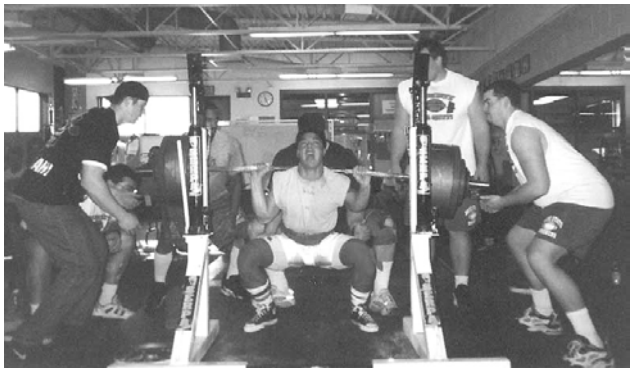
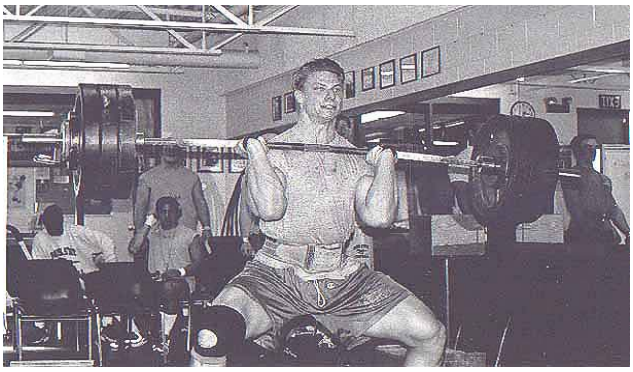
ATHLETIC BASED STRENGTH TRAINING

The Tier System





STRENGTH TRAINING PLAYBOOK for Coaches

Developed by:
Joe Kenn

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ATHLETIC BASED STRENGTH TRAINING

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To Angie, Joe, and Peter – my inspiration

Note to Readers

STOP! Read no further, unless you are willing to expand your mind from the conventional models of program design, this information is not for you. On the other hand if you are an individual who is willing to think outside the traditional models of strength training then I feel this strength training application is one that will interest you. I urge you to read on.

This manual is not intended to be a textbook. This is our coaching playbook for strength training program design. It is written in a manner to help coaches who are interested in this style of training to have a handbook that will lead them through the steps of a successful year round training program. This model is primarily for individuals who coach sports that require a great deal of maximum and explosive strength (i.e. football, wrestling, basketball, track and field, gymnastics). Also, It can be manipulated to help improve strength in sports such as tennis, golf, cross-country etc.

We refer to the actual design of a specific program as the X's and O's of strength training. This is our playbook. This manual serves as our reference when we begin designing the specific programs for a sport.

This is the fourth revision (1995, 1997, 1999 previous) to our training principles and probably will not be the last. We have continued to study and research all the methodologies that are being utilized today and how that material may benefit our athletes.

This subject matter of this manual will deal specifically with our theories as it relates to strength training program design. Other factors of training will be mentioned only when necessary.

DISCLAIMER

Anyone who participates in strength training should be required to schedule a physical exam from a physician before partaking in this strenuous task. This manual is a teaching and education tool. It should be noted that those who voluntarily participate in this style of training understand it is a dangerous activity and that the author and publisher assumes no liability for injury.

Good Luck,
Joe Kenn

FORWARD

Joe Kenn has changed many athletes' lives including mine. You will not be denied results with his demanding coaching style, work ethic, the individualization of workouts, and the precise stance of each individual lift. Not only are the workouts and techniques an absolute perfection, but the mindset in which the weights are moved shows his true talents which is knowing every athlete personally, athletically, and socially so he can maximize his potential.

Joe Kenn's workouts and running programs are absolutely incredible. I had the pleasure to be the first class in which Joe oversaw the program as the Head Strength Coach at Boise State University in 1994. It was my senior year and we were coming off of a 3-8 season with players that did not know how to work. Not only did Joe make every kid stronger, his best attribute is his ability to motivate and instill work ethic. His presence in our program took us to the 1-AA National Championship Game that year.

His constant track of every player's performance shows the players he is truly interested in their individual performances and also shows his work ethic. These two qualities are very important to have. All players need to feel a sense of loyalty towards them from a coach and Joe Kenn does that! His ability to change and individualize workouts is defiantly a characteristic that all strength coaches or any coach for that matter, should always be willing to do. His ability to work on all the platform lifts with the athletes and specialize to the specific athletic positions separates him from the rest of his colleagues.

Many strength coaches get caught up in numbers and suffer on the technique or quality of an exercise. With Joe, technique is not compromised. For example, his squats are precisely top of the thigh parallel. This is usually an eye opening experience for the athlete, and quite a transition at first, because their max number goes considerably down. But in the end the development of true power is accomplished. A very important quality that he has as a college football strength coach is he measures his success not by the numbers, although they will always be at the top, but by the success and failures of teams and athletes on the playing field. He truly understands the big picture, competing for championships.

In my opinion a strength coach in a college football program is the most important coach on the entire staff for two reasons. First, he sees and interacts with the athletes more than anybody. Second, I believe that not only the results of what the athlete achieves but most importantly what and how he goes about his business, the mindset, is a direct reflection of the overall success of the football team.

I have been around college football as a player and coach now for 13 years and I don't know of a better coach for all of the reasons I stated. Joe Kenn demands respect, perfection, attention to detail, technique, and he has the ability to change what he does for the better of the athlete and most importantly, the overall team.

I am now going into my fourth year as a full time college football coach at Montana State University, where I am the defensive line coach and recently promoted to Assistant Head Coach. Many of the qualities that I portray are directly a reflection of what I have learned from Joe Kenn. Joe was recently named strength and conditioning coach of the year, but really he should be Coach of the Year. He is a great human being, a great coach, and a great friend. It was truly an honor for the "Big House" to ask me to do this. FEEL THE THUNDER – BSU 1993-94.

Joseph L. O'Brien
1994 Division 1-AA Consensus All- American
1996 World League Champions – Scottish Claymores

The "WE" Versus "I" Mentality

Although I thought out the approach of the Tier System in early 1992, you will see a tremendous amount of we instead of I in the written portion of the manual. Why do you ask, because the evolution of the Tier System would not have occurred without those who have supported, believed, and worked the system. These individuals were and have been loyal colleagues who still have an important role in this program design application. I have had the pleasure of working with these individuals over my career and they also have a vested interest in this program.

Cheyenne "Chey Dogg" Pietri, University of Utah Graduate Assistant Strength and Conditioning Coach 1999-2001, Arizona State University Assistant Strength and Conditioning Coach 2001 – present. Cheyenne is the most fortunate of all in terms of the Tier System Program Design. Cheyenne is the only strength and conditioning coach who has actually performed the Tier System as a student athlete. I was fortunate to coach Chey at BSU for four years 1995-1999. Chey is the only coach in the country to have participated in the program, coached the program, and developed programs for specific sports. His work with the ASU swim team has again proved the Tier System diversity with working with a large majority of sports. Cheyenne has been a huge difference maker with the success of our extra work out plan especially in terms of rehabilitation, prehabilitation and reconditioning of athletes.

Mark "Coach Uye" Uyeyama, University of Utah Student Assistant Strength Coach 1999-2000, Arizona State University Graduate Assistant Strength and Conditioning Coach 2001-present. Coach Uye is one of the best "Floor" coaches in the country in my eyes. His passion is second to none in his approach to coaching athletes. In the last four years the Tier System has changed tremendously, and he has had a lot to do with the implementation of our ELITE training template and re writing our comprehensive exercise pool.

Rich "Dick" Gray, Boise State University Assistant Strength and Conditioning Coach 1996-1998. Dick is one of my best friends and he is family to me. Dick's greatest impact was pushing me to publish the first article on the Tier System in 1997 with the help of Harvey Newton. This process took over a year to complete. Dick did a masterful job of implementing the Tier System with Olympic Sports at BSU that lead us to accept the fact that this program can be adapted to any sport who believes strength training can help improve athletic ability.

Adam Miller, Boise State University Assistant Strength and Conditioning Coach 1995-1996. Adam was truly my first assistant as I began my head-coaching career in 1994. Adam had numerous experiences in strength training before heading to Boise and his confidence in this program allowed for the first model to be written and implemented solely as the program of choice at BSU.

The following individuals also have had an impact in our program design and should be noted as well. Gary Craner, Tammy Pascoe, and Jeff Lien, Boise State University Athletic Training Department. These 3 great people worked along side the strength staff at BSU to develop and implement the auxiliary program. Dave Tate of Elite Fitness Systems. Dave was extremely gracious in spending several hours with Coach Uye and Myself in Tucson, April 2002 the night before a 2-day seminar that we were unable to attend. Also, Dave has been extremely helpful during numerous phone conversations. Louie Simmons, Westside Barbell Club. Coach Simmons' columns in PL USA have enabled us to learn his system of training as well as allowing me the opportunity through Dave to visit his facility in May of 2002. I was extremely fortunate to listen to Coach during a 2-day seminar, July 2002 with Mel Siff. Chris Doyle, Head Football Strength and Conditioning Coach, University of Iowa. Chris was extremely gracious to allow me to visit him at Iowa after I replaced him at Utah. His relationship with his former strength coach at

Boston University Mike Boyle, has made Chris one of the truly greats in our profession. His knowledge of torso development rivals that of no one in the collegiate level. Martin Rooney, Parisi School of Sport for his help through conversations on athletic related functional strength training exercises for the lower body. Finally, my former strength coach Joey Bullock who allowed a lifting junkie to work out everyday and bother him all the time and Dr. Ken Leistner who has been a strong supporter of mine since I was a high school athlete.

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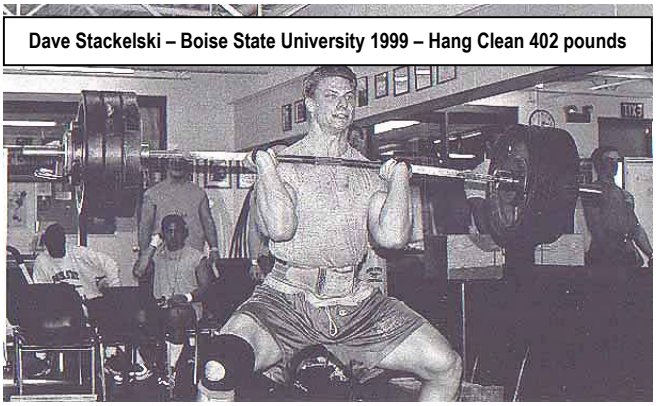
Section 1 Introduction

The development of a yearly plan for strength training has become a crucial aspect in the success of individuals as well as teams. Because of the increased importance of an athlete to be conditioned year round, a properly planned program has increased the role of the strength and conditioning coach (from here on will be referred to S/C coach). A team or individual that is functionally stronger and in better condition generally wins the competition. These athletes usually have followed a structured yearly training program, one that included all aspects of strength, mobility, flexibility, nutrition, conditioning, agility, and speed development.

It is imperative that the S/C coach be aware of the numerous training principles and applications that are available to them. The more information available to you, the more it allows you to make confident decisions when designing your program. This will ultimately enable you to create a program that will affect the athlete's performance in a positive way.

