

# CREATING, MAINTAINING AND IMPROVING PHYSICAL READINESS STANDARDS FOR POLICE TACTICAL TEAMS

By **Kathleen Vonk**

**A**s a professional athlete, what is the incentive to be at the top of your game? A monetary bonus, contract negotiations, a championship ring? What are the consequences for poor performance on the field of play? Similarly, as a SWAT operator, why is it important for you to be at your peak physique? Unlike NCAA and professional athletes, you don't have the luxury of knowing when the "big game" will be or even when your in season is.

Do fitness tests and standards for SWAT teams guarantee that operators are at their peak performance levels *at all times*? That's a tedious task even in the strength and conditioning world with regard to program design, in which there is a known target time to peak. So what does your team do on a regular basis to promote operator and team success on any given Sunday, and is it the correct program design?

Fitness standards for SWAT have long been the topic of discussion within tactical team circles throughout the United States, usually in the form of a question: "What are you guys doing?" Instead, what if we were to start asking strength and conditioning professionals, "What *should* we be doing?"

## Task analysis

Few teams seem to put the effort into laying the groundwork, which is conducting the study (or paying a qualified person/company to do so) and following up by using appropriately trained personnel to conduct testing and to design and



Moving and shooting drills at NTOA's 2011 Conference in Richmond, VA

supervise the fitness sessions for the team. There are many different tactical team physical tests that exist across the country today, but very few have been validated and deemed to be job task-specific. The reason is likely that most just don't know how to arrive at appropriate standards, and only have "gym knowledge" when running team fitness sessions.

The best case scenario for optimal applicability, as well as defensibility, is to have your own task analysis completed to determine and support the testing events and procedures. This will validate what you are doing and why, without wasting valuable time, money and resources on implementing a test simply because other teams or the military are using it. Police tactical team operators do not perform the same functions as military combat

operators. Although the armed forces lay the proper groundwork and conduct task analysis studies to determine their standards, military tests don't necessarily apply to police tactical teams. A validation study will make sure that what is being tested is proper, at the appropriate level, and for the right reasons, and therefore more defensible and somewhat insulated from being challenged. Nothing is litigation-proof, but some steps can be taken to minimize the chances. The important factor is determining that those on the team are capable of performing the required tasks.

Tasks that are required for operator success on a team must first be identified, and these tasks may not be the same in every area. An easy example is that in most cases, hostage negotiators may be

FP Ad

considered part of the team, but are not required to take and pass the same physical task test that the rest of the team does. Why? Because they are not required to dress in full tactical gear, make their way through backyards, alleyways or rooftops to reach their position, and they are not likely to breach a door and make an entry. So, the test should be appropriate for the tasks required, and should determine whether the person is able to perform the tasks or not.

Whether operators must be able to perform in a variety of positions, or whether certain functions are operator-specific, have the potential to affect the tasks and standards. If this is the case, a team's fitness program design can be modified to include the common tasks

that all operators must be able to perform, as well as those specific to each operator's position on the team. For example, a door breacher must have the ability to develop core rotational power while not only carrying extra weight on his/her body, but also accelerating the ram (resistance) at the end of the arms (biomechanical levers). Exercises can be included in that operator's fitness program to maximize torque against resistance.

Norms adjusted for age and gender have no place on tactical team standards, because every team member must be able to perform the common tasks required by all. Every team member must be able to perform at the determined minimum level, while carrying extra weight in the form of tactical and protective gear,

**“ Norms adjusted for age and gender have no place on tactical team standards, because every team member must be able to perform the common tasks required by all. ”**

shoot well on the move, or if deemed essential, partake in a rescue, whether the downed person is a civilian weighing 115 pounds or a 270-pound tactical officer including full gear (whichever tactic is used by your team).

### **Determining the essential tasks and minimum standards**

Task identification and minimum ability required to perform these tasks can be done by using several similar teams (demographics, call load, team construction, etc.) or by using numerous teams across the country, but even these methods assume that those teams are using valid events. The “gold standard” is to use entities that have the personnel and tools to conduct a direct task analysis for your region. Some examples include FitForce<sup>®</sup>, the police training standards organization within each state (POST), or a university in the immediate area.

While writing their “SWAT Fitness” book (Optac International 2003), Matt Brzycki and Stuart Meyers examined fitness standards used by teams in the United States at that time. They pointed out that many teams were using push-ups and sit-ups, even though those exercises were not job-related. They also pointed out that many tests used age and gender norms, “providing preferential treatment for female or older officers.” To use age and gender norm fitness standards makes no sense for the police and fire professions, much less for military and police tactical teams. Lives are at stake in all of the aforementioned careers, and the ability of each and every officer, firefighter and tactical team operator is paramount



Buddy rescue techniques and team movement drills at NTOA's 2011 Conference in Richmond, VA

FP Ad

whether they are male or female, young or old. Work the street — do the job.

