



DEPARTMENT OF PUBLIC SAFETY STANDARDS AND TRAINING

ORPAT THE OREGON PHYSICAL ABILITIES TEST

Process Description—Stations—Equipment



Includes . . .

- ORPAT Process Description
- Instructor Training and Certification Requirements
- Station-by-Station Illustrations—Physical Activity Description
- Equipment Descriptions and Prices
- Alternative Options for Equipment

Date: 4/05

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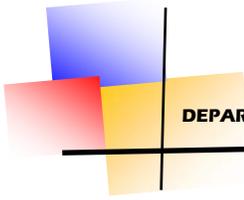
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ORPAT—OVERVIEW

ORPAT is a hybrid physical ability—job sample physical abilities test, measuring the essential physical capacities required to satisfactorily perform the duties of a Law Enforcement Officer. ORPAT was originally based on data from the RCMP PARE Research and Tests, as well as multiple Job Task Analysis for Police, and Corrections and Probation and Parole. (This document is solely focused on Police)

The PARE is research based having been derived from the work of Mr. Doug Farenholtz of the British Columbia Justice Institute. Mr. Farenholtz, through a scientifically accepted method of task analysis identified nine physical activities required by public safety officers in the pursuit of their duties. These were:

Walking	Running
Jumping	Climbing (stairs, hills)
Vaulting	Lifting
Carrying	Pulling
Pushing	

It was identified that police officers, from time-to-time had to have the ability of gaining and maintaining physical control over suspects.

Police officers must also intervene in family disputes where they have to control aggressive and/or violent behavior (pushing, pulling) and they are involved in search and rescue operations (climbing, vaulting, crawling, carrying) particularly involving motor vehicle accidents (pushing, pulling, crawling, carrying). These activities, although not commonplace, are essential and critical tasks, and therefore form a crucial part of public safety work.

The ORPAT course is designed to replicate critical and essential physical tasks and demands faced by Police Officers in the performance of their duties. Both specific tasks, and overall physical demands are replicated through the use of a carefully designed and validated, timed “obstacle course.”



ORPAT STATIONS

Part One—Obstacle Course – Mobility Run

Section one of ORPAT consists of a 1235' obstacle run where the officer must demonstrate gross motor ability such as mobility, agility, flexibility, power and general endurance.

1. Starting from the start marker, the officer runs to the outside, towards the first marker placed 20 feet out, and 10 feet from the centerline. Before reaching the first marker, the officer must cross the balance beam (centered between the start marker and first marker).
2. From this marker, the officer runs diagonally towards the second marker. This Marker is placed 40 feet out from the start position and 10 feet to the right of the centerline. Before reaching the second marker, the officer must jump over a five-foot obstacle (mat). On landing, the officer must turn left and proceed towards the stairs.
3. The stairs are placed in the center of the course in such a manner that the center of the top platform is exactly 60 feet from the start marker. The officer must run up and down the stairs hitting at least one step on the way up, the top platform, and one step on the way down.
4. Marker #3 is set in the center of the course exactly 80 feet from the start marker. The officer runs outside this marker, turns sharply right or left and runs back towards the stairs going up and down again. He/she then proceeds towards marker #4. Marker #4 is placed exactly opposite to marker #2, in line with marker #1. Before reaching marker #4 the officer must crawl under the crawl obstacle, which is centered between the stairs and marker #4 and is 23 inches high.
5. The officer runs around marker #4, turns left diagonally heading toward marker #5. Before reaching this marker, the officer must jump over two obstacles 18 inches high and 10 feet apart.
6. Reaching marker #5, the officer runs right and heads towards the start marker. Before reaching this marker, the officer will vault a 3 feet high railing. Officers will land in control on the opposite side of the obstacle, fall on their back or stomach (Alternating on each lap) get up without assistance and proceed around the start marker before repeating the same for the second lap.

