

THE NO-NONSENSE RETROFIT FOR YOUR COMBAT CHASSIS



COMBAT STRENGTH TRAINING



PAT MCNAMARA



Copyright © 2015 by Pat McNamara

All rights reserved. This book or any portion thereof
may not be reproduced or used in any manner whatsoever
without the express written permission of the author
except for the use of brief quotations in a book review.

First Edition, 2015



CONTENTS

ABOUT PAT MCNAMARA	3
GETTING STARTED	4
POWER	8
SPEED AND QUICKNESS	14
STRENGTH	20
HYPERTROPHY	28
QUICK SIX EXERCISES	30
THE MISSING LINKS	32
WRAPPING UP	37

WARNING

The techniques, exercises, and content expressed in this document are for illustrative purposes only. Consult your physician before trying any physical activity or nutritional plan.



ABOUT PAT MCNAMARA

Pat McNamara (Mac) has 22 years of Special Operations experience, 13 of which were in 1st SFOD-D. He has extensive experience in hostile fire/combat zones in the Middle East, and Eastern Europe. He trains individuals at basic and advanced levels of marksmanship and combat tactics.

When he worked in the premier special missions unit, he became an impeccable marksman, shooting with accurate, lethal results and tactical effectiveness. McNamara has trained tactical applications of shooting to people of all levels of marksmanship, from varsity level soldiers, and police officers who work the streets to civilians with little to no time behind the trigger.

His military experience quickly taught him that there is more to tactical marksmanship than merely squeezing the trigger. Utilizing his years of experience, McNamara developed a training methodology that is safe, effective and combat relevant and encourages a continuous thought process. This methodology teaches how to maintain safety at all times and choose targets that force accountability, as well as provides courses covering several categories, including individual, collective, on line and standards.

While serving as his Unit's Marksmanship NCO, he developed his own marksmanship club with NRA, CMP, and USPSA affiliations. Mac ran monthly IPSC matches and ran semi annual military marksmanship championships to encourage marksmanship fundamentals and competitiveness throughout the Army.

He retired from the Army's premier hostage rescue unit as a Sergeant Major and is the author of [Sentinel](#) and [T.A.P.S.](#) (Tactical Application of Practical Shooting). He also owns and operates TMACS Inc, a tactical training and consulting company.

GETTING STARTED

When it comes to weight training, working body parts is virtually an anachronism. Isolated training of the muscle group can actually be weakening the muscle group, because it needs to be used in a functional fashion. If you are still working body parts, you are probably one of three people: 1) you are a body builder; 2) you are recovering from injury and are going through physical therapy; or 3) you have no idea what you are doing.

Through mentoring and education, I got away from the nonsense of “pretty” muscle building and started a performance-based training regime around fifteen years ago. The difference between performance-based training and outcome-based training is that I am allowed to work within my capability level. Outcome states how many, how much, how fast. Performance states how well. If we work this way, we can work with what we are given.

I define my system, which I personally use, as Combat Strength Training (CST). CST is a system that retrofits the combat chassis (the body) so that it performs with maximum efficiency at maximum capacity.

Focusing on self-preservation and longevity, CST introduces the chassis and its external components to power, strength, and agility training in all planes of motion within the full muscle spectrum range.

It enhances the chassis' performance and tactical effectiveness through maintenance, education, and combat-replicated movements while following a safe, comprehensive, systematic, and progressive format.

As the chassis is upgraded it becomes a battlefield multiplier, which in turn becomes a force multiplier. CST improves rate of force production, strength, muscular development, speed, quickness, proprioception, and functional flexibility.

The CST methodology works within the individual's own performance level to develop a better, more efficient, stronger, and more capable self.

Though trendy and more practical PT crazes like Crossfit and military athlete have changed the way we view fitness, we are still missing the mark and not addressing all voids.

I love Crossfit and belong to an affiliate; it's got several voids though. For instance, it targets a narrow demographic (younger crowd), does not address self-preservation and longevity, neglects the transverse plane of motion, and creates too many injuries. For those of us with military or law enforcement background who routinely wear sixty pounds of lightweight crap, injury has been a way of life. You should not be getting injured in the gym! I too have been banged up throughout the years. I separated my bicep so completely that it was pulled into my forearm, broke three ribs, and dislocated my shoulder—all as a result of being a towed



jumper during an airborne operation; ruptured my L5/S1 disk as a result of a Hummer crash and had it surgically repaired; had my shoulder rebuilt after mobility training gone horribly wrong, and had an ACL replacement (center patella tendon) after snapping it during winter warfare training. I've got a herniated disk and two bulging in my neck from fighting, and I've broken both ankles and several bones in my right hand. I mention these injuries to make a point: I feel great today and boast that I am stronger and faster at forty-eight than at twenty-eight. I'm not in better shape, mind you: I cannot run ten miles tomorrow unannounced and feel good about it the next day.

We have a habit of doing what comes easy to us or what fires up our egos. The next time you are bench-pressing 315 and your shoulders ache with every rep, say to yourself, "I am an idiot." Get off of the bench press. No one cares.

Here are a few of the things we often neglect:

PROPRIOCEPTION. Proprioception, meaning "one's own, individual" perception, is the sense of the relative position of neighboring parts of the body and the strength of effort being employed in movement.

TRANSVERSE PLANE OF MOTION MOVEMENTS. The combat chassis needs to be worked in all planes of motion and in the full muscle-action spectrum. In other words, we need to work in the frontal (lateral), sagittal (back and forth), and transverse (core movement) planes of motion.