*Note: In three concurrent studies, OpTac selected a cross-section of full- and part-time teams in the U.S., determined a standard based on what operators had to do on actual assignments as well as events used at the time, administered the new OpTac fitness test, surveyed the operators and then adjusted the standards. Three evolutions took place before standards were finalized. The standards have stood for at least eight years without being challenged.*

### Sample job-related physical test

*The standard would be set with time if appropriate.*

The following is a sample compiled from several different tests currently used. However, this is only an example and the parameters have been deleted (distance, time, height of obstacle, weight of buddy), as they may not apply to your team. For example, if a team requires each operator to negotiate a 6-foot privacy fence when there are only 4-foot high chain link fences in that jurisdiction, the event may not necessarily apply. It is still recommended that a task analysis be done to determine the events and standards for each team. An actual door breach as well as shooting accuracy can be incorporated at the completion of one or more events.

- Pull-up(s) in full gear, palms out (as though grabbing a window sill or fence)
- Low crawl in full gear, including long gun
- Ascending stairs in full gear, including long gun or breaching tool
- Climb up and over a fence in full gear (height determined by what is in your jurisdiction)
- Buddy rescue in full gear
- Dismount from (jump off/step down) a platform as high as your tactical vehicle, fast walk or run in full gear including weapon
- Task-specific obstacle course in full gear, or have the preceding events occur in

a consecutive format with a required finish time, such as with the CPAT (Candidate Physical Ability Test) for firefighters [www.iaff.org/hs/CPAT/cpat\\_index.html](http://www.iaff.org/hs/CPAT/cpat_index.html).

### Physical training supervisors

Due to the potential for physical injury and even death, the fitness industry is a very high liability arena. Those who conduct any type of physical training should have the proper education and training to do so — no exceptions. We don't allow anyone without firearms instructor certification to teach us pistol skills, so why would we allow this?

Strength and conditioning professionals do not achieve excellence without investing in themselves financially, academically and through quality, hands-on experience. Many spend thousands of dollars to educate themselves and righteously earn their positions, and they would not have been hired without that substantial investment into their expertise and continuous education. Considering all of the money spent on tactical team training and equipment, *not* spending the money to have qualified personnel conducting fitness sessions and testing could be considered negligent. Simply put, not making this a priority because you didn't know what the industry standards were will never be defensible, especially when the day arrives when one of your team members goes to the hospital with life-threatening rhabdomyolysis, heat stroke or any another exercise-related injury that could have been prevented had the training been supervised by a qualified individual.

### What to look for

It is suggested that someone with a degree in exercise science, exercise physiology, kinesiology, human movement, physical education, athletic training or a similar degree be sought out. In addition to this, the individual should hold a credible certification such as the American College of Sports Medicine (ACSM), National Strength and Conditioning

### EMPLOYMENT STANDARDS

Standards must meet certain requirements as set forth in the prevailing anti-discrimination legislation/litigation record, the EEO Guidelines (Equal Employment Opportunity) and the SIOP standards (Society of Industrial Organization of Psychology. The SIOP is one of the gold standards in occupational testing). Unfortunately, there is a mistaken belief that because tactical team membership is voluntary, the agency won't be challenged on their standards. While it practically may be so, that isn't a green light to arbitrarily adopt requirements which leave the agency in an indefensible position.

All employment standards must meet two requirements: 1) The standards must be demonstrably job-related; and 2) The standards must be consistent with business necessity.

At all times, you must begin with the demands (in this case, the physical demands) of the occupational classification. Selection and training must then be crafted to ensure safe and effective performance at a minimal level. This is one of the principle reasons age- and gender-adjusted standards are both illogical and illegal: there can only be one minimum standard that is job-related. In the case of adjusted standards, you have 8 or 10 or 12 standards, not one minimum standard.

Typically, job-relatedness is established in a validation study conducted consistently with the above requirements. The documentation of the validation procedure is the final report. Such a study should be conducted by individuals qualified to defend their methods in court.

Jay Smith, MS, NSCA-CSCS  
FitForce, Inc.

Association (NSCA), LouKa Tactical Police Wellness Instructor (PWI), USA Weightlifting (USAW) certification, National Association of Sports Medicine (NASM), FitForce or similar.

