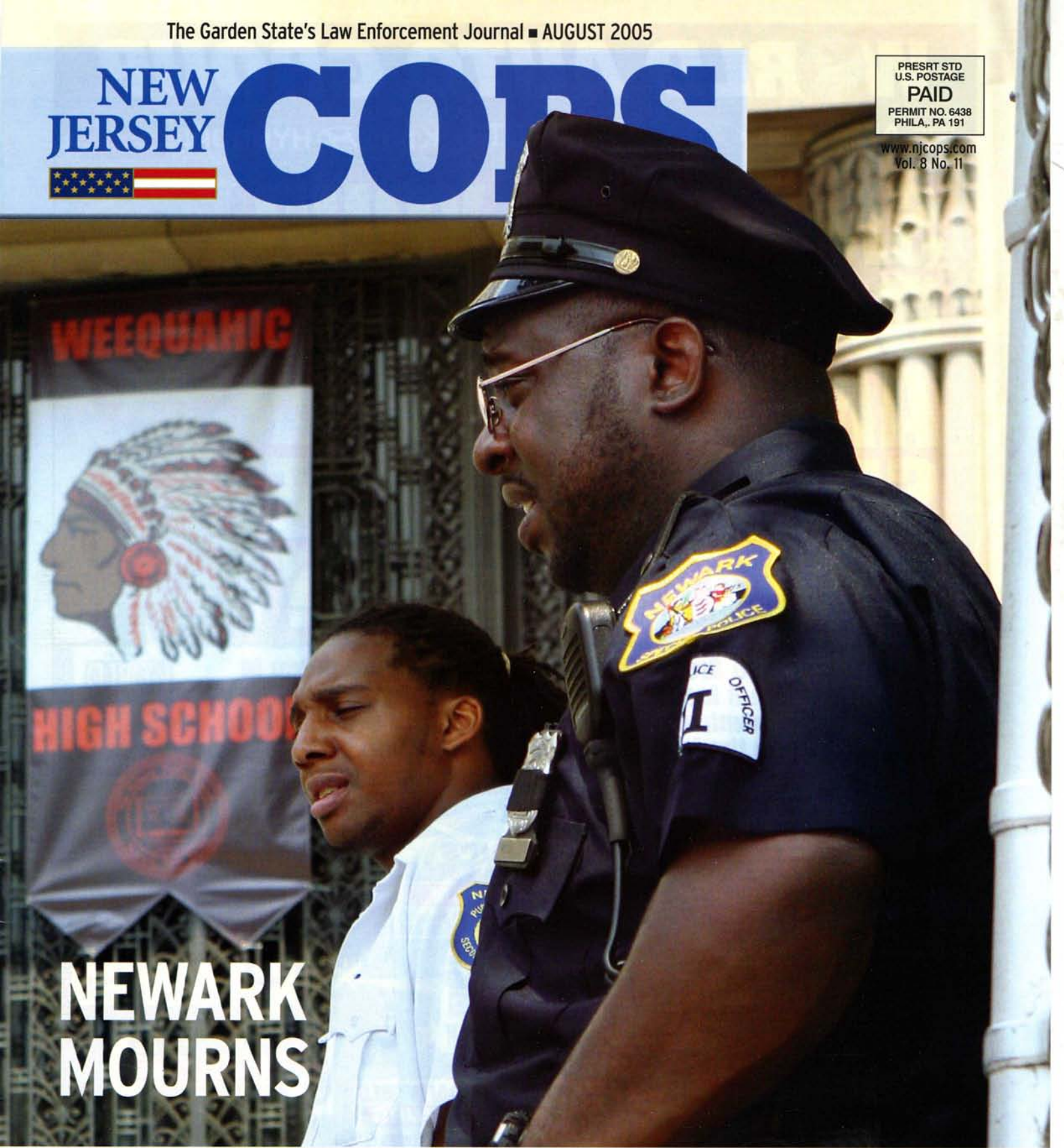


**NEW  
JERSEY**



# COPS

PRESRT STD  
U.S. POSTAGE  
**PAID**  
PERMIT NO. 6438  
PHILA., PA 191  
[www.njcops.com](http://www.njcops.com)  
Vol. 8 No. 11



## NEWARK MOURNS

AT THE TOP

**South Orange director becomes chief**

PAGE 10

DUTY GEAR

**Review of Spyderco's new knife**

PAGE 13

# Physical training for law enforcement

BY MATT BRZYCKI

As law-enforcement personnel, it's in your best interests – and in those of your fellow officers – to be as fit as possible. And to be as fit as possible, your physical training must include activities to improve your flexibility, aerobic training and muscular strength.