1.1 Strength Training


Dave Stackelski – Boise State University 1999 – Hang Clean 402 pounds

In any sport the development of whole body strength has become more and more essential to sport coaches whose longevity at their current posts are based on the success of their athletes and their team. The strength programs that these athletes participate in help in the goal of winning two fold. A stronger athlete is a better athlete, and a stronger athlete is a healthier athlete. The ability of an athlete to improve performance, decrease the chance of injury, or decrease the recovery time, if an injury does occur, is extremely important when championships are on the

line. That is why the S/C coach's role in the development of athletes has taken on a more influential role in performance enhancement.

There are different avenues to take when creating a strength-training program that will improve athletic ability. Which ones are correct, which ones are the most successful; we may never know because many teams have won championships with various styles of training.

The program that is applied to our athletes has considered all the methods that have been available for review. The methodology of our program is a combination of all the training principles that are being utilized today on the professional, university, and high school levels. We have been fortunate to receive positive feedback from those individuals who have implemented our system with their athletes. We refer to this type of training as Athletic Based Strength Training and the training model is known as The Tier System.

The Tier System is a true conglomeration of numerous types and styles of training that many of us use or have used in previous plans. You will see derivatives of the sports of weightlifting, powerlifting, and bodybuilding. We refer to these sports as the strength disciplines. Training principles from the Westside Barbell Club (Coach Louie Simmons and Dave Tate), traditional periodization, and High Intensity Training (H.I.T.) are interwoven to complete the package. We utilize the principles of H.I.T. and events from strongman training in our auxiliary training programs.

There are two main segments that are important in the planning of a successful strength-training program. The first is the development of the annual training plan through the theory of periodization. The second is designing the actual strength program through the Tier System model.

The annual plan allows us to set up the direction and the specific time periods we have for programs and goals throughout the year. When this plan is completed we then begin the development of the cyclical plan for each program. This will prepare the athletes for the demands that are placed on them during different stages of the competitive year.

Most sports have a multiple game season that may last four months or longer in duration. These sports may also have a spring or fall practice schedule in which sport specific drills may take precedent over strength training. If these situations are not taken into account before the actual development of a specific program takes place you are looking for trouble. It is imperative that the program planner looks at the big picture first, and then looks at specific blocks of time during the year to specifically work on progressing the athletes towards the upcoming competitive season.

The second segment is where the program planner begins listing exercises that may be implemented into the training program and then chooses those exercises that will benefit the athlete in the most efficient manner. Once the exercises are finally chosen, they are strategically placed in the weekly template to create an athletic based strength-training program.

As mentioned earlier this is truly an atypical program. We have broken some of the traditional principles of exercise order and linear periodization and created a program that has proven results documented in both college and high school athletes. When the Tier System was designed and we termed it Athletic Based Strength Training we were not looking to set a trend, we were looking for the most efficient way to tie in all the great aspects of the different types of training and mold it into one model.

It is imperative that we as strength professionals keep an open mind to the numerous ways there are to train athletes. The ability to recognize other program's success and take the time to study and evaluate their structure will allow you to make your program better.

As mentioned earlier, this manual will cover our program design model for strength training. There will be references to other components of athletic development only when needed.

1.2 Overview of Our Program

1.2.1 Mission Statement

To achieve athletic excellence through a systematic training approach that will enhance both mental and physical performance. The strength and conditioning coaching staff will enhance each individual athlete's athletic potential through a structured program that includes all aspects of physical development and injury prevention.

1.2.2 Overall Program Philosophy

The strength and conditioning staff will enhance every athletes' performance to reach their athletic potential. It is our philosophy that each individual athlete has an impact on the success of the sport program. When an athlete is putting in the time and effort to succeed, the strength and conditioning staff is equally committed to giving the same effort and more to help that athlete.

1.3 Goals of Our Training Program

- Work
- Team Building
- Develop of the Sport Athlete
- Injury Prevention

1.3.1 Work

We are looking at several factors in our program when it is related to the word work.

1. Increase Work Capacity – raising the athletes ability/volume of purposeful activity in a given period of time
2. Work Intensity – the athlete shows eagerness and strong concentration
3. Work Effort – the athlete is attempting to accomplish/achieve his/her objectives
4. Work Ethic – the athlete's moral principles – pride

1.3.2 Team Building

Team Building – to develop/establish a group working together. In our situation we deal predominately with teams, so group work is extremely important to the overall objective of our program. We prefer to train in large group/team settings because we can establish these intangibles of success:

1. Unity
2. Competitiveness
3. Camaraderie
4. Peer Review
5. The Power of One – One Mission, One Goal

1.3.3 Developing the Sport Athlete

Our athletes utilize strength training as one of the major pieces of their overall physical development. Unlike powerlifters and weightlifters that actually compete in the exercises they train, our athletes have been recruited to play a specific sport/position that utilizes strength training as a way to improve their level of fitness and athletic ability. The position/sport coach works on the specific skills necessary to succeed on the playing field of choice.

Exercises that influence mobility are extremely important to the development of athletes. In the strength disciplines most training activities are completed in the linear plane with little or no foot movement (weightlifting is the only discipline where the feet move but is very specific to the "catch" phase of the lifts). Therefore, the choices of movements in training can be narrower in scope. Also, strength athletes do not have the concern of the conditioning aspect in their sports. Specific conditioning demands have a major influence in the strength programs that are developed during the annual plan.

1.3.4 Injury Prevention

Several factors in our program relate to injury prevention:

1. Functional Strength Training
2. Functional Conditioning
3. Functional Flexibility
4. Proper Nutritional Guidance
5. Rest and Recovery
6. Needs Assessment – injury prone areas pertaining to a specific sport

1.4 The 5 Bullet Points of Athletic Based Strength Training

The following 5 bullet points are the main components of our strength-training program. Our training template, speed of movement, and workout duration are based on these 5 points.

- Train Movements rather than Body Parts
- Whole Body Training Sessions versus Split Training Sessions
- Explosive versus Non Explosive Movements
- Variety
- Tempo

1.4.1 Train Movements rather than Body Parts

Most athletic based sport athletes who are successful have the innate ability to control their body in space. Movement training is an important factor in improving body control. The days of concentrating on specific body parts are over. No one is going to care how big your athletes' arms and chests are if they are sitting next to you on the bench. By emphasizing movement patterns we can develop a better functional training program that will transfer the improvements from the strength training program to the comp.

Closed Chain or Ground Based exercises should make up approximately 75% or more of your overall exercise choices per program. These exercises are those in which athletes are standing on their feet producing force against the ground. The more force that athletes can apply to the ground the faster they can run, jump, and change direction. The utilization of free weight movements involving barbells and dumbbells are more effective when this type of training is being considered. Free weights also allow us to train in *multiple planes of movement* within one

exercise set. These movements can be forward/backward, left/right, up/down, rotational, and angular.

Exercises that have *multiple joint actions* are highly utilized in our program. Most athletic skills are multi-joint movements that are timed in a synchronized fashion. Exercise variations of the back squat and variations of the clean, jerk, and snatch help to improve these movement patterns. These movements also have an *extension* component within them. Extension involves three major joints, the ankle, knee, and hip. These three joints when moved from the flexed to extended position create the explosiveness needed to fire off the line of scrimmage, serve a tennis ball, or dunk a basketball. Training multiple joint movements has proven to have a higher carryover value to sports than single joint isolation movements.

The implementation of *unilateral lower body (single leg) movements* is another emphasis of our program. During competition, the athlete is very seldom on both feet at the same time. Single leg strength becomes an important factor in the lower body development of the athlete where balance and stabilization are issues. Also, when performing single leg movements such as step ups and lunges you actually open and close the kinetic chain, which is similar to running. During the support phase, the leg is in contact with the ground (closed chain), then leaves the ground (open chain) during the recovery phase, and then comes back into contact with the ground during these movements. When athletes run, their body is supported by one leg 80% of the time.

Dumbbell training is an important factor when training unilateral upper body movements. Utilizing dumbbells for upper body development gives us the same advantages of our unilateral training for the lower body. Dumbbells allow us to train arm movements individually. This helps develop more stabilization strength in each shoulder as well as develop torso stabilization, overall body balance, and awareness during standing movements. Because more muscle fiber

recruitment is necessary when training with dumbbells as compared to barbells in upper body movements, more muscle force is applied to the resistance. We also implement exercises performed on balance boards, balance beams, and stability balls. This helps improve proprioception, body balance, and core stabilization.

1.4.2 Whole Body Training Sessions versus Split Training Sessions

This concept of whole body training sessions evolved from our research into High Intensity Training programs. H.I.T. programs are based on 2-3 days per week training. Each session is comprised of one exercise per body part and each exercise is performed for one set for a prescribed number of repetitions. In some cases the exercise of choice for a body part may be a single joint/isolation movement. An example of this type of program would look like this:

1. Neck
2. Shrug
3. Leg curl
4. Leg Press
5. Leg Extensions
6. Heel Raise
7. Chest Press
8. Row
9. Lateral Raise
10. Triceps Pushdown
11. Biceps Curl
12. Torso

Although there is a place for single joint movements in our program, as stated before, athletic movement is made up of synchronized multiple joint actions. Our program is based on movement related to athletic activity and most movements of our program therefore are multiple joint in nature.

Instead of developing a whole body approach based on body parts, and performing one set per exercise, we developed Movement Categories that breakdown the exercises based on the number of joints that are involved in a particular movement. These categories are Total Body movements, Lower Body movements, and Upper Body movements. Total body movements

represent exercises that include movements of all the major joints of the body performed in a synchronized manner. Lower body movements are those exercises that focus on the movements that originate from the torso down. Upper body movements focus on movements above the torso. These movements are then performed for 2-10 sets.

It is extremely important to note that in most athletic situations the whole body is active in movement. The question must be raised as to why would you prefer to split the body into lower body and upper body sessions or push/pull sessions? These movements are all interwoven into one during performance. In every sport related movement the body uses a synchronized movement pattern that involves all the major joints of the body. Although the term sport specificity should be related only to exact drills that are performed on the playing field, we feel that the body must be conditioned through resistance exercise similar to the demands faced in competition.

It is our contention that the most efficient way to strength train would be on a 3 day per week, whole body program. This allows for improved recovery as well as being able to implement our running emphasis (speed or conditioning) of the cycle on non-strength training days. It is also important to note that in addition to these 3 strength sessions per week our athletes will have an additional 2-4 running sessions per week.

1.4.3 Explosive versus Non Explosive Movements

It is our belief that there is no such thing as explosive or non-explosive movements. Yes, we would agree that some exercises may need to be performed faster than others but, based on the rate of force development that you can generate, any exercise can be trained as slow or as fast as you would like. In most sports, success is based on who can arrive at point B from point A faster, therefore we believe in an "explosive" approach to concentric bar speed. We utilize the terms maximum concentric acceleration or progressive acceleration during the positive phase

(concentric) of the movement. This is usually implemented for all multi joint movements in our program, unless an athlete is recovering from injury or performing a prehabilitation program, then we may concentrate on a slower movement speed.

During the concentric phase of the movement, we want our athletes to accelerate the bar in the fastest time possible (we do understand that there will be a deceleration phase right before lock out). This is an acquired taste, because most athletes' first experience in strength training was based on bodybuilding principles and tempo training. In the sport of Bodybuilding, the goal is the aesthetics of lean body mass/definition and not necessarily maximum strength development.

We have also observed many athletes train over the years, so it must be mentioned that regardless of whether we classified a lift to be explosive or non explosive in the past (which we did), after approximately 80-85% of the athlete's one repetition maximum the bar begins to slow down due to the increased load. The true fact is this, as the load increases speed will decrease however, the athlete must continue to drive the bar as fast as possible at all times.

