



"mess you up"

# THE *CrossFit*<sup>®</sup> Journal

© 2003 All rights reserved

## POLICE TRAINING

**“The difference between combat and sports is that in combat you bury the guy who comes in second.”  
-Unidentified Navy SEAL on the Discovery Channel’s “U.S. Navy SEALs II,” 1999**

### Introduction

CrossFit’s work enhancing sport performance, while exciting and even gratifying, sometimes feels too much like helping adults play children’s games. On the other hand, our work with seniors and little kids, while very rewarding, lacks the excitement surrounding elite human performance.

Our recent work and acceptance in the law enforcement, tactical operations, and military special operations communities has been both extremely gratifying and very exciting.

Increasingly, our readers are coming from the ranks of the professional combatant. They have come to CrossFit aware of the reality that, on average, the fitness challenges with which they are most likely to be faced will not be best met by a specialized, narrowly focused fitness. That is the sole domain of the sport athlete.

Incredibly, the fitness needs of professional combatants, police and military, have not been given the same quality analysis, commitment, or even funding that is generally given to sport.

The resulting inadequacies in both police and military training are both technical and financial. But in the case of law enforcement physical training programming, the obstacles to better training are more profound due to a widespread misunderstanding of the physiological needs of police work and the implications this misunderstanding portend for funding police training.

Let’s take a look.

### CrossFit’s Perspective

It is CrossFit’s contention that cops and soldiers are professional athletes. In fact, we argue that the physical preparedness required of military combat - and by extension law enforcement - matches and regularly surpasses that required of Olympic athletes. In light of this view, we find it disturbing that few police departments offer formal fitness instruction after academy graduation.

We further contend that a careful examination of the physical demands of police work and the success of CrossFit’s training model suggest a remedy to inadequate training even where the obstacles are seen as being primarily financial or administrative.

### Combat vs. Sport

For ease of discussion and economy of words we refer to the collective physical demands of police work, including defensive tactics and arrest and control, as “combat.”

The fitness demands of the modern MMA/NHB (Mixed Martial Arts/No Holds Barred) competitor are extraordinary, but imagine for a moment that we were to change the rules of the competition as follows:

1. The date and time of the fight are to remain secret. The fight is “on” when the opponent(s) appear.
2. The number of opponents is unknown – one, two, three...ten?

3. There'll be no referee.
4. The fight may or may not include weapons.
5. There are no rounds, time limits, etc.
6. No information can be provided regarding the opponent's size, skills, or background.
7. Innocents are present that must not be harmed.
8. Your opponent may be intent on LITERALLY killing you.

Now, we ask, have the physical demands for this "sport" been lessened or heightened? Only the most punch drunk of pugs would fail to recognize at once that both the physical demands and the stakes have been terrifyingly increased, not lessened. This is the nature of combat as compared to sport. Ultimately, we come to see martial arts as tamer subsets of combat.



The fact that the fighter's confrontation is certain whereas the cop's is only probable, only creates the illusion of lesser demand – an illusion borne out of a comfort best seen in grazing zebra: "odds are it won't be me." A police officer so comforted places himself, his partners, and tragically, the public, unnecessarily in harm's way.

The fact that the requirements of combat are marked by largely unforeseeable circumstances and combat not being a game or sport has contributed to the exercise science community's showing little interest in the training needs of police and military personnel. One prominent exercise physiologist, in reference to our training, opined recently in his newsletter that "many of us could easily draw up" a program for Marines, clearly implying that the programming needs of combatants are more easily designed than the needs of the sport competitor. If Olympic medals were awarded for "arrest and control" the coaching community and exercise scientists would be climbing over one another to lend a hand.

## Combat Demands

What are the physical demands of combat?

Of the ten general physical skills (See CFJ, October 2002, "What is Fitness") - cardiorespiratory endurance, stamina, strength, flexibility, power, speed, coordination, agility, balance, and accuracy - it can readily be seen that success in combat, i.e., survival, could hinge on any of these ten components.