There are three main components of physical training: flexibility training, aerobic training and strength training. The guidelines for these areas can be organized under the acronym of FITT, which stands for frequency, intensity, time and type. Let's look at each of the three areas in greater detail

## FLEXIBILITY TRAINING

The main purposes of flexibility training are to: move your joints through a greater range of motion; exert your strength over a greater range of motion; reduce your risk of injury; relieve and/or reduce general muscular soreness.



Matt Brzycki

**Frequency:** It's important to do stretching movements on a regular basis. Preferably, you should stretch daily.

**Intensity:** Of the three components of physical training, flexibility training requires the least intensity or effort. You should stretch comfortably in a pain-free manner. You'll be able to stretch farther if you relax during the stretch. Inhale and exhale normally without holding your breath. Finally, try to stretch progressively farther than previously.

**Time:** Most authorities recommend that you hold the stretched position for about 30 - 60 seconds. You can do a comprehensive stretching routine in as little as 10 - 15 minutes per session.

**Type:** There are two main types of stretching: static and ballistic. However, it's safer to do static stretching (under control without any bouncing, bobbing or jerking movements). Stretch the muscles of your major joints.

## AEROBIC TRAINING

The main purposes of aerobic training are to: improve the functional ability of your Aerobic System; establish a solid foundation of aerobic support; maintain your percentage of body fat at an acceptable level; and surrender less quickly to fatigue.

**Frequency:** According to the American College of Sports Medicine (ACSM), you should do aerobic training 3-5 times per week.

**Intensity:** In order for aerobic training to be as effective as possible, you need to maintain a certain level of intensity. Specifically, you should use a "training zone" of 60-90 percent of your age-predicted maximum heart rate.

To find your age-predicted maximum heart rate, simply subtract your age from 220. For a 30-year-old officer, this would be 190 beats per minute [220 - 30 = 190]. To find your training zone, multiply your age-predicted maximum by 0.60 and 0.90. In this example, the officer would

SEE PAGE 23

End of Model Year  
Super Spectacular  
Open House!!



### OPEN HOUSE HOURS

THUR 9A - 9P  
FRI 9A - 9P  
SAT 9A - 6P

**\$ Lowest prices of the year!**

**Jayco**

We carry the full line of America's Most Liveable RVs, including....



Jayco's Jay Flight, America's #1 selling travel trailers & fifth wheels!



Jayco's very affordable Jay Feather series of Ultra Lite Weight trailers.



**Sunny Brook**

One of the best kept secrets in the RV industry! Check out these beautifully-crafted travel trailers and fifth wheels.

**Newmar Corp**



**Southwind**



**White Horse  
RV Center**

980 N. Black Horse Pike (Rt. 42), Williamstown, NJ 08094  
(856) 262-1717

Open House  
Highlights!

Open House pricing on every RV on our lot!

Factory representatives will be on hand to answer your questions.

Special Open House financing available.

A fun and pleasurable buying experience — no high pressure tactics!

Refreshments (Saturday only).

**HUGE variety**  
of new and  
pre-owned RVs  
in stock  
to choose from!!

WWW.WHITEHORSERV.COM

FROM PAGE 22

need to maintain a heart rate of about 114-171 beats per minute.

Like all other forms of training, your aerobic training must be made more challenging over time. To make aerobic training more difficult than previously, you can (1) complete a greater distance in the same amount of time; (2) complete the same distance in a shorter amount of time; or (3) maintain the same pace for a longer duration.

**Time:** The ACSM recommends that aerobic training be done for 20-60 minutes. Keep in mind that you can get 30 minutes of aerobic activity by doing one session that lasts 30 minutes, two sessions that last 15 minutes each or three sessions that last 10 minutes each

**Type:** For best results, you should use activities that are rhythmic in nature and involve large amounts of muscle mass. There are numerous options available, including biking, rowing, running, stair climbing and swimming. For the most part, perform activities that you find enjoyable and appropriate for your level of skill and orthopedic health

#### STRENGTH TRAINING

The main purposes of strength training

are to : improve the functional ability of your musculoskeletal system; increase your muscle mass and decrease your body fat; surrender less quickly to fatigue; and improve your psychological state.