1.4.4 Variety

Athletics is based on a tremendous amount of movements in different planes of action. It is imperative that Athletic Based Strength Training programs include as many variations of movement as possible to train the muscles in as many planes as possible. A free weight dominated approach allows for extreme variety. Remember, training on all three planes of movement, sagital, frontal, and transverse as well as unilateral movements are crucial in Athletic Based Strength Training. Also, every 2-4 weeks we will change numerous exercises of the weekly schedule. This allows us to change movement angles and stay within our philosophy of building a functionally stronger athlete.

1.4.5 Tempo

One of our goals is to increase work capacity. We do this in a daily session by decreasing rest time, always standing during work out sessions, complexing, coupling, or combining movements, or super/tri setting exercises. We understand that most research says that a 3-minute rest between sets is necessary to increase strength. Unfortunately, most athletes never get this amount of rest between successive bouts of performance in a competition. For example, in Football, an average series is 5 plays with a rest interval of 35 seconds. This athlete will repeat this type of performance for approximately 17 series for a total of 75 plays. Obviously some series may be as short as 1 play and as long as 15, so it is important that the athlete is trained with a limited rest period in between sets to be prepared for numerous bouts of repetitive exercise. By reducing the rate of recovery between sets, you are allowing for more muscle fiber to be recruited for each set there after.

Our goal is to complete the main session of the work out in 60 minutes or less regardless of the total number of sets prescribed. We are looking for an anaerobic conditioning affect during our strength sessions. This will help increase the athlete's work capacity.

Section 2 Specifics

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Section 2 Annual Plan Development

2.1 Periodization

The development of a properly outlined yearly training regimen has a tremendous effect on the individual and team's success. With this in mind, the theoretical principle of Periodization plays an important role in the S/C coach's decision making throughout the training year.

Periodization is the principle of developing long term (yearly) training outlines for a specific sport. The main concept of periodization is to break down the training year into "periods". These periods each have specific goals and program guidelines. They are set to allow the athlete to be physically and mentally ready for the upcoming competitions.

There are numerous factors that must be considered in the development of a successful periodization model. Volume, intensity, frequency, exercise selection, exercise order, recovery, linear speed development, change of direction, plyometric training, basic skill development, aerobic, and anaerobic conditioning are some of the main factors that must be accounted for.

Although nothing can be set in stone, a periodization outline allows a coach to have the framework for the specific goals for the training year. This allows the coach to have a plan in place, and if necessary, make minor adjustments to future programs.

Periodization has been interpreted in several different ways since it surfaced as one of the primary factors for the success of the Eastern Bloc sports system. For the competitive Olympic athlete, a periodization model can last as long as four years.

The following Periodization format was developed to simplify many of the advanced models and to take into consideration the academic/training calendar of our athletes. Many amateur U.S.

athletes are student-athletes on the high school and university levels and most models don't take this into consideration. Since our athletes have competitive seasons annually, we classify our training year as the Annual Plan.

2.2 The Annual Plan

The annual plan is unique to each individual sport. A frequently asked question by most sport coaches is: when does the year begin? Some believe the annual plan starts when the school year starts, and ends when school lets out for the summer. Some think it starts January 1st and ends December 31st. Others believe it starts when the competitions begin. Although these seem to be logical answers to the sport coach, these answers are incorrect. There are also some coaches that do not even consider the importance of an annual plan and just repeat training regimens one after the other. Failure to plan is planning to fail.

2.2.1 When does the Annual Plan begin?

The annual plan is based specifically on the sport that the program is being designed for. The annual plan begins the day after the last competition of the previous season and ends the day of the last competition of the upcoming season. This allows for a gradual increase in the development of the athlete from one program phase to the next without unnecessary breaks that would hinder improved performance.

2.2.2 Uncontrollable Factors of the Annual Plan

Before one begins to develop the Annual Plan for a specific sport, there are several factors that need to be considered before the actual running programs and strength programs (cycles) are developed. Before the actual design of the annual plan can be started, a list of uncontrollable factors must be created.

Uncontrollable factors are those factors that the S/C coach cannot manipulate when designing the annual plan for a sport. These factors can lead to the S/C coach adjusting programs and cycles because these factors were not accounted for when the annual plan was developed. To save time, before you begin the development of the annual plan, there are factors that you must account for in the year. Most of these factors are dates that fall within the academic calendar (Table 1).

Table 1 - Uncontrollable Factors of the Annual Plan [examples]

Type of school year - semester or quarters
School holidays
Length of semester or quarter breaks
Fall break
Spring break
Examination schedule at the end of semesters or quarters
When does the semester or quarter begin?
Sport - length or season
Sport – Is it a split semester season? - Example basketball
Sport - Does the sport include 2 a day practice in the pre competitive phase?
Sport - Does the sport implement a spring or fall schedule/practice?
Play-Offs – length of participation
Tournaments – length of participation
Bowl Preparation
Student Athlete Discretionary Time

These factors have the ability to alter a particular program and cycle. For example, a S/C coach creates an eight-week cycle for a sport with week eight being a test week. Unfortunately for the S/C coach, week eight falls during spring break and all the athletes will not be in school for that week. Therefore, the strength coach cannot perform the testing at that time and now must adjust not only the evaluation week, but also the eight-week program and the remaining schedule of the annual plan.

2.3 Stages of the Annual Plan

Table 2 – Main Stages and Programs of the Annual Plan

Stages	**Rejuvenation**	**Developmental**	**Competitive**
Programs	**Post Season**	**Spring**	**Pre Season**
	Off Season	**Summer**	**In Season**
		Fall	**Championship Season**
		Winter	

There are three main stages we implement into the annual plan, Rejuvenation, Developmental, and Competitive (Table 2). Within these 3 stages, specific programs are developed based on the time periods determined during the 52-week training plan. Each stage and subsequent program has goals and objectives that are established to enhance the athletes' performance for the most important competition schedule of their sport.

2.3.1 The Rejuvenation Stage

The first major stage of the annual plan is the Rejuvenation Stage. This stage begins the day after the last competition of the previous year. The duration of this stage is typically between 2 – 8 weeks. A shorter stage is generally a bi-product of a longer Competitive Stage. In most team sports (professional, college/university, high school), teams that are extremely successful usually have a shorter Rejuvenation Stage because they have qualified for play-offs, tournaments, or bowl games. The Rejuvenation Stage begins the new competitive year.

The main objective of this stage is twofold. We want to maintain a general level of fitness while also giving the athlete time to psychologically and biologically rest, relax, and regenerate. This is accomplished by implementing training strategies that are atypical to the specific programs characteristics of the Developmental and Competitive Stages.

The Rejuvenation Stage is the ideal time to begin intense rehabilitation of injuries that may have occurred during the year's competitions. In this case, these individuals will have a program designed specifically for developing strength in the injured area. The athlete should schedule an individual appointment with the athletic trainer to implement a specific rehabilitation routine for the injured area(s). The S/C coach will then meet with the athletic trainer to discuss the alternatives available for the athlete's training plan.

The majority of the program protocols for rehabilitation will be implemented from an auxiliary training file that has numerous rehabilitation and prehabilitation programs. This will allow the athlete to be at or near 100% health for the Developmental Stage that follows. Obviously this pertains to athletes who have minor injuries. The major injury (surgical) rehabilitation process may consist of more time then the 2-8 weeks of the Rejuvenation Stage.

The Rejuvenation Stage can be broken down into two different programs. These programs are the Post Season and Off-Season. Depending on the length of the Rejuvenation Stage, the Post Season program may not be included. When both programs are implemented it is best to divide the number of weeks equally for each program. If this phase has an odd number of weeks such as 7, 3 weeks should be given to the Post Season program and 4 weeks to the Off Season program. The Off Season program is more conducive to the training that will occur during the Developmental and Competitive stages therefore when the total number of weeks in the Rejuvenation Stage is odd, we want more time invested in the Off Season Program.

During this stage, most athletes are on semester break and are away from campus. It is important to note this when developing the exercise pool for these programs. Athletes may not have the same equipment at home as they do at your facility.

The coach's involvement during this stage is minimal. After the review of technique for the foundation exercises and the introduction of new exercises have been accomplished, the coach is on the floor for safety/spotting concerns. This gives the athlete more control over the pace and choices of exercises without the interference of the coach.

This is the only time during the annual plan where the athlete will focus on individual body parts (Post Season Program) rather than movement patterns related to strength development. The athlete is encouraged to experiment with different training apparatuses for a more multi

dimensional training effect that we are trying to encourage during this stage. This will give the athletes the opportunity to train their body differently then our typical training programs.

The Post Season Program

Table 3 – Post Season Template

Work Out 1	**Work Out 2**	**Work Out 3**
Rack Holds 3 x 5 sec.	OH Squat Holds 3 x 5 sec.	OH Squat Holds 3 x 5 sec.
Hang Clean Progression Set 3x5 Rep1 – RDL Rep2 – Shrug Pull Rep3 – Power Pull Rep4 – High Catch Clean Rep5 – Clean to Front Squat Each Rep start with cadence Ready – erect position Set – Athletic Position Hit – perform movement	Squat Progression Bwt Squat – Wall or Rack x 15 Free Hand Squat w/ bar x 15 Zercher Squat 2 x 12 pause Front Squat 2 x 12 pause Back Squat 2 x 12 pause Snatch Grip Progression Set 3x3 Rep1 - RDL Rep2 – Shrug Pull Rep3 – Power Pull Each Rep start with cadence Ready – erect position Set – Athletic Position Hit – perform movement	Press/Jerk Progression Set 2x5 Rep1 – Standing Press Rep2 – Push Press Rep3 – Power Jerk Rep4 – Split Jerk – Dominant Leg Rep5 – Split Jerk – Alternate Leg Repeat Behind Head Each Rep start with cadence Ready – erect position Set – Athletic Position Hit – perform movement
From the Deck Progression Set 3x3 Rep1 – Clean Deadlift Rep2 – Shrug Pull Rep3 – Power Pull Each Rep start with cadence Set – Proper Deck Position Hit – perform movement	Block Snatch Grip Progression Set 3x3 Rep1 – Block Deadlift Rep2 – Shrug Pull Rep3 – Power Pull Each Rep start with cadence Set – Proper Block Position Hit – perform movement	Bench Progression Floor Press 2 x 12 Bench Press 2 x 12 Grip7 Bench Press 2 x 12
12 Exercise Circuit-repeat 1-3 1 – Hamstring x 12 2 – Leg Press/V Squat/Bear x15 3 – Quadriceps x 12 4 – RDL – Hammer x 12 5 – Back x 12 6 – Chest x 12 7 – Shoulder x 12 8 – Triceps x 12 9 – Biceps x 12 10 – BWT exercise x 12 11 – Back x 12 12 – Torso x 15	7 Exercise Circuit – repeat 1-3 1 – Chest Exercise x 12 2 – Back Exercise x 12 3 – Shoulder Exercise x 12 4 – Triceps Exercise x 12 5 – Biceps Exercise x 12 6 – Leg Exercise x 12 7 – BWT Exercise x max	10 Exercise Circuit-repeat 1-3 1 – Leg Exercise x 12 2 – Back Exercise x 12 3 – Back Exercise x 12 4 – Shoulder Exercise x 12 5 – Shoulder Exercise x 12 6 – Chest Exercise x 12 7 – Triceps Exercise x 12 8 – Biceps Exercise x 12 9 – Leg Exercise x 12 10 – BWT Exercise x 12

Depending on the length of the Rejuvenation Stage, the Post-Season Program (Table 3) may not be implemented. If the Rejuvenation Stage is 4 weeks or longer the Post Season Program will be the first training program of the annual plan. If the Rejuvenation Stage is shorter, we will omit this program.