The physical demands of defensive tactics and arrest and control require a broad based general adaptation. This is not the domain of the specialist. Survival will be awarded on average to those men and women who've secured the most generalized physical capacity. They will, by necessity, be strong, fast, quick reacting, accurate, and flexible. This broad adaptation is well developed, by design, within the CrossFit arena.

Derek Ray of the Florida Police Corps has developed, implemented, and tested (by independent agency) CrossFit protocols and can give ample evidence of CrossFit's successes in battle, on the streets, and in competition/testing.

Essential to our understanding and successes in police training is the understanding that police work is largely anaerobic not aerobic. Though poorly understood, this is, nonetheless, a fact.

Time domain matching of task or sport to training is the first step to effective, legitimate strength and conditioning. Looking at police work, ask yourself, where would an application of a twenty minute max effort be? Is it likely that an officer would wrestle with a suspect for twenty minutes? An officer is about as likely to be struck by lightning as to be engaged in a twenty-minute fight. FBI stats show clearly that it just doesn't happen. Might an officer give chase on foot for twenty minutes? "Perhaps" is the answer but this too remains unlikely and in any case one viable option in this

scenario clearly includes letting the bad guy get away, that is, the situation is less likely to be life threatening to the officer than shorter, more intense, and more threatening encounters. It is the short encounters, those lasting from a few seconds to a few minutes, where an officer will affect most of his arrests and where police officers' lives are tragically lost.

When the men and women charged with training police officers come to terms with the unavoidable reality that police work is by overwhelming preponderance anaerobic, the fitness of police nationwide will begin to improve dramatically.

To give perspective, basketball, wrestling, boxing, and football are each so predominantly anaerobic that the NSCA (National Strength and Conditioning Association), in its epic *Essentials of Strength and Conditioning*, recommends that nearly 90% of the training time spent in each of these sports should be spent in anaerobic pathways. To do otherwise would be to reduce the strength, speed, and power of these athletes and assure defeat (see CFJ, October 2002, "What is Fitness?"). Police work is substantially more anaerobic than each of these sports we've offered as examples.

Combat offers randomized challenges, that are largely anaerobic, completely functional, and mixed generously among the lower extremities, trunk/core, and upper extremities. Any program that doesn't readily match and train for these demands is woefully lacking.



### Flawed Models

It is typical of police academy training to mix bodybuilding style weight training with extended running efforts - the intention being to improve both endurance and strength. While this works it only works in the sense that any exercise is better than none. To a large extent these efforts are counter-productive in that the marginal strength gains incurred through bodybuilding movements are shed by distance running.

A typical client academy, prior to our arrival, has been working in the weight room with upper body isolation type movements in a conventional bodybuilding split program on Tuesdays and Thursdays and running their cadets on Monday, Wednesday, and Friday. While they were getting results, they were functioning at less than half potential.

The model they'd embraced was flawed on many fronts:

1. The program was too predictable. Combat presents unpredictable challenges and rewards those prepared physically and psychologically to deal with unpredictability.
2. It lacked movements that elicit a large neuroendocrine response, which are the most potent tools known for increasing strength.
3. It distinguished between strength and endurance in a manner for which nature has no regard.
4. It lacked functional movements that reinforce common recruitment patterns and efficiently/effectively prepare for any physical contingency.
5. It trained at intensities below the threshold for maximal adaptation. That is, the program was entirely aerobic!!

We've researched the PT (physical training) programs in dozens of police academies and they nearly all share most of these flaws.

## Florida's Success

Derek Ray at the Florida Police Corps in Jacksonville, Florida was the first to officially implement the CrossFit model in an academy setting. Florida's program, by contrast to widespread practice:

1. Incorporates workouts each containing singularly unique qualities and demands.
2. Relies entirely on movements demonstrated to elicit a potent neuroendocrine response.
3. Blends traditional elements of strength training and "cardio" training as required for combat.
4. Utilizes functional movements exclusively.
5. Trains at intensities that optimize adaptation, i.e., are nearly entirely anaerobic.
6. Nearly halves workout time.

