, following the direction of travel indicated by tape placed on the floor, until exiting the maze. If the Firefighter cannot finish the drill for any reason it will be considered a failure.

## **HYDRANT OPERATION**

**REQUIREMENT:** Completely open fire hydrant valve while using a hydrant wrench.

**JOB RELATEDNESS:** Firefighters are required to operate fire hydrants during emergency firefighting operations and during routine hydrant testing and maintenance.

While the average fire hydrant begins to flow water after approximately six (6) turns of the stem, it usually requires about twenty (20) full turns to completely open the hydrant valve. Fire hydrants require an average of 80 lbs. of initial twisting force and then become appreciably easier to turn.

**PROCEDURES:** While standing on the hydrant prop platform (3 feet by 2 feet), the Firefighter shall completely open the hydrant valve with the attached hydrant wrench. The Firefighter must perform the drill while remaining on the prop platform and away from all discharge openings for safety reasons. If the Firefighter fails to remain on the platform or fails to completely open the hydrant, it will be considered a failure.

## **VICTIM DRAG**

**REQUIREMENT:** Drag a 140 pound simulated victim 120 feet.

**JOB RELATEDNESS:** When performing a rescue in a fire situation, an adult is rarely carried from the building; instead the firefighter usually drags the victim to a safe location. While removing the victim to a safe location, it is not unusual to travel a distance of 120 feet or more. This task is commonly completed by one firefighter.

**PROCEDURE:** The Firefighter must, while walking backwards, drag a 140 pound simulated victim 120 feet across the finish line as quickly as possible. The Firefighter may not stop during the drill until crossing the finish line. If the Firefighter stops prior to completing the evolution, it will be considered a failure.