Strength training during this program is broken down into three sessions per week, every other day. There are two parts to each session, an exercise technique section followed by traditional circuit training (body parts). The technique section is implemented to perfect exercise technique

of our main exercises, and to introduce new exercises that will be included in the Developmental Stage.

The traditional circuit program is outlined for the athlete with the corresponding body part and number of reps to be completed for each. The athlete can choose any exercise that represents that body part movement. We implement 3 circuits during the week, a short circuit (6-9 exercises), a moderate circuit (9-12 exercises), and a long circuit (12 - 15 exercises).

Training percentages are not affixed to any exercise during this program. Athletes should choose a load that allows them to perform each rep with proper technique and they should be able to finish 1 to 2 reps after the goal rep is acheived.

The Off Season Program

Table 4 – Off Season Template

Work Out 1	Work Out 2	Work Out 4	Work Out 5
Hang Clean 3-5 x 5-6	Bench Press 3-5 x 8-12	Push Jerk 3-5 x 5-6	Grip1 Incline Press 3-5 x 6-10
Back Squat 3-5 x 8-12	Choose Horizontal Movement 4 x 12	Front Squat 3-5 x 6-10	Choose Horizontal Movement 4 x 12
Choose Multiple Joint Single Leg Movement 2 x 12 each leg	Choose Vertical Push and Pull Exercise 3 x 12	Choose Multiple Joint Single Leg Movement 2 x 12 each leg	Choose Vertical Push and Pull Exercise 3 x 12
Choose Posterior Chain Exercise 3 x 12	Choose Elbow Flexion and Extension Exercise 2 x 12	Choose Posterior Chain Exercise 3 x 12	Choose Elbow Flexion and Extension Exercise 2 x 12

The Off Season Program (Table 4) will always be included in the annual plan. The length of the Rejuvenation Stage will determine if this is the first or second program of the training year.

During this program the athlete will train on a 4-day split with Day 1 and Day 4 being a lower body emphasis work out and Day 2 and Day 5 being an upper body emphasis work out. Day 3, 6, and 7 are recovery days.

A total body exercise will be included in the lower body sessions and will be performed as the first exercise of the daily rotation. The athlete still has the ability to make exercise choices in some cases, but the program is more conducive to the programs of the Developmental Stage. This program will not include training percentages but will have set/rep schemes assigned to each exercise.

Rejuvenation Stage Conditioning Program

Table 5 – Rejuvenation Conditioning Options

General Conditioning Activities 20-30 mins.	Sport Activities
• Stationary Bike • Treadmill • Stair Stepper • Nordic Trak • Rower	• Basketball – full or half court • Racquetball • Handball • Tennis • In Line Skating • Any sport activity non related to your specific sport is acceptable

During the Rejuvenation Stage, conditioning is primarily aerobic and athletic in nature (Table 5). The athletes have the choice of two different categories to choose from for their conditioning sessions, general conditioning activities or athletic conditioning exercises.

Aerobic activities are considered general conditioning activities. These activities include long distance jogging, stair climbing, stationary bike, stationary rower, treadmill work, and other endurance machines available to the athlete. This work out should last between 20 and 30 minutes in duration.

Athletic conditioning exercises are considered non-sport specific activities. It is encouraged that the athletes participate in a sport activity non-related to their specific sport. Some examples are racquetball, in-line skating, basketball, handball, etc. Conditioning will become more specific in the later programs of the annual plan. Conditioning during this phase should be 2-3 times per week. The athletes choose how many times per week they condition, as well as what activities they partake in.

Secondary Rejuvenation Stage

A Secondary Rejuvenation Stage can occur in another major stage of training during the annual plan. This stage would usually occur after a strength-testing period or during semester/quarter ending classroom examination weeks.

2.3.2 The Developmental Stage

The Developmental Stage follows the Rejuvenation Stage. It is the second stage of the annual plan, and continues the building of future champions. This phase can vary between 18 to 30 weeks in duration depending on the sport. The objectives of this phase are to enhance the athlete's level of fitness, strength, flexibility, conditioning, agility, and speed.

This phase should be between 1 to 2 times as long as the competitive phase, but in some cases with team sports it might be as short as 2 to 3 months. Volume of training is based on the goals of each program.

To simplify matters on program names, the programs during this stage are classified by the seasonal equinoxes of the year (Table 6). Depending on when the Rejuvenation Stage ends and the Competitive Stage begins will determine whether the athlete would be in a spring, summer, fall, or winter developmental program.

Table 6 – Developmental Programs

Developmental	Programs
Spring Program	March 21st – June 21st
Summer Program	June 22nd – September 22nd
Fall Program	September 23rd – December 21st
Winter Program	December 22nd – March 20th

During this stage, programs designed during the dates March 21st – June 21st will be referred to as Spring Development. The Summer Development program will be between June 22nd and September 22nd. The Fall Development program will be between September 23rd and December 21st. The Winter Development program will be between December 21st and March 20th.

In some cases, because of the academic calendar and non-competitive practices, a team's program may be a combination of two seasons or a season may be split in half.

For example:
This occurs with our football team. During the Spring Development program the athlete has to compete in spring practice followed by semester exams. A 10-12 week program leading to the beginning of two-a-day practices generally follows this. Based on this model's approach to long term planning this scenario would be broken down into 3 programs. The athlete would participate in a Spring I Development Program followed by a Secondary Rejuvenation Stage and then a Spring II/Summer Development Program that would carry him through the second half of spring and the first half of summer.

The objectives of the early Developmental Stage programs are to increase the athlete's work capacity, general physical preparation and to improvement of technical and basic skills. General as well as specific strength training exercises that will enhance athletic ability in the sport should have a higher priority than the specific skills that are required for the individual's success in that sport. This may change if a spring or fall practice schedule is implemented during this stage.

The length of a program and the specific goals of the running program will determine the type of strength training that will be implemented during this stage. The running sessions during this stage are geared towards the goals of the specific program. Most of the drills will include linear runs, change of direction drills, and interval training. It is also a time where technique and basic running mechanics are focused on.

During the latter part of the developmental stage the athlete is making the progression to the Competitive Stage. Therefore, the type of program designed is more specific to the needs of the athlete's sport.

Most of the strength exercises utilized are directed specifically to improving overall athletic ability. This is done with out negating the antagonistic muscle groups that help in balance and stabilization. This is also a good time to implement hybrid exercises into the program. Hybrid exercises allow for greater muscle activation and in some cases increased range of motion which is imperative as we get closer to competition.

The majority of exercises implemented should be of high quality and facilitate a general transfer of movement patterns for the individual to have a maximum training effect. Hopefully, this will develop an optimal link between skills developed in the strength training and running sessions and the position specific skills of the sport.

Running during the latter part of this stage is geared towards sport specific movement patterns and anaerobic interval programs that pertain to the energy system of that sport. During this type of running program it is imperative that the S/C coach coordinate with the sport coach for drills and movement actions of the specific sport.

2.3.3 The Competitive Stage

During the Competitive Stage, our goal is to continue to improve on the level of physical preparation developed during the Developmental Stage. Although this is a difficult task, come championship time, we want our teams to be the best-prepared and conditioned teams on the field or court. The objectives of the Competitive Stage are achieved through competitions, specific sport skills and exercises, and strength training.

The overall volume of work for the strength-training program during the Competitive Stage is reduced minimally. Our goal is to continue to drive the athlete to improve strength during this stage. Actual practice sessions are now the focal point of training with the strength session secondary. The duration of this phase could be between 3 to 5+ months depending on the sport.

The Competitive Stage is broken down into three programs, Pre, In, and Championship Seasons. This stage will begin with a Pre Season Program followed by an In Season Program. If we are fortunate to have our teams play in a NCAA event or Bowl Game this will be considered the Championship Season program.

Pre Season Program

The goal of the Pre Season Program is to have the athlete participate in scrimmages and exhibition meets. This will allow the sport coach and the S/C coach to evaluate and assess the athlete or team's level of preparation for the main competitions.

During this program, strength training is either metabolic circuit (movement) based or standard training sessions. This determination is dependent on the length of the program and the team's practice schedule.

The implementation of a metabolic circuit will occur for sports that include two a day practices during this program. Metabolic circuits are implemented because of the amount of work done during practice. These circuits are 4-6 exercises long based on movements that will help in flexibility and muscle recovery. Volume, intensity, and time are decreased in a circuit. This can help give the athlete more time to recover between practices during this strenuous period. Conditioning is sport specific and handled on the field, court, mat, etc. if necessary.

In Season Program

The In Season program is dedicated to the elevation of the skills and performance for the specific sport of choice. Strength training exercises during this program are geared towards speed and strength development.

The number of strength training sessions per week is dependent on competitions that an athlete participates in. Depending on the competition schedule, 2-3 strength-training sessions per week

are recommended with 3 being optimal. The goal of the strength-training program is to exceed the amount of strength developed during the Developmental Stage. Conditioning is handled on the field, court, mat, etc.

Championship Season Program

The Championship Season Program will be a continuation of the In Season Program if tournaments, play-offs, or bowl preparation begins right after the In Season. If there is a break between the last In Season competition and the first competition of the championship season (usually 4 weeks for a bowl game), we will train the athlete similar to the Developmental Stage until approximately 10-14 days before the competition. With a longer period of time between competitions, raising the volume during the first two weeks of training will help increase work capacity and further enhance the overall conditioning levels of the athlete.

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Section 3 Training Cycles

Basic Terminology

Volume: A measurement of the total amount of repetitions. This can be per movement, per training session, per week, per month, per year.
Intensity: This is the percentage of load based on an athlete's repetition maximum of a performed exercise. We refer to this as training intensity.

When the three main training stages and specific programs have been established, it is now time to set the specific training goals for each time period. In our philosophy, strength-training goals per program are based on the goals of our running plan for the same time period. We believe that the goals of both areas, running and strength training must coincide for the training results to be successful. Our running plan has 4 categories of emphasis, 1 – Plyometrics/Speed Development, 2 – Metabolic Conditioning/Practice, 3 – Anaerobic Conditioning/Interval Training, and 4 – General Conditioning. Depending on the running category that is emphasized for a particular period, the strength training cycle will have similar goals.

For example:
Our football team trains at a high volume of yardage during the 1st training cycle of the spring II/summer program, category 3. The volume per work out is usually between 2200-2500 yards. Because the demands on the body are quite different than the shorter and more explosive emphasis of our plyometric/speed development program it would be counterproductive to train the athlete in the strength program at a lower repetition (1-3) high intensity (85+%) cycle. This would not lead to optimal results. Your strength program for this running plan should emphasize high volume training where sets are in the 8-12+ range to stimulate local muscle endurance to areas of the body that are being trained.

Cycle training is one of our foundations for a successful annual plan. It is the systematic scheme of increasing an athletes' strength from a base point A to a higher-level point B over a designated period of time.

3.1 Micro's, Meso's, and Macro's

3.1.1 Microcycles

The microcycle represents the smallest unit of measurement in our annual plan's development of strength training cycles. The microcycle is an individual training week. Our microcycles are based on a Sunday through Saturday workweek. This weekly structure allows for the variation of exercises, volume, intensity, and frequency for each individual training session of the week.

Blocking the days per week into a microcycle allows for the tracking of the total number of training sessions as well as weekly averages in volume and intensity.

Microcycle Terminology

We have named and defined individual microcycles based on the type of training for the week. There are 6 different types of training blocks that can define a weekly training period.