The net result of Mr. Ray's program is an 80% improvement on cadet physical testing scores. This testing, by the way, was performed by outside, independent agencies - nearly twice the result in half the time.

Incidentally, and importantly, Derek's program has so captured the interest of the participants that a good number of his cadets are returning to the academy for PT after graduation and drawing veteran officers off the street with them.

The efficiency, efficacy, and popularity of Florida's program suggests a possible design for in house, on duty, PT programming in police departments nationwide.

## A Modest Proposal

The chief obstacle to on duty PT models hold that effective training week. This commitment of five additional translates to a 12.5% budget increase to Budget, economics, and politics render

More effective programming an in-house PT program comprised of would be more effective. This totals one to deliver the same manpower to the street.



programming is budgetary. Traditional requires an hour each day, five days per hours per week per officer ultimately deliver the same manpower to the street. this kind of program untenable.

technologies, like CrossFit, suggest that three twenty-minute workouts per week hour per week or a 2.5% budget increase

The point must be made clear that expediency played no role in our use of abbreviated workouts. Our single design consideration is maximizing physical capacity – expediency is but a fringe benefit. It is a misapprehension of physiological response that has favored the traditional extended workouts.

Our workouts average twenty-minutes in duration and we have a group with which we've been working only three days per week for several years. The protocol has proven efficacious.

We'd like to see police departments nationwide implement an in-house program supported by a simple web-based application with a database that eventually supportes the officers with:

1. A proven fitness protocol/technology.
2. Each workout assignment.
3. Detailed graphical and textual depictions of fundamental movements.
4. A simple database that both grades performance and allows officers to compare their performance against others by pools partitioned by station, department, state, or nation and could additionally be partitioned by age, gender, weight, etc. for each, any, or all workouts.
5. An attractive interface that returns data in user-friendly scatter plots, pie charts, and bar graphs.
6. A program that offers and encourages challenges and competitions among individual officers, tactical teams, academies, departments, divisions, states, etc.

7. A system that finds and details “chinks” in an officer’s physical capacity.
8. A library of fitness, nutrition, and health material selected and partitioned in manageable weekly doses.
9. A forum where participants would form a community where their achievements, questions, and concerns could be addressed and shared.
10. Motivation to greater participation on the officers own time picking up another two or three days of workout per week, thereby optimizing their fitness.,
11. A method of storing, retrieving, and organizing personal data like resting heart rate, cholesterol levels, blood pressure, body fat, girth, etc.

Individuals familiar with our website, [www.crossfit.com](http://www.crossfit.com), and program know that this is clearly feasible. Our work with police training programs nationally also convinces us that implementation could be done inexpensively and incrementally so that the benefits of the program could be touted to justify greater commitment and participation.

**Secondary Benefits**

Worksite fitness programs have a proven, well documented, history of measurably reducing health care costs, reducing absenteeism, increasing productivity, reducing use of health care benefits, reducing worker’s comp/disability, reducing injuries, and increasing morale and loyalty.

Every study done on worksite fitness programs has shown positive outcomes and of the thirty that have been analyzed for cost outcomes, 29 have proved to be cost effective. Whatever benefit is conferred on factory workers, insurance executives, and office workers, it seems reasonable to expect that the potential benefit for police officers would be even greater given the extraordinary demands and risks of their profession. Coors measured a whopping \$6.15 saved for every dollar invested in their program. Programs at Coors, Bank of America, Kennecott, and Equitable Life averaged a return on investment of \$5.86 for every dollar invested.

Interestingly, our experience with worksite fitness programs suggests that most of them, while measurably efficacious are far from state-of-the-art in their models for workouts, fitness in general, and nutrition specifically. It should be easy to generate a return on investment that matched or exceeded the benefits found in industry.