Getting up without assistance implies the following:

- After a stomach fall, the officers push up from the floor mat with their arms in a push-up like manner. The form is not a significant issue. However, the officer **is not allowed to roll over or use the railing for support.**
- After the back fall, the officer will stand up, using a sit-up/curl-up procedure. Again, form is unimportant. Officers can roll on their back and use the roll to gain momentum to stand-up. **The officer cannot use the railing for assistance.**

Six laps must be completed before starting Part 2 (fight portion). This is to place the officer in an anaerobic condition, before simulating a struggle (to simulate pursuit and struggle)

Once the sixth lap is completed, the officer proceeds towards the push pull machine, thus starting part two.

ORPAT STATIONS

Part Two—Push Pull Machine

After completing the obstacle run, the officer moves to the push pull station, which consists of a push pull unit and a line on the wall 39" from the floor. Reaching the push pull unit should not take more than five seconds. Maximum allowed distance is 20 feet. In the case where it is physically impossible to locate the station within 20 feet of the end of the run, an amount of time equivalent to the period taken to reach the push/pull must be deducted from the officer's total time. The officer may perform this activity in the order he/she chooses. Since the push is more difficult to perform it is recommended to do this activity first.

Push Activity

Upon reaching the push pull unit, the officer grasps the handles and pushes the 80lbs off the floor, then moves right to left completing a 180-degree arc. Six complete arcs must be executed by bringing the bar parallel with the base of the machine.

The officer must remain in control throughout the activity. Shoulder girdle strength and endurance are required to push the weight and maintain it under control.

The chest may not touch the lever arm. The arms must remain bent at the elbow throughout the performance of the activity. The degree of the bend can vary from 60 to 135 degree. The elbows or hands must not be touching the chest or shoulders since this denotes a lack of muscular control. The back must be straight and the contraction of the abdominal muscles to maintain pelvic tilt is essential. This part of the test normally lasts 25 seconds.

It is important that the elbows remain bent throughout the test and the arms or hands must not touch the chest or shoulders. Officers must be reminded to this throughout the performance of this push activity. If after on reminder, the officers fail to redress the situation, the specific arc should be repeated and must respect form in order to be accepted.

Controlled Falls

Once the push activity is completed, the weight is dropped, maintaining control. The officer moves away from the unit, falls on his/her stomach, executing a push-up like movement, stands-up, touches the line on the wall 39 inches from the floor and executes a second fall; this time on their back, executing a sit-up like maneuver rising to a standing position touching the wall once again. This sequence is repeated twice (4 falls, 2 front, 2 back). This activity typically lasts 20 seconds. Again form is not important. However the officer must show control and come to a ready position.

Precaution must be taken in both the front and back falls; the officer should be advised not to go into a full squat position. The safe fall and stand-up procedures should be demonstrated by the administrator and practiced by the officers before the test.

ORPAT STATIONS

Pull Activity (continued)

Once the fourth fall is completed, the officer grasps the rope and pulls the weight off the floor. Maintaining the weight in this position, he/ she moves through an arc of 180 degrees by bringing the bar parallel to the base of the machine. This action is repeated six times, touching the line three times on each side. This portion of the section lasts approximately 20 seconds. The officer must remain in control. The elbows must remain flexed throughout this activity.

In order to maintain balance, a shuffle movement of the feet is suggested. Crossing the feet over weakens this position and for less fit individuals, may cause them to drop the weight or lose their balance.

The back must be kept straight throughout the movement as well as contracting the abdominal muscles, thus stabilizing the pelvis.

Part Three—"Dummy" Drag Section

The "Dummy" Drag section of ORPAT is a DEMO/NO DEMO activity. After a 60-second rest period the officer must drag a 165lb dummy a distance of 25ft. Officers must use the under the arm technique. This is accomplished by reaching under the dummy's arms and grasping the forearm section. He/she then drags the dummy for 25ft. Officers must perform this task in a controlled manner.

Once motion is started officer cannot stop to pass this section successfully. Recruits will have three attempts to complete task. Three unsuccessful trials will constitute a failure. Officers failing the Dummy Drag Section fail the ORPAT examination.