Base
A Base Microcycle refers to the first week of the cycle. We may also refer to this week as an introduction microcycle. This week new training goals and/or the addition of new exercises are implemented into the program.

Load
Depending on the type of cycle being implemented the next 1-2 microcycles will be considered Load Microcycles. During this microcycle the training intensity is increased from the previous week. Load microcycles will have the highest total volume and intensity of a mesocycle. When two load weeks follow each other they will increase in a step-load progression based on training intensity.

Unload
This is a recovery/regeneration microcycle. It is strategically placed following base and load microcycles to give the athlete the ability to recover. We implement this block to restore energy, remove fatigue, and to relax psychologically. During unload weeks both the sets and/or reps are decreased per training session.

Performance
The Performance Microcycle is an evaluation week. The athlete will be tested in specific exercises/drills identified for that particular sport. The number of tests performed is based on the particular goals of the performance microcycle and where it falls in the annual plan.

Competition
The Competition Microcycle involves the athletes participating in actual competitions for their sport. These microcycles may fall in succession, every other week, or once every several weeks depending on the sport.

Variation
The Variation Microcycle can follow a performance microcycle or will be implemented during the Rejuvenation Stage of the annual plan. This is an unload microcycle, implementing a variety of exercises not included in the athlete's specific training program. The type of training performed during a variation block is usually a circuit or a program that is atypical to our Tier System. The implementation of a variation microcycle into the Developmental Stage usually means a transition from one cycle to another, a program change or a stage change.

Active Rest

The Active Rest microcycle is a cycle where the athlete is not required to participate in strength training workouts. Sometimes it is necessary to give the athlete complete rest from strength training to ensure recovery. Generally, 5 to 7 days of rest will not affect the athlete's strength levels. After 7 days the athlete may begin to detrain and strength levels may begin to diminish. This microcycle is generally implemented during either classroom examinations, after a season, or during holidays. During active rest periods it is still in the athlete's best interest to engage in some light physical activities.

Both the variation and active rest microcycles may be utilized as training modes during a secondary rejuvenation period.

3.1.2 Mesocycles

The linking of microcycles together to determine a training effect is considered a mesocycle. Mesocycles vary between 2-4 weeks in our methodology. The length of the mesocycle is based either on the type of cycle we are implementing or the training level of our athlete. Depending on the strength level of our athletes, or program goals, a standard 4-week or a 2-week mesocycle will be implemented. Optimally, when using intensity-based cycles, 4-week mesocycles work more efficiently.

Basic Intensity Cycles

Table 7 – Basic Intensity Cycles for Foundation Exercises

Strength Cycle	Training Range	Total Body Reps per Set*	Total Body Volume	Lower/Upper Body Reps per Set	Lower/Upper Body Volume
General Conditioning	60% - 67.5%	6	18	10	30
Strength Endurance	60% - 67.5% 70% - 77.5%	5-6 4-6	30 24	12-15 8-10	60-90 40-60
Developmental Strength	70% - 77.5% 80% - 87.5%	4-6 2-4	24 20	6-10 3-6	20-48 12-30
Metabolic Strength	80% - 87.5% 90% - 95%	Cluster Cluster	20 10	Cluster Cluster	15-30 10-15
Explosive Strength*	55% - 65% 70% - 75%	3-6 3-6	18-30 12-24	3-6 3-6	18-30 12-24
Maximum Strength	90+%	1-2 or Multiple Rep Max	4-10	1-3 or Multiple Rep Max	3-12

There are six types of training effects (Table 7) that can be chosen from for a specific cycle. The type of training cycle that will be implemented depends on the specific goals and needs of the

program. Each cycle type has a specific role in the physical development of an athlete. Also, depending on the cycle utilized, a corresponding set scheme is implemented.

General Conditioning [Gen-C]

A General Conditioning cycle is implemented when introducing strength training to novice participants or athletes coming off of serious injury. It is incorporated to keep the load low and the repetitions at a range where proper technique and execution can be stressed for strength training exercises. We use a stable 3 set scheme for Gen-C. This is a 3 set cycle with the same load and repetitions per set (Table 8).

Strength Endurance [S-End]

A Strength Endurance cycle is implemented when there is a need for local muscular endurance during training. The volume is high and serves as a base for higher intensity training. S-End training is an excellent progression for newcomers after they have gone through the technique development from a Gen-C cycle. Also, S-End training may be used for athletes who need to add additional muscle mass. S-End training is also implemented when the running plan is conditioning based with a high volume of yardage. We use a descending set cycle for strength endurance. The highest training intensity for the session is performed first and then each set after is decreased by 2.5%. The repetitions stay the same (Table 8).

Developmental Strength [Dev-S]

Developmental Strength is the primary strength mode of the Developmental Stage during traditional training. The volume is lower than the S-End cycle while the average intensity is slightly higher. The Dev-S cycle will prepare the athlete for the conversion to either the more rigorous Maximum Strength or Explosive Strength Cycles. Our two primary set schemes for this mesocycle are advanced stable or progressive stable sets. The Advanced Stable scheme is a 6 set cycle where intensity and repetitions stay the same. The Progressive Stable scheme is also a 6 set cycle where the first three sets ascend to the top three sets, which are performed for the top training intensity of the day, and the reps remain the same. The repetitions of the first three sets are usually ½ the volume of the top sets (Table 8).

Metabolic Strength [Met-S]

In most competitive sports the ability to maintain a high level of strength, play after play or point after point is criticall. Most sports have multiple bouts of exercise followed by a short rest period in between. The athletes who can recover the fastest between rest intervals and maintain the highest level of strength are usually the ones who will win the battles. The Met-S cycle takes this into account by using a set/rep principle called a "cluster". A cluster set is one in which each rep of the set is an individual rep with a short rest time between. We will usually use a 20-35 second rest in between a cluster with a 90-120 second rest in between sets. This allows the athlete a short recovery period followed by an all out single at a particular load. We will primarily use cluster sets of 3 and 5 reps but, for testing purposes we will go to a cluster set of 10 to 15 reps. The set and rep cycle is similar to the advanced stable scheme, with the exception of the rest period between reps (Table 8).

Explosive Strength [Exp-S]

Synonymous with Power, the Explosive Strength Cycle, is a low to moderate intensity phase. Speed of movement is a strong factor in our program. We try to develop many different types of power related strength. The goal is not how much the athlete can move, but how fast. Training Cycles are primarily based on the Prilepin Table (Tables 8, 9 & 10).

Glossary of Terms

- *Starting Strength* – the measurement of how fast and forceful the athletic motion is at the beginning. The ability to "turn on" as many muscle fibers as possible instantaneously. Starting Strength can be improved by implementing a "pause" at the midpoint of movements. This takes away any momentum of the eccentric phase and makes the athlete develop a forceful motion at this position of the exercise.
- *Explosive Strength* - is the greatest amount of force developed in a very brief time period. Your ability to leave the muscle fibers turned on over a longer period of time
- *Speed-Strength* – how well you apply force with speed. A combination of starting strength and explosive strength. Speed in more vital over strength.
- *Strength-Speed* – rapid movements against heavy loads. Strength is more vital then speed.

During this cycle, we are concentrating on increasing bar velocity and acceleration, and to improve speed of movement. We want our athletes to apply a maximum amount of force to the resistance and move it as fast as possible during the concentric phase of the exercise. We always preach maximum concentric or progressive acceleration on all movements but during this type of training this is the absolute goal.

Maximum Strength [Max-S]

Maximum Strength training is utilized when the goal is to improve repetition maximums. We prefer the 1 repetition max because it is the only true indicator of what athletes can accomplish as their limit in a specific exercise. We will use either an advanced or progressive stable set cycle during a mesocycle (Table 8).

Table 8 - Set and Rep Schemes

Gen-Cond	**S-End**	**Dev-S**	**Max-S**	**Met-S**	**Exp-S**
Stable 3	Descending	Advanced	Progressive	Cluster	Prilepin
65% x 10	65.0% x 12	82.5% x 4	67.5% x 3	82.5% x 4cl-20	75% x 3
65% x 10	62.5% x 12	82.5% x 4	72.5% x 3	82.5% x 4cl-20	75% x 3
65% x 10	60.0% x 12	82.5% x 4	77.5% x 3	82.5% x 4cl-20	75% x 3
	57.5% x 12	82.5% x 4	82.5% x 5	82.5% x 4cl-20	75% x 3
	55.0% x2	82.5% x 4	82.5% x 5	82.5% x 4cl-20	75% x 3
	52.5% x 12	82.5% x 4	82.5% x 5	82.5% x 4cl-20	75% x 3
					75% x 3
					75% x 3

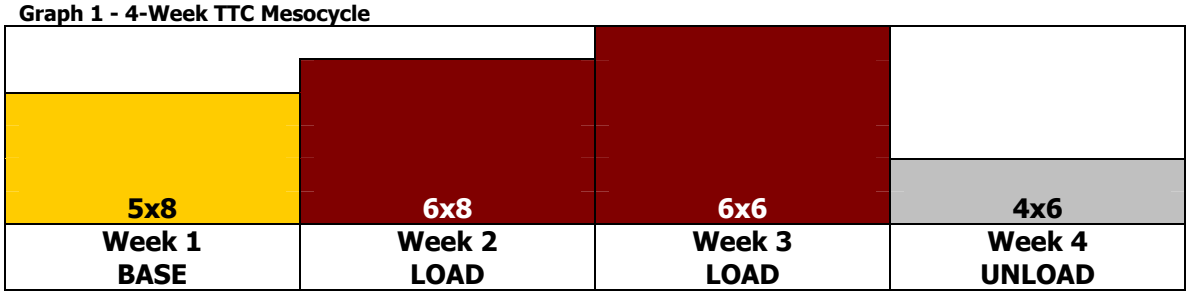
3.1.3 Macrocycles

Once recognized as the entire training year, we define macrocycles as the linking of 2 or more 4-week mesocycles within the same training program. These types of cycles are usually found in the traditional cycling plan. Macrocycles generally occur during the developmental stage when there is a long uninterrupted training block. A macrocycle may also occur during the Competitive Stage when there are successive competitions weekly. Long-term cycles such as macrocycles are usually used when the training age is low and we want to establish a solid strength base before graduating to a more advanced design. In a macrocycle each 4-week block has a specific type of strength that is focused on.

We will implement 4 types of training cycles within our annual plan. They are the Traditional Cycle, the Performance Cycle, the Elite Cycle, and the Performance Elite Cycle. The goals of the program and/or the training level of the athlete determine the choice of cycle.

3.2 The Traditional Cycle [TTC]

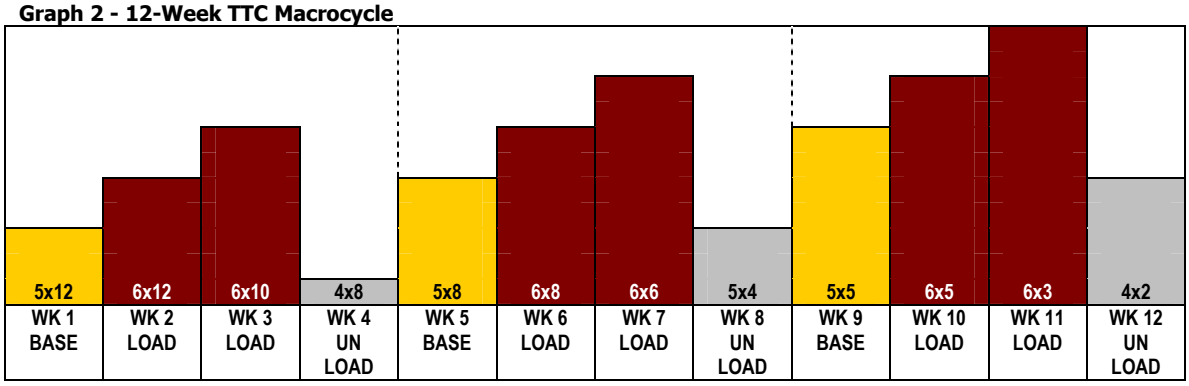
Graph 1 - 4-Week TTC Mesocycle



The *Traditional Cycle* (Graph 1) follows our interpretation of the modified progressive overload principle as well as typical linear periodization. For a muscle to increase strength it must be stressed beyond it's present capacity. The overload (resistance) must be progressed gradually over time with a built in for recovery (reduction in load and volume) so the athlete can adjust to the increased demands placed on the body without fatigue, staleness, and/or over training becoming an issue.