MUSCLE SPECTRUM RANGE. Our combat chassis must produce a variety of actions to effectively manipulate gravity, ground reaction forces, momentum, and external resistance. Therefore, we must work within the three different actions that the muscles produce: eccentric (lengthening of the muscle), concentric (shortening or contraction), and isometric (having equal force or maintaining length).

FINGER AND GRIP STRENGTH. This is the limiting factor to all upper-body strength. We are load-bearing creatures. How much we can carry and for how long is usually determined by what our hands can handle.

NECK. The neck supports the command center. It needs to be worked. This is not optional, especially if you were full kit, including a brain bucket. Simple "buddy-assist" manual resistance exercises performed twice a week can determine whether you go limp or are able to stay in the fight when taking one on the chin.

I am a firm believer in breaking down the week into subtasks, where each day, I place my focus in one area. These areas of focus include: speed/quickness, power, strength, and muscular development (hypertrophy).

SPEED = FAST IN ONE DIRECTION
QUICKNESS = FAST IN MULTIPLE
DIRECTIONS



Training example – sprints, double-end, or speed-bag work, speed ladder drills, The Seven, and Wall-Ups (a couple of my own concoctions)

Combat application – movement under fire

Personal application – running up a flight of stairs; running through a crowd to the safety of your vehicle; throwing accurate punches in bunches to an adversary's bread basket

POWER = RATE OF FORCE PRODUCTION: HOW MUCH, HOW FAST

Training example – power cleans, medicine ball throws, lateral sledgehammer, heavy bag work, and a few more of my own; the avenger, punch to the nuts and bag of body parts, and the black hole (Make sure you get coaching from a qualified strength coach before you attempt Oly lifts.)

Combat application – hoisting a teammate into a fireman's carry; heaving an ammo can to a top gunner

Personal application – throwing the table through the restaurant window; hoisting an injured loved one into a fireman's carry

STRENGTH = HOW MUCH

Training example – max squat, max dead lift, max overhead press (three reps each)

Combat application – uprighting an overturned vehicle; pulling one's self up/over an obstacle

Personal application – holding a dangling loved one by the hand; carrying your kids or wife from point A to point B

HYPERTROPHY = MUSCULAR DEVELOPMENT

Training example – 20 reps sets to failure followed by manual resistance

Let me draw this out for you. Let's take upper body for example. On a bench press, use a weight that challenges you to do twenty clean and deliberate reps with the last three or four buddy assisted. As soon as you are done, start knocking out slow and deliberate push-ups until you can do no more. Finish up with a few more on your knees until you can do no more. Stick a fork in you. You are done.

Combat application – self-preservation

Personal application – self-preservation

In addition to my big four, I will work abs every day and focus on functional balance and functional flexibility twice a week.



I think it is important that each workout is run as a circuit, and that it lasts thirty minutes or more. Each workout must start with a five-to-ten-minute warm-up (run a mile, jump rope, row).

Many of the exercises I use are difficult to describe, and too much would be lost in translation if I were to jot them down. For the time being, if you are not performing Olympic-style lifts, get schooled up and start. Compound lifts, like Olympic-style lifts, are not only superior for building strength but are also more calorically challenging and elicit greater responses, which generate elevations of testosterone and HGH (human growth hormone).

Performing compound lifts (like Oly lifts) will result in greater fitness levels, increased caloric expenditure, and improved total body strength and power development.

We all have different goals when it comes to our PT program. For some, it is as simple as cosmetics; for others, it is a requirement. Combat readiness, however, is nonnegotiable. This should be the main focus and should drive what we do and how we do it. Put your big fat ego aside and understand that we all perform differently, and that performance can be measured by doing what you can with what you have. Some of our combat chassis are Porsches, and some are Mack trucks. Allow yourself to work within your capability level.

Get some!

POWER

As we continue to outline the elements of my combat strength training (CST) system, a performance-based approach to maintaining your combat chassis, we will look at the four main training areas: power, speed/quickness, strength, and hypertrophy. In these chapters, we delve deeper into power, and I will give you a set of my own special concoctions.

NO LIMITS

As you plan out your training strategy, keep in mind that limits begin where vision ends. There are never enough hours in a day, and with some of our schedules, planning a workout into the day can be arduous. We are better at seeing problems than we are at seeing solutions. Don't fall into that trap. Reach down, grab a pair, and find a solution to plugging your workout into your day, even if it means doing it at the conclusion of your graveyard shift.

Training is not optional and shouldn't be daunting. Mental preparation is key. Plan your workout hours prior to execution and see yourself doing it. Play a highlight reel in your head of yourself crushing it. Visualization is critical—just watch any Olympic athlete prepping for his or her run. You must see it and believe it so you can sink your teeth into it.

For instance, I have complete confidence that I can tear down the walls of an adversary, and that I can save my life or a loved one's life. I know that in a confrontation, or when necessary, I can and will detonate. There is no question or doubt: I will come unglued and go berserk if the situation dictates it. I can attribute this to a positive attitude and belief in myself. This belief in my capabilities translates to and is a testament to how I work out.

Work the combat chassis in all planes of motion and within the complete muscle spectrum range: eccentric (lengthening of the muscle), concentric (shortening or contraction), and isometric (equal force or maintaining length). As mentioned earlier, I believe that we should work a minimum of four days a week. We should work in circuit and in anaerobic chunks at near metabolic threshold to achieve an aerobic goal (i.e., working in short explosive durations to where we're almost about to pass out or throw up).