Be wary of certifications that are obtained by paying a fee and receiving a certificate through the mail, through online testing only and with no educational and practical component required. Unless there are educational prerequisites, be careful of using short classes (three days or less) that would be hard-pressed to effectively cover all of the necessary material to prepare that person to implement fitness testing and design fitness programs. Many popular and fad fitness programs fall into

FP Ad

this category, and physical harm to team members can occur if these credentials are used in lieu of quality certifications. It is extremely risky to allow someone with no educational background or someone with no fitness credentials to design, implement and direct team fitness sessions.

### Recovery heart rate

Heart rate data is objective and unequivocal. It could be argued to take the concept a step further and incorporate resting and/or recovery heart rates into operator testing.

Although it may be unrealistic to have tactical team operators run 1.5 miles in full gear, the strength of the cardiovascular system is extremely important for a team member. As one of many examples, the cardiovascular system of an operator must be able to handle and recover from performing during a 5-hour operation in 95 degree heat and 90 percent humidity. The effects of heat stress on the cardiovascular system have long been documented, but it is hard to relate some of the cardiovascular endurance testing to a required SWAT task, such as the 1.5-mile run within 12 minutes, especially when few operators have ever done this on an actual operation. Recovery heart rate offers a solution to this potential dilemma.

Information obtained from exercise physiologist Tricia Sterland of Polar Electro, Inc., supports the utilization of recovery heart rate. She adds that it will be more certain that the officer can not only handle the required physical task, but also recover from it without adverse consequences. Sterland explains, "Utilizing an exact number of beats per minute for heart rate recovery could be difficult based upon where the peak heart rate was for the task at hand. A common rule of thumb is that a drop of 30 to 35 bpm occurs for those who are very physically fit. In contrast, a recovery of 12 bpm or fewer could be a sign of cardiovascular issues." Applying this information to operator physical task testing might include a stan-

**“ It is extremely risky to allow someone with no educational background or someone with no fitness credentials to design, implement and direct team fitness sessions. ”**

dard of a 25 bpm drop in heart rate within one minute of completing the task.

Another option is to conduct preliminary testing to include resting heart rate, blood pressure and recovery heart rate *prior* to physical fitness testing. This is the norm in the fitness industry today. According to the National Strength and Conditioning Association, the average resting heart rate range is 66 to 71 beats per minute for men and 68 to 72 beats per minute for women.<sup>1</sup> Any value between 60 and 100 is considered normal. Requiring resting heart rate to be within this range, as well as conducting a simple recovery heart rate screening test such as the Cooper Institute Three Minute Step Test, is a simple addition to any tactical team physical testing protocol.<sup>2</sup>

Using resting and recovery heart rate has the potential to raise a red flag and possibly reveal underlying issues before they result in tragedy. One need only to visit the Officer Down Memorial Page ([www.odmp.org](http://www.odmp.org)) to realize that many officers who have died on duty from myocardial infarction (MI or heart attack) have been physically exerting themselves, whether during a forcible arrest, foot pursuit or even physical fitness testing. The ODMP Web site states that 71 officers have died in the line of duty from a heart attack from the beginning of 2006 through the end of 2011, which is an average of 12 per year. Thousands more happen off-duty each year, and cardiovascular disease is the number one killer in the country today, police officers included.

In most cases, only with a consistent and effective cardiovascular training

program will "normal" resting and recovery heart rate be observed, or improvements made. This element of tactical team testing will require operators to achieve and maintain healthy cardiovascular systems without requiring a 1.5-mile run during testing.

Finally, whether it is your team physician or the local EMT service, having emergency medical assistance in the immediate area during physical testing is easy to achieve in most cases and is recommended.

### Spend money to save money... and lives

Ultimately, the key to enabling SWAT officers to perform at their peak starts with the basics. It will pay off in the long run to spend money upfront and have an applicable task analysis done by a reputable organization, followed by the implementation of an appropriate and defensible standard. Mandate that adequately educated and trained personnel implement the testing, and involve them in both team and individual program design.

Taking the easy way out by using someone else's standard "because others are doing it" or by using an unqualified leader for the team's fitness sessions may set your team and agency up for preventable injuries and death, negative public opinion and litigation. ■

### About the author

**Kathleen Vonk**, BS, CSCS, is a police officer with the Ann Arbor City Police Department, a certified strength and conditioning specialist through NSCA and co-owner of LouKa Tactical Training. Officer Vonk also serves as NTOA's Physical Fitness Section Chair. She can be reached at [Kathy@loukactical.com](mailto:Kathy@loukactical.com).

### Endnotes

1. "NSCA's Essentials for Personal Training," National Strength and Conditioning Association, 2004.
2. <http://www.rchr.com/wellness/LEMUWellnessProgram/3MinuteStepTestProtocol/tabid/2054/Default.aspx>