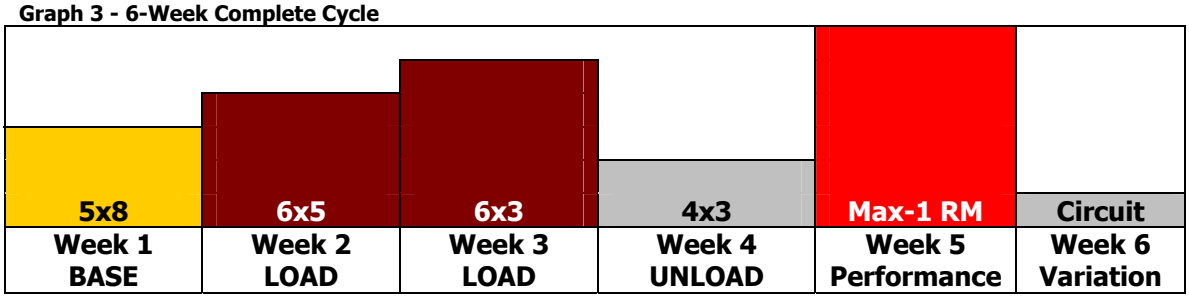
A traditional cycle is usually a long-term cycle that gradually progresses the athlete to a higher level of strength. A traditional macrocycle will usually last between 2-3, 4-week mesocycles progressing the athlete from a high volume – lower intensity phase to a low volume – high intensity phase (Graph 2). Unload weeks occur at every fourth week (adding in a week of recovery and regeneration), as the athlete makes the transition to the next cycle.

Graph 2 - 12-Week TTC Macrocycle



3.2.1 A Complete Cycle

Graph 3 - 6-Week Complete Cycle



A Complete Cycle (Graph 3) is a traditional cycle that has a performance microcycle and a variation microcycle following a 4 week block of training that includes a base, 2 loads, and an unload microcycle. The length of a complete cycle can be either 6 weeks (1 mesocycle), 10 weeks (2 mesocycles), 14 weeks (3 mesocycles), or 18 weeks (4 mesocycles).

An incomplete cycle is a cycle in which we have to restructure or eliminate elements of the complete cycle. This is done when we have an odd number of weeks to work with.

In the traditional cycle all assistance movements follow the same repetition scheme as the foundation exercise for that particular movement category.

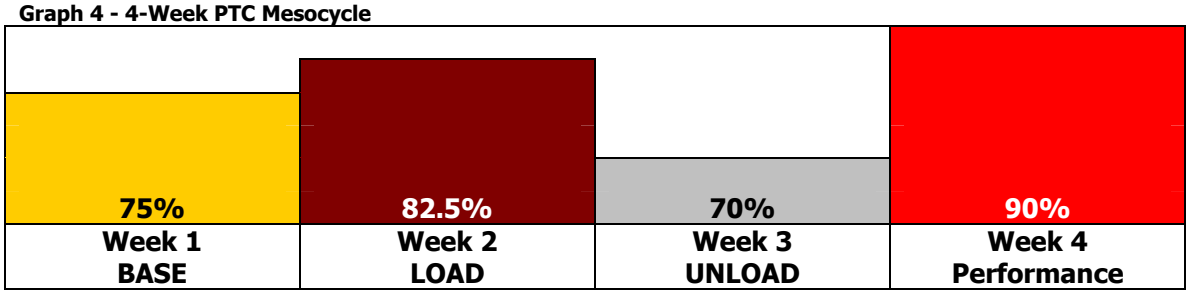
For example:
If the rep scheme for a lower body foundation movement is 12 reps per set all other lower body movements are performed for 12 reps per set. One 4 week mesocycle in the traditional approach has one goal, either strength endurance, base strength, explosive strength or maximum strength.

First year athletes and those who have a low training age primarily use traditional cycles. The linear approach of cycling, where there is one strength goal focused on per mesocycle, prepares the athlete both mentally and physically for the more advanced training that will follow.

We also utilize this cycle during periods where the emphasis of our running plan is high volume. Traditional cycles are used to develop a solid foundation before embarking on our advanced training cycles.

3.3 The Performance Cycle [PTC]

Graph 4 - 4-Week PTC Mesocycle



The *Performance Cycle* (Graph 4) is also a 4 week based cycle but these cycles do not have to be linked together as in the traditional cycle model. When implementing a PTC we are anticipating a new record being achieved during week four training sessions. This record is usually a multiple repetition maximum based on a training intensity from a previous 1-repetition maximum. If the athlete is "on" we will go off the designated plan for the session and go after a new 1-repetition maximum. This cycle along with its Elite counterpart are the primary cycles implemented during the Developmental Stage of the annual plan.

The major difference in the TTC and PTC occur in weeks 3 and 4. In the TTC, week 3 is the highest training intensity of the cycle with week 4 being the unload week. In the PTC, week 3 is the unload week following the week 2 loading. In the PTC, the unload week is strategically placed at week three because we are preparing the athlete for the week 4 performance tests. During the performance microcycle we will evaluate several (1-3) movements for record purposes. The similarity of the two cycles is based on the repetition scheme for all exercises of the same movement category. They are identical throughout the microcycle.

Performance Cycles are based on the training methodology of the United States Weightlifting (USAWL). Mike Conroy, Head Coach of team Idaho Weightlifting has played a very important role in our utilization of cycling methods from the USAWL model as well as the technical aspects of Weightlifting.

3.4 THE ELITE CYCLES

The Elite Cycles are based on a non-linear cyclical approach. Within one microcycle/mesocycle we will include, strength endurance, explosive strength, and developmental or maximum strength training methods together. We feel this is the ideal way to train the advanced athlete because in traditional linear periodization you do not maintain/improve on the progress of the previous cycle.

It has been determined that all these types of strength are interwoven together to achieve success, so why not train them at the same time, rather than separate four week blocks. The non-linear approach allows us to continue to improve elements of each type of strength without having to switch priorities, therefore losing the desired effects of past training cycles.

For example:

In a 12-week linear approach weeks 1-4 would generally be a strength endurance cycle while weeks 9-12 would be a maximum strength cycle. By the time the athletes reach week 9 the benefits of weeks 1-4 would be minimal at best. In a non-linear approach depending on the rotation of the daily session each movement category has a different training goal and both low volume high intensity work, high volume low intensity work, and explosive training are all included into a microcycle.

The Elite Cycles are based on a 3-emphasis rotation of cycles, Effort, Speed, and Volume. Each is performed every training session with a corresponding movement category.

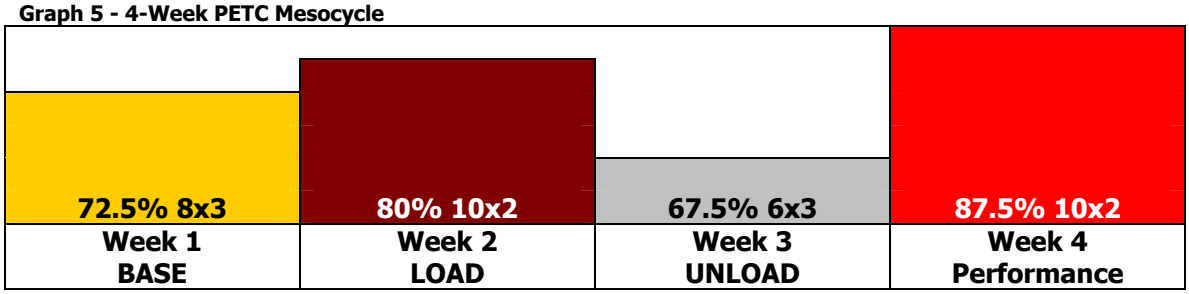
The Elite Cycles (Advanced Elite in particular) are based off of the conjugated periodization approach utilized by Louie Simmons of the Westside Barbell Club and Dave Tate of Elite Fitness Systems. Dave has been extremely helpful in the advancement of our model of training. We are indebted to these individuals for making us the program we are today. Dave can be reached through his website at http://www.elitefitnesssystems.com

3.4.1 Effort Cycles

Effort exercises are based on two different types; percentage based and repetition max based. The percentage-based cycle is based on the foundation movements of our program. For the Elite cycle we rotate supplemental exercises every two weeks trying to set new records for a prescribed amount of repetitions. These repetitions are usually between 1-5. This is the only difference between the Performance Elite, and Elite cycles.

The Performance Elite Cycle [PETC]

Graph 5 - 4-Week PETC Mesocycle



The *Performance Elite Cycle* (Graph 5) is similar to the PTC with the exception of the sets and rep schemes. Foundation rather than supplemental movements are used for the PETC. For the PETC, the sets and rep schemes come from the Prilepin Volume Table. The Prilepin table is based on a rep per set scheme that optimizes the greatest amount of speed and strength per set (Table 9).

Table 9 - The Prilepin Table

PERCENT - RANGE	REPS per SET	OPTIMAL VOLUME	VOLUME - RANGE
55-65	**3-6**	**24**	**18-30**
70-75	**3-6**	**18**	**12-24**
80-85	**2-4**	**15**	**10-20**
90+	**1-2**	**7**	**4-10**

* Note: The Prilepin Table is used for all of our total body based percentage cycles.

Prilepin discovered, performing more than the maximum allowed reps per set at a certain percentage, the bar speed slowed and power output decreased (Table 10). When utilizing this table for our PETC we primarily train our athletes at the high end of the volume scale.

Table 10 - The Prilepin Set Rep Chart

%	Reps per Set	Volume Low	2 sets	3 sets	4 sets	5 sets	6 sets	7 sets	8 sets	9 sets	10 sets
55-65	3t6	18		x6			x3				
70-75	3t6	12	x6	x4	x3						
80-85	2t4	10				x2					
90+	1t2	4	x2		x1						
%	**Reps per Set**	**Volume Optimal**	**2 sets**	**3 sets**	**4 sets**	**5 sets**	**6 sets**	**7 sets**	**8 sets**	**9 sets**	**10 sets**
55-65	3t6	24			x6		x4		x3		
70-75	3t6	18		x6			x3				
80-85	2t4	15				x3					
90+	1t2	7						x1			
%	**Reps per Set**	**Volume High**	**2 sets**	**3 sets**	**4 sets**	**5 sets**	**6 sets**	**7 sets**	**8 sets**	**9 sets**	**10 sets**
55-65	3t6	30				x6	x5				x3
70-75	3t6	24			x6		x4		x3		
80-85	2t4	20				x4					x2
90+	1t2	10				x2					x1

Elite Cycle [ETC]

Graph 6 - Multiple Rotation of ETC – Upper Body

	Floor Press		Board Press		Close Gr Bench		Stand Press		Incline Press
Floor Press Effort 1	Effort 1	Board Press Effort 2	Effort 2	Close Gr Bench Effort 3	Effort 3	Stand Press Effort 4	Effort 4	Incline Press Effort 5	Effort 5
WK 1 Intro	WK 2 Max	WK 1 Intro	WK 2 Max	WK 1 Intro	WK 2 Max	WK 1 Intro	WK 2 Max	WK 1 Intro	WK 2 Max

The *Elite Cycle* is based on a 2-week mesocycle for Effort exercises (Graph 6). By rotating exercises bi-monthly we can maintain a high level of training, 90% and above for a greater period of time then by traditional means of training. In a linear outline after training at 90% or above for 3 weeks on the same exercise you will begin to reach a state of diminishing returns.