I break my four days into the main training areas: one each on power, strength, speed and quickness, and finally, muscular development. I consider the power day to be the one with the most real-world application.

POWER

Power is the rate at which work is performed, the rate of force production. It is the product of both strength and speed. As we age, muscle power ebbs even more swiftly than strength



does. So exercises that can produce gains in power become especially important later in life.

Some real-world examples of power include the following: throwing a massive left hook into an adversary's bread basket; heaving a chair or table through the window of a burning room; hoisting a loved one out of harm's way or an injured team mate into a fireman's carry; mule kicking a door open to gain access to a crisis site; using a door ram on a primary breach point; or from a secured headlock position, flipping an adversary ass over teakettle. If you ever find yourself in one of these situations, you'll be damn glad you trained specifically on power exercises.

Note that most of these examples are also in the transverse plane of motion. This plane seems to be the most neglected of the three planes of motion, yet it is the one we will rely on most when the shit goes south. As a reminder, our bodies operate in three planes of motion: frontal (side to side), sagittal (forward or backward), and transverse (rotational).

Unfortunately, we all tend to live in what I call a "sagittalistic" type of environment when it comes to our workout programs, because we tend to get consumed by cosmetics. So we often default to "feel good" exercises that do not do us much good—except perhaps to boost our fragile egos.

EXERCISES

Over the years, I've developed a set of exercises to work specifically on power. Work each station for one minute and complete three revolutions. Remember to focus on performance, not outcome, so mind your capability level and work meaningful repetitions with weights that make sense for you. Crank up some flesh-ripping heavy metal and get your combat chassis in motion!

Get some!



PUNCH TO THE JAW. Set up a bar with a barbell on one end and the other secured in a corner of the room. Power is generated from the hips, so rotate on the balls of your feet

under the weight. This is not a push but a thrust upward, as if you're punching someone in the jaw. Be sure to use appropriate weight: for me, this is forty-five-pound bar with a forty-five-pound plate, so that I am able to complete a thrust through rate of force production without muscling it up.



PUNCH TO THE NUTS. Adjust a ring or bar deep enough so that you can grab it with one hand and assume an L-shaped position with your knees bent and body parallel to the floor. Your elbow should touch the floor. Grab a weight with your other hand and, using torso rotation, thrust the weight as high as you can reach.



BAG OF BODY PARTS. Use a sandbag or duffle bag filled to between seventy-five and one hundred pounds. Stand facing away from a four-foot platform and place the bag at your



feet. From a deep squat, grab the bag and hoist it in a transverse motion to the platform directly behind you. Turn 180 degrees to grab it and return it to the floor. Repeat in the other direction.



THE BLACK HOLE. I use an old tire for this. Using the same motion and mechanics as the Bag of Body Parts, start next to the tire and hoist the duffel bag into the middle of the tire. Then from on top of the tire, reach down to grab the bag and move it to the other side. This will also test functional flexibility while you retrieve the bag from the hole.

HEAVY BAG. This is pretty straightforward and just requires a heavy bag. If you do not know how to box, just throw straight jabs and crosses. Rotate your hips on the balls of your feet with each blow. This rotation is similar to the motion used when throwing a ball. If you have boxing or martial arts experience, go ahead and work that bag!



SIT-UP WALL BALL. Anchor your feet at the base of a wall (I use dumbbells). With a medicine ball in your hands, force yourself into a sit-up position and, without losing momentum, continue to a standing position and heave the ball to a fifteen-foot mark.



SINGLE KETTLEBELL CLEAN AND SNATCH. This is my favorite “on the road” exercise, as it covers many bases. If I have the access, I will work up to 125-pound dumbbells. Doing this with kettlebells requires a little finesse. Do one-handed clean and snatches off the ground with each side.



THE AVENGER. Break out the tire again and grab a sledgehammer. The objective here is to move the tire a desired distance (try to make note of this so you can track your progress). Put your entire body into it! Rotate on the balls of your feet and make sure that you generate power from the hips. Work both sides as well.

SPEED AND QUICKNESS

In this section, we will discuss some of the components vital to mobility. And mobility equals survivability!

CST is a performance-based approach to maintaining your combat chassis.

SPEED – the rate or swiftness of action in one direction

QUICKNESS – the ability to rapidly change direction without the loss of speed balance or body control

When it comes to training, combat readiness, being fit, and having a warrior mind-set are nonnegotiable. You—we—live in a world of persistent conflict. We must be our own agents of correction.

We cannot outperform our self-image. Being functionally fit and healthy increases confidence. Confidence and performance work hand in hand. Confidence is a battlefield multiplier.

In the past, we discussed how the work week should be broken down into a strength day, power day, a speed and quickness day, and a muscular development day.

When we work, we should work in circuit in anaerobic chunks at near metabolic threshold to meet an aerobic goal. Thirty-five to forty-five minutes is more than enough if we are working correctly. Our repetitions should be meaningful and performed with conviction.

We should work the combat chassis in all planes of motion and within the complete muscle spectrum range.

Whether your combat chassis performs like a Porsche or a Jeep, you can incrementally retrofit it so that it performs more efficiently at near maximum capacity.

The Combat Strength-Training Program (CST) is intended to replicate real-world movements necessary to save your life or your loved ones. If you were to build a scenario around it, you could approach it like this: You are out with your kids. Sociopath enters restaurant. You heave a chair through a window (power) which is your only “out.” You hoist your two kids, who are between fifty-five and seventy-five pounds (strength). Negotiate your way through the chaos to safety (speed and quickness).