ORPAT Hybrid Characteristics— Instructor Qualifications

ORPAT HYBRID CHARACTERISTICS

The ORPAT is a hybrid combination of both physical abilities testing, and job sample testing. As such it combines elements of demonstrated job tasks (climbing stairs) with overall fitness and strength assessment (largely through the sequential combination of various task samples. Pure physical abilities tests have been criticized because it is hard to validate them against actual physical requirements, and they typically produce adverse impact in testing women, although women perform well on the job. Pure job sample tests are criticized because they do very little to assess overall strength, agility and endurance.

By combining job sample and physical abilities testing, we have been able to achieve a very high validation level, not only for Police, but emerging research strongly suggests that the ORPAT process and its ancillary measurement and validation, is transferable across the board to other law enforcement disciplines, without modification, other than using performance norms that are specific to those groups.

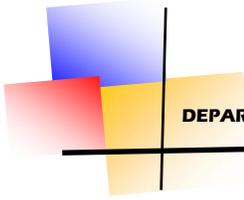
Because of the dual nature of the ORPAT, we will list both job task, and overall fitness elements for each station.

Instructor Qualifications

There is a mandatory 12-hour certification process, required to be qualified as an ORPAT instructor.

This process includes:

1. Classroom training
2. Instruction in course set up.
3. Course performance measurement methodology
4. Course demonstration/explanation
5. Course evaluation
6. Practical experience with running the course



ORPAT—EQUIPMENT REQUIREMENTS

Space

Because of the variability presented by outdoor courses, ORPAT is ***strictly done indoors***, so that a controlled environment can be established and maintained. This requires an open space, roughly equivalent to a small gymnasium or multi-purpose facility. (please note attached ORPAT map). The floor should be reasonably smooth and free from irregularities and hazards. Lighting must be bright and produce no significant shadows.

The actual area actively used in the ORPAT should be marked off and clearly identified to make certain that observers or participants waiting their turn do not stray into the course itself.

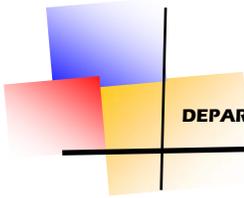
General Equipment Requirements

- 8 traffic cones 12" \$5.95 each
- 4 cones or chairs 18" High \$8.95 each
- 2 cedar sticks 3 feet long
- Balance beam (15' long x 6" wide x 10" high)
- Crawl Obstacle (30" high x 36" wide)
- 5 foot x 3 foot rubber mat (Les Schwab) \$20



ORPAT SPECIFIC EQUIPMENT REQUIREMENTS

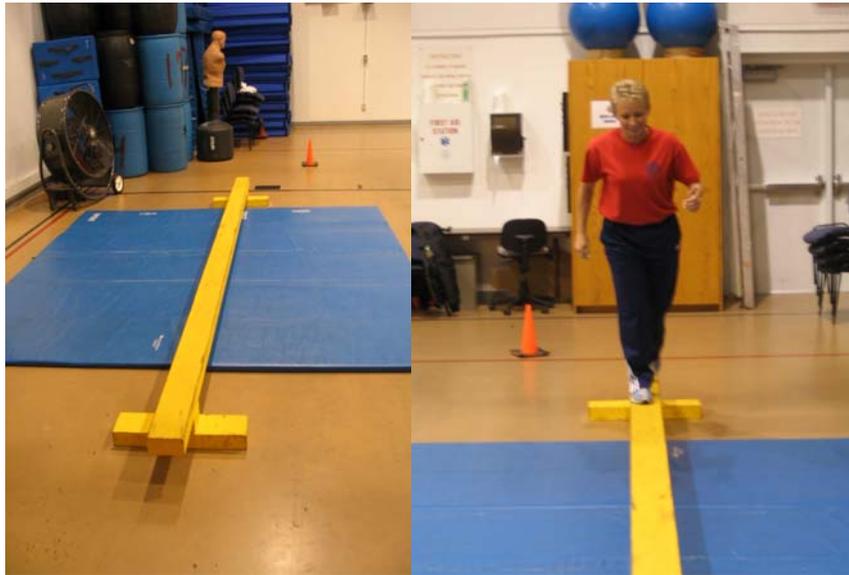
- Portable Stairs (5 stairs up 5 down) \$2,300
- Portable Vault and Climbing Rail (variable height 3-8 feet) \$700
- PUSH/PULL Machine (PTM 1000-Power Training Machine) \$3,000