The Elite cycle is primarily utilized during the competitive stage of training. It may be used during the developmental stage of training when the athlete has sport practice, or for the highly trained athlete who has been in an organized program for 3+ years.

Depending on the emphasis of the program, the Effort exercise is either the first or second emphasis of the daily/weekly plan. Week one we introduce the exercise and work for a higher repetition maximum. Week two's work is based on the repetition max set done the previous week or from a previous record set. The athletes continue to increase the load until they can no longer achieve the repetition goal (Table 11).

Table 11 - Repetition Cycle for Effort Exercises

Week 1 Total/Lower Body	Week 2 Total/Lower Body	Week 1 Upper Body	Week 2 Lower Body
Set 1 – x3-5	Set 1 - x3	Set 1 - x5	Set 1 - x3
Set 2 – x3-5	Set 2 - x3	Set 2 - x5	Set 2 - x3
Set 3 – x3-5	Set 3 - x3	Set 3 - x5	Set 3 - x3
Set 4 – x3-5	Set 4 – x1-3	Set 4 - x3	Set 4 - x1
Set 5 – x3-5	Set 5 – x1-3	Set 5 - x3	Set 5 - x1
Set 6 – x3-5	Set 6 – x1-3	Set 6 - x3	Set 6 - x1

The Total/Lower Body cycle begins with week one working up to a 3 or 5 repetition maximum. Week two, the athlete works up to a 1 or 3 repetition maximum based on the movement choice. The Upper Body cycle begins with week one working up to a 3 repetition maximum. Week two the athlete works up to a 1-3 repetition maximum.

In the case that the athletes do not set a new record from a previous training session, that is ok. They still must work to the heaviest load they can for that particular session. This is based on the maximum effort philosophy. You must work to the highest level you can achieve on that particular day regardless if it is a record or not.

After the movement and repetition maximum are recorded, and when the athletes return to a repeated movement, their goal is to break the previous cycles repetition record. Again, by rotating the movements every 2 weeks we are able to stay above a 90% work load longer than the usual 3 weeks under traditional cycling principles. This will allow us to maintain a higher level of maximum strength throughout the annual plan. The supplemental movements used for effort are chosen based on their importance of improving the maximum strength of our foundation movements. We will usually rotate 3-5 exercises per lower and upper body

3.4.2 Speed

Table 12 - Speed Cycle Chart

Week	Total Body	Squat	Bench - bands	Bench - chains	Bench – naked
One	8-10x1 @ 60-65%	5-8x2 @ 45-50%	8x3 @ 45%	8x3 @ 50%	8x3 @ 55%
Two	8-10x1 @ 65-70%	5-8x2 @ 47.5-52.5%	8x3 @ 45%	8x3 @ 50%	8x3 @ 55%
Three	8-10x1 @ 70-75%	5-8x2 @ 50-55%			

The speed emphasis comes from our definition of the Explosive Strength cycle. Similar to the effort cycle this will be either the first or second emphasis of the training session based on the goals of the program. Speed cycles are set up as a 3-week wave for total and lower body movements and a 2-week cycle for upper body movements (Table 12). Exercises utilized for speed training are, Total Body – Deadlift, Power Clean from the deck, or High Pull from the deck, Lower Body – Pause Squat or Box Squat, and Upper Body – Bench Press with varied grips. For athletes who participate in wrestling we are experimenting with varied grip pull-ups for speed work that emphasizes pulling actions. We are looking to move non-maximal loads with the greatest amount of speed possible.

The total body movements incorporated in the program are usually referred to as the explosive movements, but by utilizing *maximum concentric acceleration* with lower and upper body movements we can create an "explosive" action with these lifts also. Maximum concentric acceleration is a principle in which the athlete performs a repetition with a controlled negative and then accelerates the bar from mid point through the concentric portion of the lift. By using this method of training we are improving the efficiency of the movement.

Based on Dr. Fred Hatfield's Compensatory Acceleration Training (CAT) the athletes do not back down when their leverages improve. When performing this type of training the athletes are giving maximum effort through out the full range of motion of the concentric portion of the lift. Obviously, right before the completion of the lift the bar must begin to decelerate to avoid injury.

This is much different from the tempo type of training that most bodybuilders utilize to maximize the hypertrophy (muscle building) effects of strength training.

Another principle utilized in our goal of increasing power output is *accommodating resistance*. During this type of training we implement chains and/or bands to overload the top end of our exercises. Based on biomechanics, the athlete is stronger in limited range of motion movements especially at lock out. We implement the use of chains and bands during squat and bench press training to help the athlete develop bar acceleration throughout a greater range of motion during the concentric phase of the movement. As the bar gets closer to completion you are in a much more advantageous position for overload. Bar weight alone will lead to a longer deceleration phase because of the progressive speed being built. The added load as your leverages improve allows us to continue to accelerate the bar longer while the resistance is getting heavier at lock out. By increasing the acceleration phase of the movement, we are able to increase the rate of force development through a greater range of motion.

Chains unload at the mid-point of the movement and load during the ascent phase of the movement allowing the athlete to accelerate a lighter load at the mid-point and drive through a heavier load at lock out. The Bands continue to keep added resistance on the bar, which also allows the athlete to build up rapid eccentric strength. This creates a stretch reflex component similar to plyometric training as well as increasing the resistance (load) at the top end of the movement. The training and strength level of the athlete determines the amount of added resistance from either chains or bands.

3.4.3 Volume

The volume emphasis is the third emphasis of the rotation. The rep range is based on the S-End mesocycle guidelines. Volume work compliments the overall training program. Most exercises utilized for volume training are chosen based on their ability to improve range of motion and joint

integrity. The types of exercises utilized for this cycle are based on the stage of training we are in. In some cases we may do sets to momentary muscular failure but most of the time we generally set the load and rep scheme so the athlete has 1-2 reps left.

By combining all three types of strength development into one training session/one microcycle, this allows us to prepare the body in a better functional training plan that will enhance the athletes' abilities and levels of strength in a highly efficient way compared to traditional linear cycling. Although we utilize both cycle models, the non-linear approach, produced a higher productive training mode for our advanced level athletes.

Actual Cyclical Charts – Appendix 1 – Training Cycles

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Section 2-3[A] Specifics

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Section 2-3[A] Putting it Together

2-3[A].1 Charting Your Annual Plan

The development of the Annual Plan through the use of periodization should be a simple task. Too many coaches make this task far more agonizing then it really needs to be. We have simplified our process by taking into consideration what periodization is and how it relates to our athletes. We spend approximately 5-10 days after the previous In Season or Championship Season to review the previous plan and to develop the new Annual Plan for the specific sport. A review day follows every program. This allows us to make adjustments to an upcoming program as well as record notes for our end of the year recap.

To help put the above information into an easy accessible way to create the Annual Plan, follow the step-by-step planning instructions below for a simplified way of establishing the training plan. Developing your Annual and Cyclical Plan should include these seven steps in order:

1. **Design a Template**
2. **List Calendar dates week 1-52 – (remember: When does the training year begin?)**
3. **Mark all Competitions and Uncontrollable factors**
4. **Break down your plan into the 3 main stages**
5. **Reduce your main stages to specific programs**
6. **Develop a running plan for each program**
7. **Develop a training intensity cycle[s] for each program**

These steps are shown in order on the following pages. Our template design was created on Microsoft Excel.