Train like you fight is a ubiquitous and abused axiom that is typically heard in the military and LEO communities. We love saying it, but few know what it means. News flash: it has nothing to do with how much black Velcro and multicam we strap on to ourselves. Spontaneity and nontelegraphic motion are key components to winning a gunfight or street fight, but few



train for *that* fight.

Being strong and powerful in a sagittal plane of motion is not enough to ensure combat readiness. In order to ensure that the combat chassis is capable of rapid movement in multiple directions, we must incorporate speed and quickness training into our regime. This is worth mentioning a second time: mobility equals survivability! It is hard to attack a moving target—a target that has a keen intellect of proprioception (one’s own perception of the relative position of the neighboring parts of the body).

When I run pistol and rifle range drills that require rapid change of motion and short explosive bouts of speed, many guys run like they’ve got a corn cob shoved up their ass. They “duck walk” on flat feet and are herky-jerky.

As we plan out this particular training strategy and draw examples of a speed and quickness workout, keep in mind that it is not my intention to neglect traditional agility exercises but to give you additional movements to add to your *carte de jour*. Jumping rope, doing traditional ladder drills, and implementing plyometrics are all necessary components that add to overall athleticism; however, some plyometrics are high impact and may not be conducive to self-preservation and longevity.

Get some!

EXERCISES

Work these in circuit for about a minute at a whack until you are done with all. Repeat the revolution four times through. Use the weight most appropriate for you. CST works on a performance-based training methodology. Keep in mind that performance is measured by doing what we can with what we have, and we all perform differently.

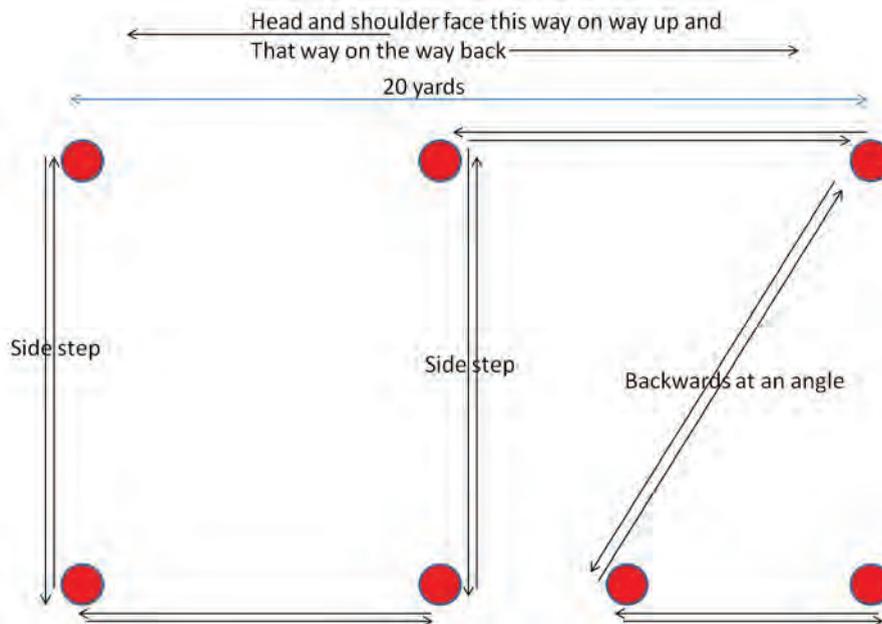


FOCUS BAG. If you do not have a focus bag, you may use a heavy bag or simply shadowbox. A Focus Bag or “double-end” bag will allow you to work with visual acuity as well as with fast hands. Concentrate on straight jabs and crosses versus heavy, winding, haymaker punches: “punches in bunches.” Keep your head low and tuck your chin into the pocket of

your shoulder at the extension of your punch. Rotate on your toes and throw from the hips. Replicate the motion you would use when throwing a ball.



WALL-UPS. The height of the box is determined by your level of athleticism. This exercise replicates the motion of jumping through a window or hurdling a fence. It will test your ability to work in a transverse plane of motion and will test your functional flexibility. I consider this a low-impact plyometric exercise, since you are controlling your descent.



THE SEVEN. This is a footwork drill, intended to be run as fast as possible. It is



mapped out like the diagram above. Face one direction running up and the other direction running back. Run this twice through (up and back and up and back). This should take forty-five seconds to a minute, depending on your level of fitness and on how smoked you are through the revolutions.



RUBBER BAND. Use resistance bands and adjust them to fit your specific needs. Draw a start box under your feet with the band extended and taught but not stretched. Draw drop boxes at about five yards out with about a five-yard spread. Set a kettlebell or dumbbell in one of the boxes. On your start, reach out to the weight and transfer it into the other drop box. Move back to the start box but not beyond it. Repeat for about a minute.



RING JUMPS. Set rings to just over shoulder height. Jump and pull with arms extended until you are in a full knees-to-chest position. This is another example of a lowimpact plyometric.

ALTERNATING BALL PUSH-UPS. A little risky as there is a chance in jamming a shoulder here, so if your body says, “No,” don’t do it. The push-up itself can take a back seat to the motion of rotating the ball between left side and right. You can modify these and do them on your knees. There’s nothing wrong with doing “sissy” push-ups so long as your ego doesn’t get in the way.



MEDICINE BALL TURNS. All transverse plane of motion here—the plane we tend to neglect most often when we work out but the one used most often in life itself. Sit with a ball in front of you. (The weight of the ball is determined by what you are capable of.) Attempt to turn with the ball and place it behind you. Turn in the other direction to reacquire your grasp on the ball.