STATION—BALANCE BEAM

Station Description

From a standing start, the officer runs around a cone and jumps up on the fifteen feet balance beam, running the length. If he/she falls off the beam, the officer must return to the start of the beam obstacle.



Assessment Elements

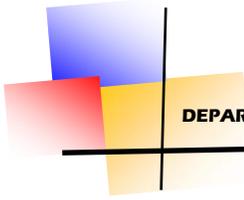
Job Tasks	Physical Abilities
Running after someone	Balance
Pursuing suspect on foot	Depth Perception
Walking and balancing on narrow, elevated surfaces	Agility Lower body strength

Equipment Requirements/Costs*

1. 2' X 6" - 15' long (1 @)
2. 2' X 6" - Approximately 1' in length (2 @)
3. Paint (sand grit)

The Balance Beam can be constructed, rather than purchased. Materials costs vary by market condition, but are estimated at less than \$30.00.

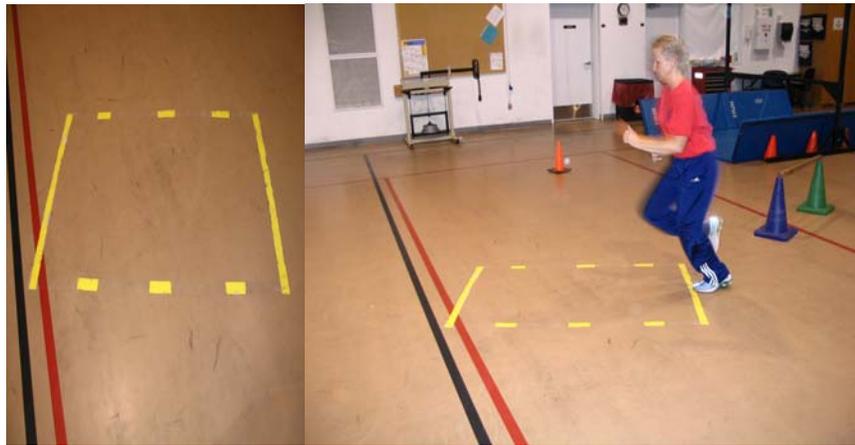
4. Defensive Tactics Mat



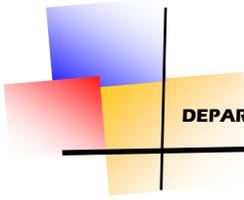
STATION—FIVE FOOT JUMP OBSTACLE

Station Description

After completing the balance beam obstacle, the officer rounds another cone and jumps the five foot obstacle (designed to simulate a ditch, or other opening-type obstacle). The officer's feet (foot) cannot land within the marked obstacle perimeter.



Assessment Elements		Equipment Requirements/Costs
Job Tasks	Physical Abilities	
Running after someone	Depth Perception	Tape—Cost is negligible
Pursuing suspect on foot	Running Speed	Or . . . 5' X3' rubber mat (available from Les Schwab (approximately \$20.00).
Jump across obstacles	Agility	
	Lower Body Strength	
	Core strength	
	Ability to jump	
	Cardio-vascular	



STATION—STAIRS CLIMB

Station Description

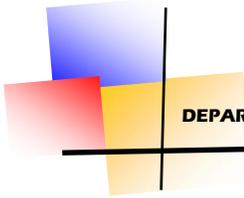
After completing the jump obstacle, the officer rounds another cone, and runs 60 feet of the course to the stair simulator. Comprised of five steps on either side, the officer runs up one side, down the other, rounds a cone and repeats the stair obstacle.