**Frequency:** A period of about 48 hours is necessary for your muscles and energy systems to recover between workouts. Effectively, this means that you need to do strength training 2 - 3 times per week on non-consecutive days (assuming total-body workouts). Can two weekly sessions of strength training be productive? In a study that involved 117 subjects, a group that trained two times per week experienced approximately 80% of the gains in strength of a group that trained three times per week

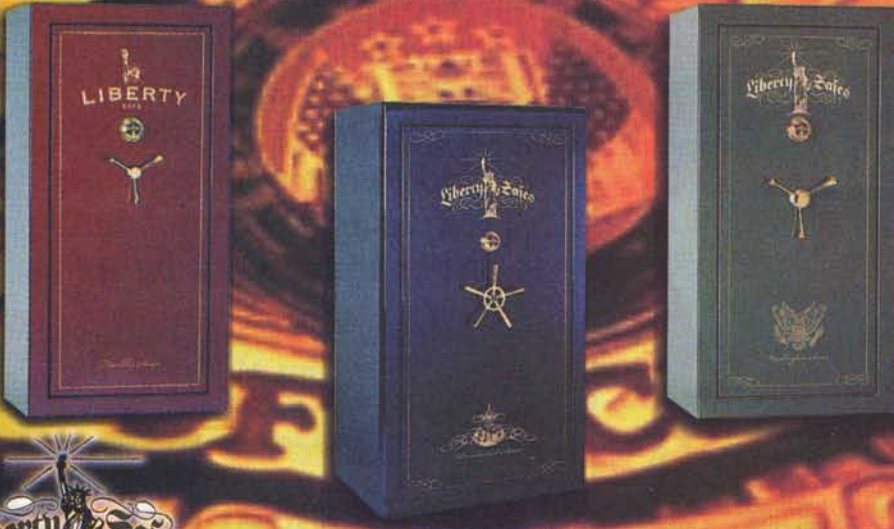
**Intensity:** Strength training must be challenging. Your effort should produce or approach muscular fatigue. This means that you should exercise to the point where you can no longer do any more repetitions. Equally important is to make your efforts progressively more demanding in subsequent workouts. Therefore, try to (1) do more repetitions with the same resistance; (2) do the same number of repetitions with more resistance; or (3) do more repetitions with more resistance.

**Time:** Workouts in the weight room need not be marathon efforts. If you're using a high level of intensity in the weight room, 45 - 60 minutes of training will be enough to produce significant increases in muscular strength. Remember, your goal is to produce an adequate level of muscular fatigue. To achieve this, the idea is to perform the minimal number of sets of each exercise

**Type:** Your workout must be comprehensive, addressing all of your major muscle groups: your hips, legs, torso and mid-section. You can accomplish this by implementing free weights and/or machines. You won't develop in a different way just because you used different equipment. Studies have found similar responses between groups that used free weights and groups that used machines.

*Matt Brzycki is the coordinator of Recreational Fitness and Wellness at Princeton University. A former Marine Drill Instructor, he has authored, co-authored or edited 13 books on strength and fitness, including SWAT Fitness (available at [www.operationaltactics.org](http://www.operationaltactics.org)).*

# LIBERTY A SAFE FOR THE WORLD'S MOST DEMANDING PEOPLE



**LIBERTY SAFES**  
AT **Sportsmen's CENTER**  
Rt. 130  
Bordentown, NJ  
08505  
**(609)-298-5300**

**LIBERTY SAFES**  
COMMERCIAL & RESIDENTIAL  
SECURITY PRODUCTS  
1215 Rt. 73 North  
Mount Laurel, NJ  
08054  
**(856)-222-9904**

**LIBERTY SAFES**  
COMMERCIAL & RESIDENTIAL  
SECURITY PRODUCTS  
38 E. Germantown Pike  
Norristown, PA  
19401  
**(610)-275-6101**

**FINANCING AVAILABLE • 90 DAYS SAME AS CASH •  
IN-HOME DELIVERY SERVICE AVAILABLE •**

**SEE US AT BOOTH 655 FOR LAW ENFORCEMENT DISCOUNT**

N8839-01