Keep in mind that this is a speed and quickness workout. All repetitions should be performed as fast as possible—and with conviction. Don't “flat dick” it!



STRENGTH

Too often someone asks, “How much can you bench?”—as if this were some sort of useful indicator of how strength is measured. To this question, I will typically answer, “No idea, but I can dead-lift 405 for five reps.” The mouth breather who asked the question usually starts looking at me like I’ve got a dick growing out of my forehead. If we were to examine a single exercise to measure strength, it should more appropriately be a query on how much one can dead-lift or squat. These types of exercises are also more practical, and the motion is more frequently replicated in actual day-to-day scenarios.

We have been outlining my Combat Strength Training program, which improves how our combat chassis operates. The program is performance based, and performance is measured by doing what you can with what you have. This is critical: work with what you have versus striving toward bullshit arbitrary standards. We have outlined and given examples of workouts focused on power as well as speed and quickness. In this section, we tackle strength.

Physical strength is the ability to exert force on physical objects using muscles. An individual’s physical strength is determined by two factors: the cross-sectional area of muscle fibers recruited to generate force and the intensity of that recruitment.

WHY TRAIN STRENGTH?

Strength training builds muscle. The stronger you are, the more muscles you’ll have. However, strength training is not body building; building muscle is a byproduct of exercising, not its goal. Strength training increases bone density and, when done properly and through the full range of motion, also boosts a person’s flexibility and balance. Additionally, knowing that we have the ability to resist being moved or broken by an opposing force is a real confidence booster.

Balance, speed, quickness, power, or muscular development do not present results overnight. Increases in strength, however, can be gauged even within a week. All one has to do is to apply the appropriate amount of tension to a muscle group. It’s all about supply and demand. You will quickly get out of it what you put into it.

Building strength requires you to push heavier weights. Before you touch anything that increases resistance, make sure that you warm up properly. The purpose is to increase your body temperature to help improve muscle and tendon flexibility and pliability in order to facilitate an improved range of motion. Plan on about ten minutes to warm up properly. Jog a mile, jump rope, shadow box—pick your poison.

As a part of my job, I travel a lot. I train badasses to be better badasses. I do this primarily on the firing range, all year long in the blazing heat and in the driving, freezing rain. By the



end of the day, I am smoked. But I will still plan in a workout at the end of day—without fail. I guess what I am saying is to remember that old saying: “Excuses are like assholes....” If you plan your workout ahead of time, play a highlight reel in your head, see it happening, and see yourself succeeding, you are more likely to see it through at the end of your graveyard shift, at the crack of freaking dawn, or at the end of a long work day. Tap into the power of visualization.

Some real-world examples of exhibiting strength include: prying open the door to a crisis site with a manual breaching tool; collapsing an adversary’s jugular veins with a rear naked choke; assisting a buddy over a wall either from the top or the bottom; or tipping over a so-called smart car plastered in “Coexist” bumper stickers.

STRENGTH WORKOUTS

As part of my Combat Strength Training strategy, I will work strength once a week, typically performing a five by five by five (5 x 5 x 5) program when working strength. This includes five strength motions for five sets at five reps each, while increasing the resistance for each set. Traditional strength exercises work well, including squats, dead lifts, shoulder presses, bench presses, and pull-ups.



SQUATS. If you are not including squats in your workout, you are not really working out. Squats are functional, and functional exercises help your body to perform real-life activities—as opposed to simply being able to operate pieces of gym equipment. Squats are one of the best functional exercises out there. When you do squats, you build muscle and help your muscles work more efficiently as well as promote mobility and balance. Squats obviously help to build your leg muscles, but they are also calorically challenging and create an anabolic environment, promoting body-wide muscle building. When performed intensely,



squats elicit greater responses that in turn generate elevations of testosterone and HGH (human growth hormone). This is vital for muscle growth and will also help to improve muscle mass when you train other areas of your body aside from your legs.



DEAD LIFT. Your grip is your limiting factor to all upper-body strength. Grip work is typically neglected, or your poor grip is actually masked by training aids. If you require wraps, gloves, or an alternating grip to perform exercises like a dead lift, you need to work on your grip strength.

BENCH PRESS. We human beings are load-bearing creatures. We are not designed to bench press. Do not let ego determine how many plates you stack onto the barbell. If it hurts, decrease the amount of tension or simply don't do it.



PULL-UPS WITH BAND. If the sack of cottage cheese you call a body is creating too much downward force for you to pull up, use a rubber band to help you and decrease that amount of tension. Over time, you will require a smaller band, or you will be able to perform more repetitions. It's also a good idea to lose a couple of pounds from your gelatinous physique. On the other hand, if you can perform good pull-ups without a sissy "kipping" motion, use a band to provide more tension instead (as pictured). Increase the number of bands or the band thickness with each set.



DIPS WITH BANDS. Use bands for dips in the same fashion that you would with pull-ups. Increase or decrease tension as necessary.



OVERHEAD PRESS. The press is a highly effective compound upper-body exercise. Performing it standing (rather than seated) recruits many more muscle groups in order to maintain balance and support the lift. Like the squat and dead lift, it can be thought of as a whole-body exercise, to some extent.

STRENGTH FINISHERS

Just like any other Combat Strength Training workout—whether it be power, speed and quickness, or hypertrophy, exercises should be done in circuit.