Assessment Elements

Equipment Requirements/Costs

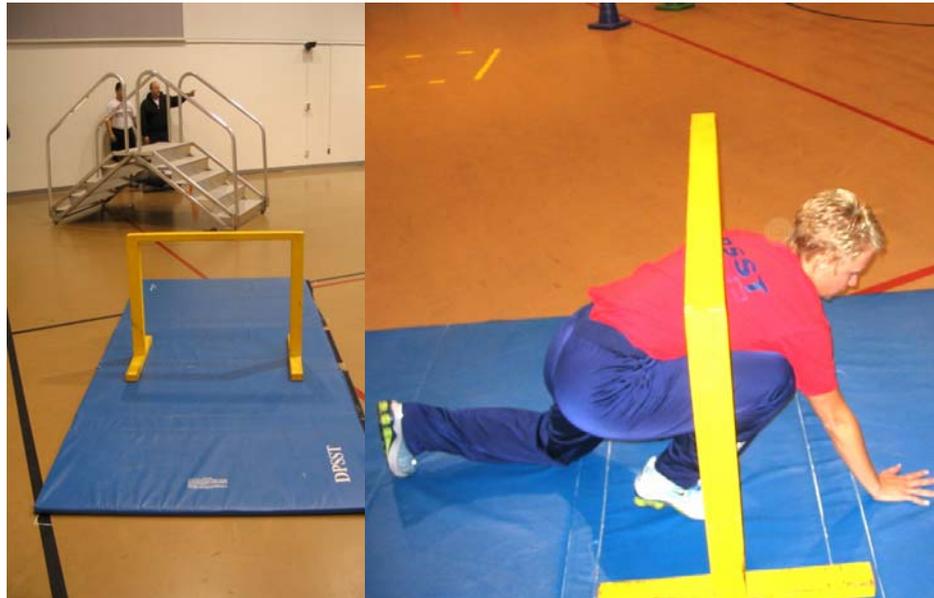
Job Tasks	Physical Abilities	Equipment Requirements/Costs
Running after someone	Depth Perception	Portable stair system—(five stairs) 1 @ \$2,300.00 Source: Proline Training sales@prolinetraining.com
Pursuing suspect on foot	Visual acuity	
Run up/down stairs	Agility	800-606-7727
	Coordination	Alternatives: While it is possible to construct a stair simulator from wood, weight, instability, lack of portability and other potential hazards and liabilities make this inadvisable.
	Lower Body Strength	
	Core strength	
	Cardio-vascular fitness	



STATION—CRAWL OBSTACLE

Station Description

After completing the stair obstacle, the officer runs to the crawl obstacle, drops down and goes under the 23" high bar. The crawl obstacle is intended to represent crawling through small openings.

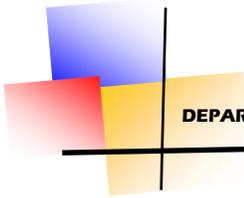


Assessment Elements

Job Tasks	Physical Abilities
Running after someone	Agility
Pursuing suspect on foot	Coordination
Crawl through opening	Core Body Strength
	Core power
	Lower body strength

Equipment Requirements/Costs

1. 2" x 2" - 30" long (2@)
 2. 2" X 2" - 36" long (1 @)
 3. 2" X 2" - 20" long (2 @)
 4. Paint
- Prices subject to market, but estimate at less that \$20.00 per hurdle
- Defensive Tactics Mat



STATION—EIGHTEEN INCH BARRIER JUMP (TWO)

Station Description

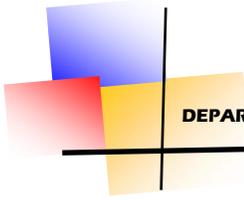
After completing the crawl obstacle, the officer traverses the center section of the course, which contains two eighteen inch jump barriers. These barriers are intended to represent small obstructions, such as curbs, landscape features, etc.



Assessment Elements

Equipment Requirements/Costs

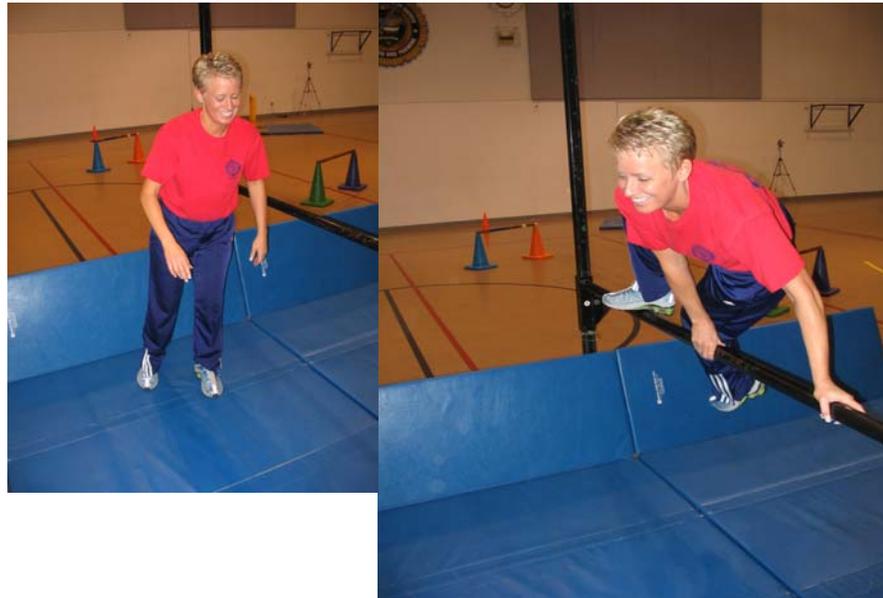
Job Tasks	Physical Abilities	Equipment Requirements/Costs
Running after someone	Depth Perception	1. Traffic cones—\$5.95 X 4 2. 2" x 2" 36" long (2@) (under \$10.00)
Pursuing suspect on foot	Agility	
Jump over obstacles	Coordination	
	Balance	
	Lower Body Strength	
	Core strength	
	Ability to jump	



STATION—THREE FOOT VAULT

Station Description

After completing the two 18” jump barriers, the officer does a controlled vault of three feet, drops to a prone position, rising without assistance and begins the obstacle course again.

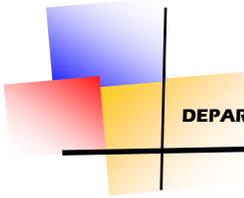


Assessment Elements

Job Tasks	Physical Abilities
Running after someone	Depth Perception
Pursuing suspect on foot	Agility
Jump/climb over obstacles	Coordination
Regain feet after falling/being knocked down.	Balance
Jump down from elevated surface	Core power
	Cardio-Vascular fitness
	Upper/Lower body strength

Equipment Requirements/Costs

1. Portable vault and climbing rail—\$700.00 Source: Proline Training sales@prolinetraining.com—800-606-7727
2. Defensive Tactics Mat



STATION—FALL TO BACK—FRONT

Station Description

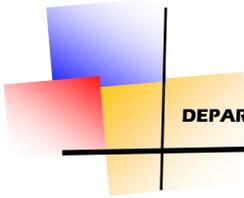
After completing the vault obstacle, and returning to feet, the officer falls to stomach and then back, recovering to feet each time without using any mechanic assist. The purpose of this is to simulate recovery after clearing an obstacle and falling to the ground.



Assessment Elements

Equipment Requirements/Costs

Job Tasks	Physical Abilities	Equipment Requirements/Costs
Physically control person	Balance	None
Get to feet after falling/being knocked down.	Core strength	
	Cardio Vascular Fitness	
	Upper/lower body strength	



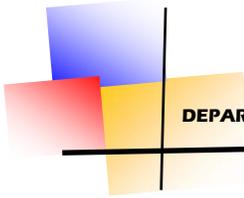
SECTION TWO—PUSH-PULL MACHINE—PUSH (FIGHT PORTION)

Station Description

After completing six laps of the obstacle course, the officer moves to the push-pull machine. This machine simulates struggling with-controlling a subject, and extracting subject from car or room. It presents a standardized “fight” obstacle to each participant.