I will plan in a total body smokefest to finish off anything that I may have neglected. A rope pull from a full squat position, a farmer's carry or Atlas stone lifts are great ways to finish, to increase the combat chassis' strength, and to elicit muscle recruitment. What we mean by muscle recruitment is the ability to activate more and more muscle fibers and motor neurons (referred to as a motor unit) in a muscle as resistance is increased. During movement you utilize adjunct muscles to assist muscles that become overburdened. So the recruitment of successive motor units as you continue to exert force provides you with increasing levels of contractile strength.

Here are a few finishers that will encourage muscle recruitment:



ROPE PULL. Assume a squat position and keep your feet planted in the same spot while pulling in a heavy load.



FARMER CARRY. Grasp two heavy objects, one in each hand, and walk as far as you can. This develops your core, balance, grip strength, and upper body. You definitely must include this one in your strength workout.



WEIGHTED SIT-UP. We should work our abs every day. On strength day I will simply increase the resistance utilizing this exercise. Starting in a squat position, pick up a heavy object and push up to a standing position.

ROPE CLIMB. Climbing rope requires the entire combat chassis to work as a unit. There is an art form to this, and there is only one way to climb a rope.



TIC TOC OR BARBELL TORQUE. This is a rotational exercise that requires a large group of muscles to work in unison. It's a full-body exercise that will develop a strong core. Set up a bar with a barbell on one end and grasp it with both hands. Start on one side of



your waist, push up, then back down to the other side.

When it comes to working out, if you just do what you've always done, then you will simply get what you've always gotten. Stop pussy-footing around with namby-pamby sissy concentration curls. Stack some plates on a bar and embrace the suckfest that is proper strength training!

Get some!

HYPERTROPHY

My Combat Strength Training (CST) program is a system that retrofits the combat chassis so that it performs more efficiently at near maximum capacity. The CST system doesn't discriminate against age or how you are put together. It is performance based, recognizing that performance is measured by doing what you can with what you have. In previous sections, I've outlined CST, and then I broke it down into power, speed and quickness, strength, and now, muscular development.

One of the primary purposes of CST is to focus on self-preservation and longevity—stronger for longer. Along with strength, we have to build muscle. Although building strength will indeed also build muscle, I like to dedicate one day a week specifically to muscular development (also known as hypertrophy). Muscle hypertrophy refers to the growth and increase of the size of muscle cells.

hypertrophy (hi-per-truh-fee): enlargement or overgrowth of an organ or tissue as a result of an increase in size (as opposed to the number) of its constituent cells

The main reason people should build muscle is because it adds strength to the body, and strength helps you live your life more easily.

Your combat chassis houses about 650 muscles. Each has its own function in helping the body conduct its daily activities. Muscular development helps strengthen these connective tissues, also increasing bone density. By doing this, you're reducing both your risk for injury and your odds of developing osteoporosis later in life. This is something you should think about right now—versus later in life when you can't walk your fat ass up a flight of stairs.

For those of you whose jobs required you to do some dynamic shit while wearing sixty pounds of lightweight crap, you've probably already got some hard miles accumulated on your chassis. In fact, if you're like me, to complement all of that mileage, you've also had several reconstructive surgeries. Mine include the lower back, left bicep, right shoulder, right knee, and a healthy serving of broken bones.

Additionally, the more muscle you have, the higher your metabolic rate. So by doing absolutely nothing, you can actually burn calories. One pound of muscle uses about six calories a day to sustain itself, while one pound of fat burns just two calories daily. Not to mention: the more muscle you have, the more "badass" you will look.

DIET

Diet also plays an important role in muscular development. I am not qualified at all to give advice on diet. However, I do know these things:



1. It is wise to shop at the perimeter of the grocery store.
2. Product, not food, comes in bags or boxes.
3. Water is the elixir of life and the single most important performance enhancement supplement in muscular development.
4. You should be taking in about two grams of protein per pound of your weight.
5. You need to increase your fiber intake.
6. Use a basal metabolic rate (BMR) calculator to figure out your recommended daily caloric intake. Your body requires a certain number of calories to maintain your current weight. BMR varies from person to person, depending on your weight, muscle mass, activity level, age, and so forth. If your calorie intake is lower than your BMR, you will lose weight. This is known as a calorie deficit. If your daily calorie intake is higher than your BMR, you will gain weight—a calorie surplus. Use a BMR calculator that has an activity-level field; otherwise, it will only calculate your resting BMR.
7. The days of eating “three square meals” are long gone. Research has shown that eating more, smaller meals is not only great for promoting a fast metabolism but also for helping to maintain, lose, and gain weight.

Many of us strive to achieve our so-called “fighting weight.” Fighting weight is a term used by the military and professional fighters (e.g., boxers, MMA, martial artists) to describe the appropriate weight at which someone is the most physically fit to fight in combat, the ring, or the octagon. Once you have found yours, diet becomes a delicate balancing act.

“I pick tings up and I poot dem down.”

As far as building muscle is concerned, simply increasing your caloric and protein intake will not do the trick. You will simply add to your gelatinous cottage cheese frame. You’ve got to put in the work and push some heavy things around. I worked with University of Michigan’s Mike Gittleson years ago. His philosophy was simple: “All your muscles understand is applied tension.” They do not understand reps, weight, or sets. I like to say that sets and breaks are for tea parties. His way of building muscle is not easy though. Expect to have a bout of dry heaves if you are working correctly. Training should be comprehensive, systematic, and progressive. Progression builds muscle; without it, you won’t grow. Progression is the constant increase of weight, stress, and intensity required to tell your body that it needs to grow more muscle.