Assessment Elements		Equipment Requirements/Costs
Job Tasks	Physical Abilities	PTM-1000 Push-Pull Machine— \$3,000.00
Physically control person	Balance	Source: Proline Training sales@prolinetraining.com—800-606-7727
Pull—drag person	Agility	
Struggle with person	Core strength	
	Cardio Vascular Fitness	
	Upper/lower body strength	



STATION—FALL TO BACK—FRONT

Station Description

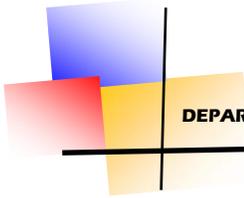
After completing the push-pull machine, the officer moves to a wall, and performs front and back falls to the floor, simulating being knocked down/falling to the ground in a fight scenario, and recovering to feet.



Assessment Elements

Equipment Requirements/Costs

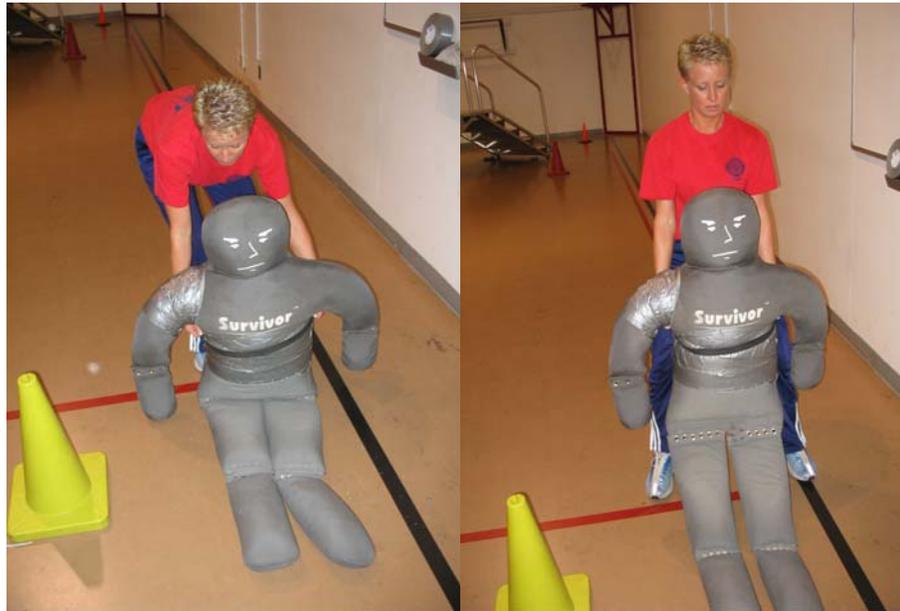
Job Tasks	Physical Abilities	Equipment Requirements/Costs
Physically control person	Balance	None
Get to feet after falling/being knocked down.	Core strength	
	Cardio Vascular Fitness	
	Upper/lower body strength	



SECTION THREE—DUMMY DRAG

Station Description

After completing the fight portion of the test, the officer is given a sixty (60) second recovery time, and then moves to a 165 pound dummy. The dummy must be moved in a controlled manner for 25 feet.