I still stick by Gittleson’s twenty-rep set approach. This is a set of twenty repetitions of a specific compound movement done to near failure while following these rules:

- >> Don’t use momentum to move weight.
- >> Use a full range of motion.
- >> Don’t lock joints out at the top of movements (maintain applied resistance).



>> Keep your reps slow and controlled.

By slow and controlled I mean two seconds within the muscle spectrum or during the concentric motion (shortening of the muscle), two seconds during the isometric state of contraction (static), and two seconds during the eccentric movement (lengthening of the muscle). This monster set is followed by manual resistance, replicating the same movement but with light weight or your body's weight only. Typically, in order to maximize the benefit of the twenty-rep set, you will need a spotter. You will know when you are doing the twenty-rep set correctly when you feel like throwing up at the end of it.

QUICK SIX EXERCISES

Here are a few movements that will cover your entire body. This is what can be referred to as a "Quick Six." The key with all of these exercises is to find a weight that will push you to the point of failure at the twentieth repetition. Follow the two-second rule within the muscle spectrum.



1. SHOULDER PRESSES. Perform shoulder presses with a water-filled keg. The sloshing water provides an unstable weight, which requires your body to compensate. Your chassis will recruit other muscles typically not being utilized in a regular barbell shoulder press. If you do not have kegs of varying weight, use a barbell.



At the conclusion of the twentieth rep, perform resistance work like a lateral raise with chains. The chains supply more resistance during the concentric movement. Keep these slow and controlled. When you can no longer complete a rep, reduce the amount of resistance. Continue until you are toast.

2. SQUATS. I've said this before, and I'll say it again: if you are not squatting, you are not working out. If you want to develop any part of your combat chassis, you've got to do squats. Once you've completed the set with weights, perform manual resistance work with your body weight. Sissy squats are a good example of this body weight movement, or as shown, you can do manual squats while grasping a pillar or something similar.

3. CHIN-UPS. A chin-up is a great way to develop your upper body's "pretty muscles" while performing a compound exercise. If you cannot perform twenty controlled reps while following the two-second muscle-spectrum rule, go ahead and use a resistance band. After this set I like to perform stone curls with hands on opposite sides of the stone.

4. BENCH PRESSES & PUSH-UPS. Build your girth by performing a twenty-rep set of bench presses or dips, followed by either ring or standard push-ups. When you fail at push-ups, do them on your knees. But don't get poopy pants if someone makes fun of you.



5. BRIDGES. A simple way to develop your neck is to do a modified bridge on a bench. It is absolutely necessary to work your neck. After all, it supports your chassis' command center. Observe caution when doing bridges—this is your C-spine we're messing with. Adjust the amount of resistance by adjusting the distance your feet are from the bench. Do the same thing for the back of your neck while sitting on your ass.

6. ABS. Complete your workout by performing one hundred reps of your favorite abdominal exercise. Simple sit-ups will suffice.

This entire workout will take you all of twenty to twenty-five minutes. Keep in mind that it is just an example. There are plenty of other compound building exercises that you may substitute for your twenty-rep set.

Before you touch anything that increases resistance, make sure you warm up properly. The purpose is to increase your body temperature to help improve muscle and tendon flexibility and pliability in order to facilitate an improved range of motion.

So stop pissing and moaning about how tired, old, fat, out of shape, broken, or sore you are. Nobody gives a shit. Protect yourself and your loved ones by maintaining a fit mind and body.

THE MISSING LINKS

One should not pursue goals that are easily achieved. One must develop an instinct for what one can barely accomplish through one's greatest efforts. I pulled this Einstein quote to explain some of my drills and to help define my training methodology. So a goal that would be difficult to achieve, but doable, is as follows in this question: If you had cloned yourself yesterday, could you kick your clone's ass tomorrow. The time is relative of course. The point is this: Are you making incremental gains to improve your mind and combat chassis? Are you pursuing goals that are not easily achievable?

The week should be broken down into a strength day, power day, speed and quickness day, and a hypertrophy (muscular development) day. Workouts should be done in circuit and should last between twenty-five and thirty minutes. Individual exercises should be performed in anaerobic chunks to near metabolic threshold to achieve an aerobic goal as well.

As you may recollect, I am not a fan of body-builder-type workouts. I do not harbor disdain for body builders, but I think it is a waste of an investment unless, of course, you are a competitive body builder. Besides, there is no ass-kicking quality to peaks on biceps. Your clone will not be impressed.

To summarize previous sections: we need to work compound movements, in all planes of direction, and within the complete muscle spectrum.

This missing links section focuses on just that: the final pieces of the puzzle that bring everything together. These are done in conjunction with your workout or at the end of it. They may even be incorporated into the workout. Let your imagination run wild.



MUSCULAR IMBALANCES. If you are nursing a bad knee or back or have joint pain that is unexplainable, it may not be your body breaking down but an imbalance in your combat chassis—common with those of you pseudo body builders who work the front much more than the back. For example, you do tons of bench presses or heaps of leg extensions but don't work the opposing groups as much.

Muscle imbalance occurs when opposing muscles provide different directions of tension due to tightness and/or weakness. You may be overworking in one area and underworking in another. They may also occur simply because of patterns you create and constantly replicate. I developed an imbalance simply because of how I stand—stood. My normal stance was my fighting/shooting stance: shoulders semisquare, lower body slightly canted to the right, left foot oriented forward, and right foot oriented oblique to the right. This is how I stood for everything I did. Because of this habitual behavior, I developed bursitis in my right knee to the point where the pain was incapacitating. I had to change patterns. That started with changing my stance. Changing my stance and a good stretching regime will mitigate my muscular imbalances, giving me an edge on my clone's mobility.

I'd recommend finding a qualified physical therapist (PT or DPT) or certified athletic trainer (ATC) who can give you an accurate assessment of your status in terms of muscle balance, imbalance, and movement.

“Yesterday's clone has an imbalance that causes him excruciating pain when he steps hard to the left. I will force this movement on him and front kick him to the sternum.”

Hand and eye coordination. Most of us wouldn't think to work this in a gym—let alone work it at all. But it is necessary to wreck your clone in the event he has an ocular dominance.

The easiest way for me to work hand and eye coordination in my gym is by throwing a ball against the wall. My drill requires that if I throw it with my right hand and catch it with my left, I continue by throwing it with my left hand and catching it with my right. Initially, you will





look like a European throwing with your “weak” hand, but you will catch on fast.

Another way—and a safer way—to work hand and eye is to bend at the waist, focus on a point directly at the floor, bounce a ball to that point of focus, and catch it with the other hand. Repeat in the opposite direction without losing focus on that point on the floor.

“Yesterday’s clone was strong right-eye dominant. I can feign a left jab and throw a punishing right hook to the back of his mandible.”

Proprioception. Good balance and a strong core go hand in hand, and a strong core usually means better posture, less back pain, and improved performance during exercise and athletics. Plus, the better you balance, the less likely you are to fall or injure yourself. If you haven’t thought much about maintaining—or enhancing—your balance, now is as good a time as any to start. Your clone may be slacking!

The easiest way to improve balance is to stand on one leg. Most of us are better balanced on our strong side, so equal attention to both left and right sides is necessary.



I use a kettlebell stood on end to work balance. The kettlebell must be heavy enough so that it can’t be “muscled” upright but only balanced upright. Once upright, stand on one foot. Slowly twist your body to face different directions, look in different directions, or close your eyes to increase the difficulty level. Your sense of vision is a big part of the balance equation. It works hand in hand with the proprioceptive systems to maintain balance and prevent falls. By staring at a single focal point (minimizing your head and eye movement), you’ll balance more easily. If you move your gaze or take vision out of the equation altogether, it’s harder to balance.

I have recently increased the difficulty level of this drill by incorporating a balance beam. It is a simple two-by-four with a base, but it does the job. I will upright and balance the kettlebell overhead, walk the length of the beam, change hands, and change directions.

Another age-old drill for balance, proprioception, and muscle recruitment is a “Russian or Turkish Get-Up.” Designed to be performed with a kettlebell, I use a full-length barbell to increase the level of difficulty.



While lying on your back, balance the bar above you with one arm and “get up” to a full standing position. Reverse the motion by lying back down. Change hands and do it again.

“My clone’s balance sucks on his left side. I am hoping to battle in a construction site far above the ground where my superior balance will rule, and he will fall to his death.”



FINGER STRENGTH. Hand strength is arguably the most functional type of strength out there. From shooting, climbing, or digging your claws into an adversary’s eye sockets, you use your hands in day-to-day activities more than any other part of the body. The hands are also a crucial component of most upper-body exercises, so having strong hands will help your training all around. A limiting factor

to upper-body strength usually lies in your finger’s ability to grasp and maintain that grasp for as long as possible. Simply working grip is not enough. You must work the tips of your phalanges—I love using that word!—as distal as possible.

Ropes, balls, bars, etc. are all great mechanisms to increase grip strength. Try doing pull-ups by draping a towel over the pull-up bar and using the rolled-up towel as your grip.





Another one to try is walking a sledgehammer up using opposing finger pressure on each side of the sledge handle. Use a platform to rest your forearms on. Do this at the end of your workout when you are already “pre-smoked.”

“My clone’s finger strength is very good. Mine will be better, and I will be better equipped to crush his windpipe.”

Neck. As mentioned in a previous section, the neck supports the command center. It needs to be worked. This is not optional, especially if you wear full kit, including a brain bucket. It is not acceptable to have a pencil neck on top of your combat chassis. Simple “buddy-assist” manual resistance exercises performed twice a week can determine whether you go limp or are able to stay in the fight when taking one on the chin. Another way to develop your neck is to do a modified bridge on a bench. Take caution when doing bridges. This is your C-spine we are messing with. Adjust the amount of resistance by adjusting the distance your feet are from the bench. Do the same thing for the back of your neck while sitting on your ass.

“My clone’s neck is strong. He works his neck regularly but neglects the back of his neck a bit. I will have rotational strength in all directions. If I am able to secure a figure four head lock, lights out Mutha F#\$@er!”



WRAPPING UP

In this book, I've defined the Combat Strength Training system and the Combat Chassis. I've introduced you to performance-based training, and the major components of the combat chassis upgrade: Power, speed/quickness, strength, and hypertrophy. I've also showed you common functions that other training protocols typically neglect as well as potential weak links in your Combat Chassis of which you need to be aware.

Hopefully you've found this information beneficial. But, this book is only the beginning of your Combat Chassis retrofit. My goal is that you shift your focus to what really matters from a PT perspective so that you can see your own path more clearly. This is not the ultimate fitness program for all time, but a milestone. Only you know your desired outcomes and goals, and it's your job to keep taking the right steps to get there and build upon your success. I trust this book will be a useful tool in your toolbox.