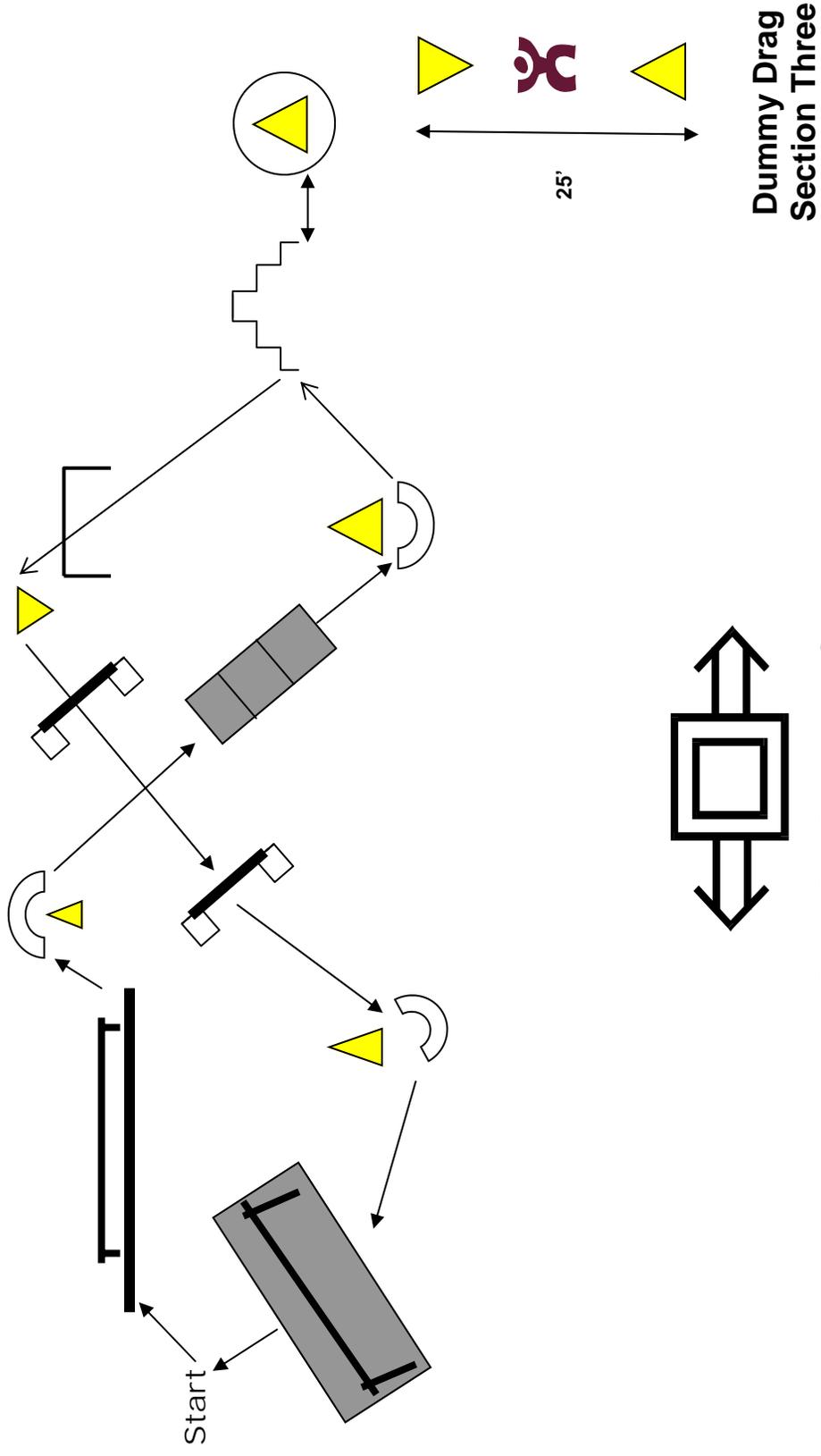
Assessment Elements

Equipment Requirements/Costs

Job Tasks	Physical Abilities	Equipment Requirements/Costs
Physically control person	Balance	Survivor—Agility Training Dummy—\$495.00
Pull/drag person	Core strength	Source: Dummies Unlimited—4750 Chino Avenue, Chino California, 91710 (909) 590-8161
Lift and Carry person	Lower/upper body strength	
	Ability to recover	

ORPAT COURSE MAP

Obstacle Course—Section One



Push-Pull Machine—Section