Figure 1 – Step 1 Design a Template

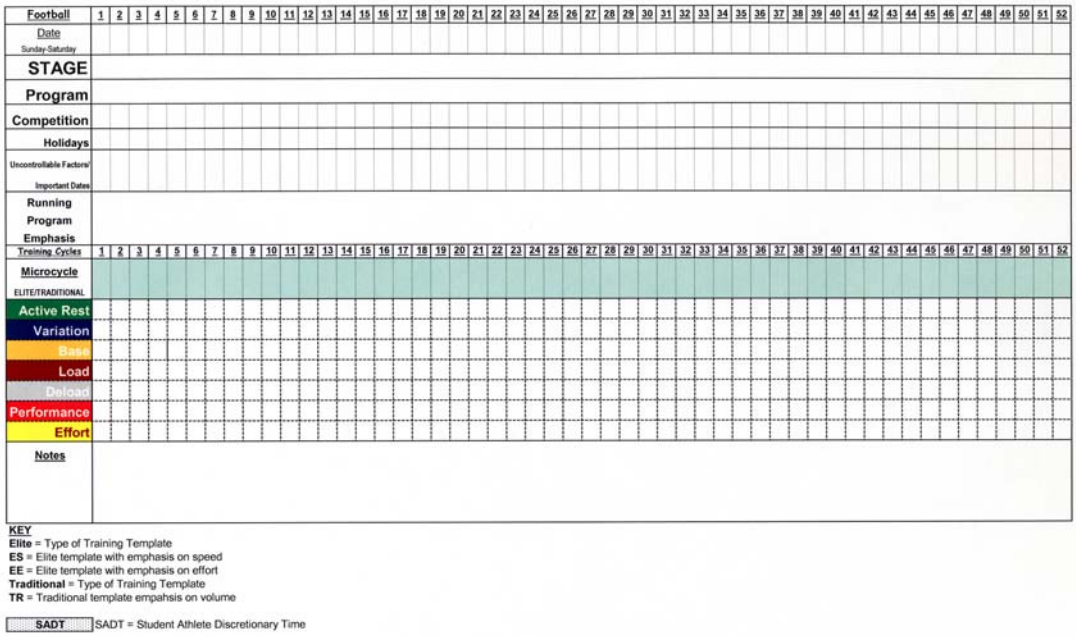


Figure 2 – Step 2 List Calendar Dates – Sunday – Saturday

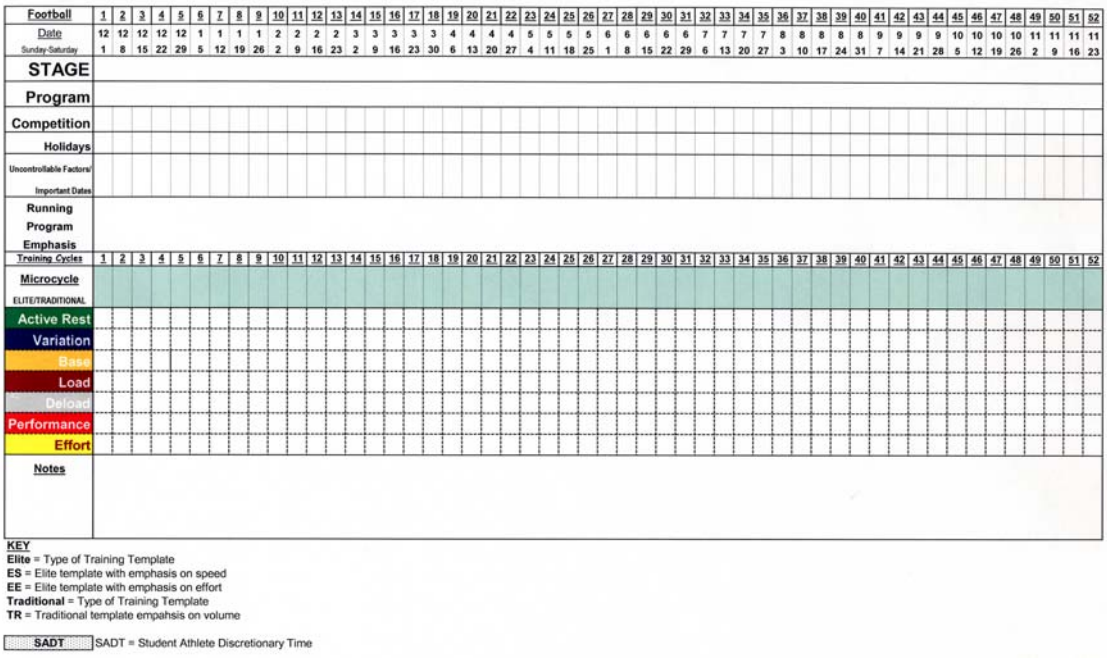


Figure 3 – Step 3 Mark Competitions and Uncontrollable Factors

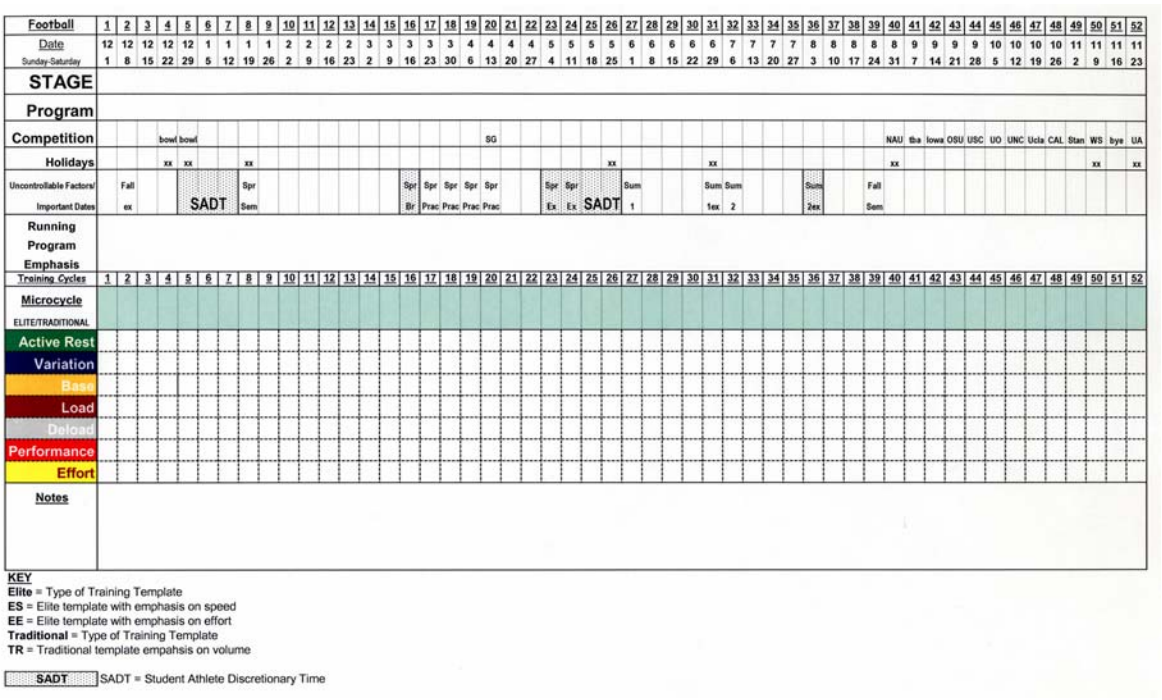


Figure 4 – Step 4 Breakdown Annual Plan to 3 Main Stages

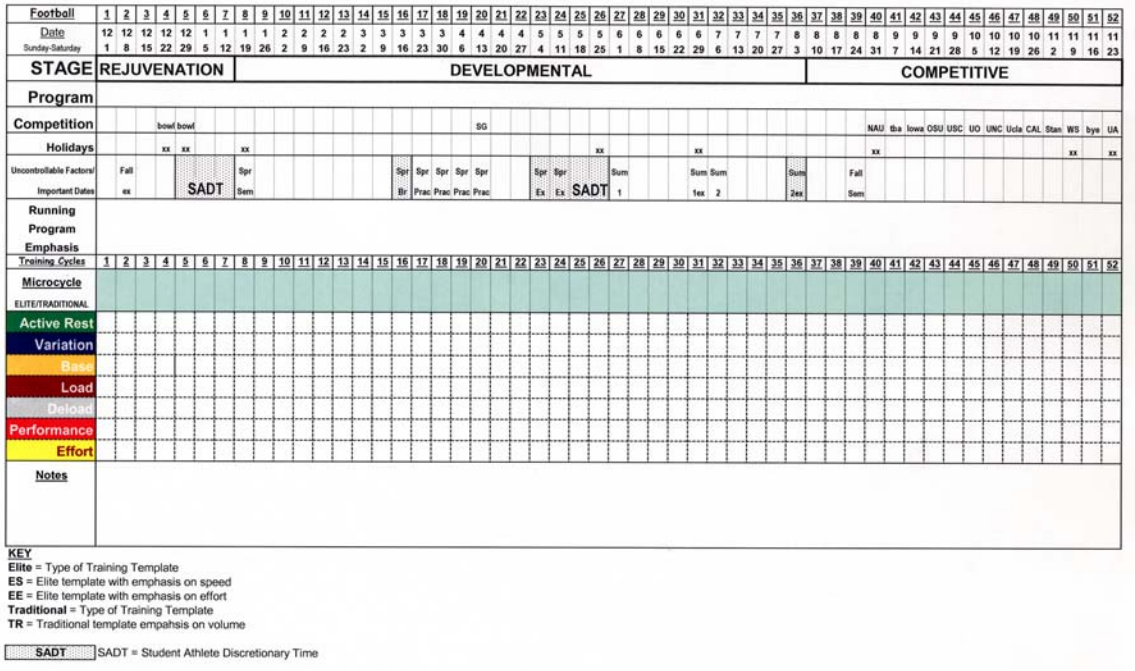


Figure 5 – Step 5 Reduce Main Stages to Specific Programs

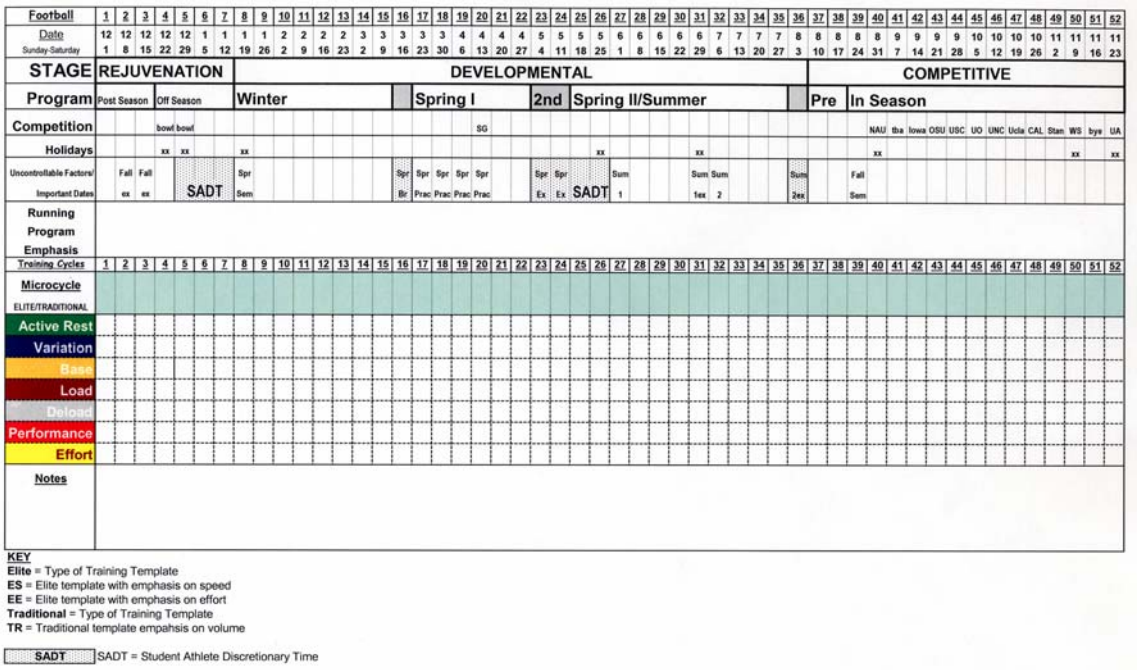


Figure 6 – Step 6 Develop the Running Plan for Each Specific Program

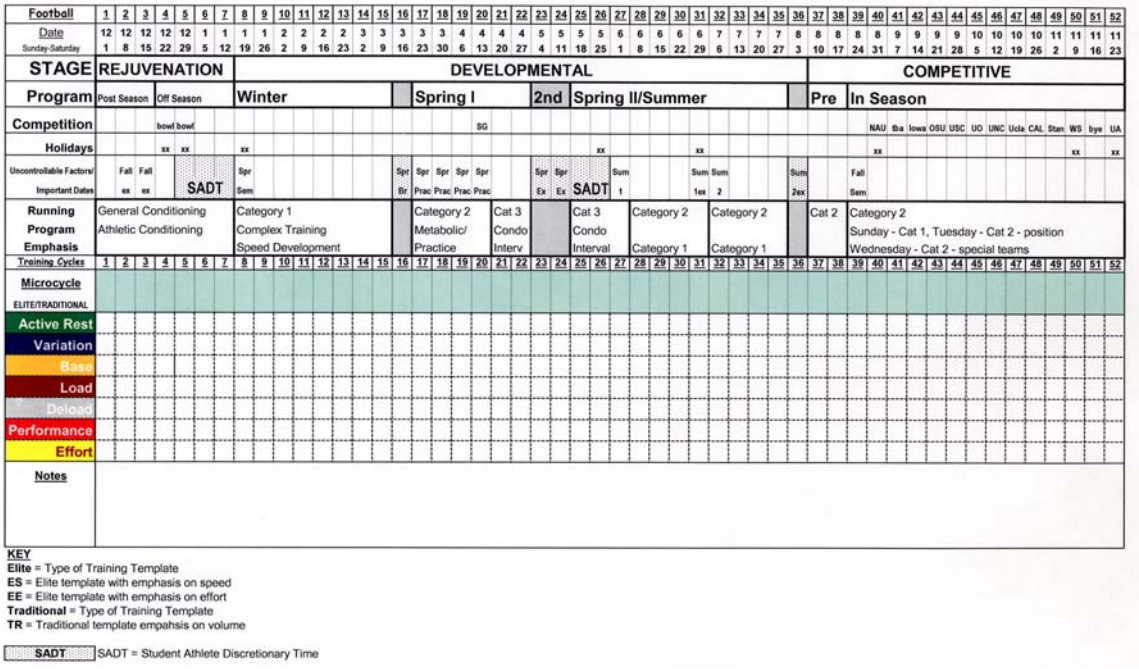
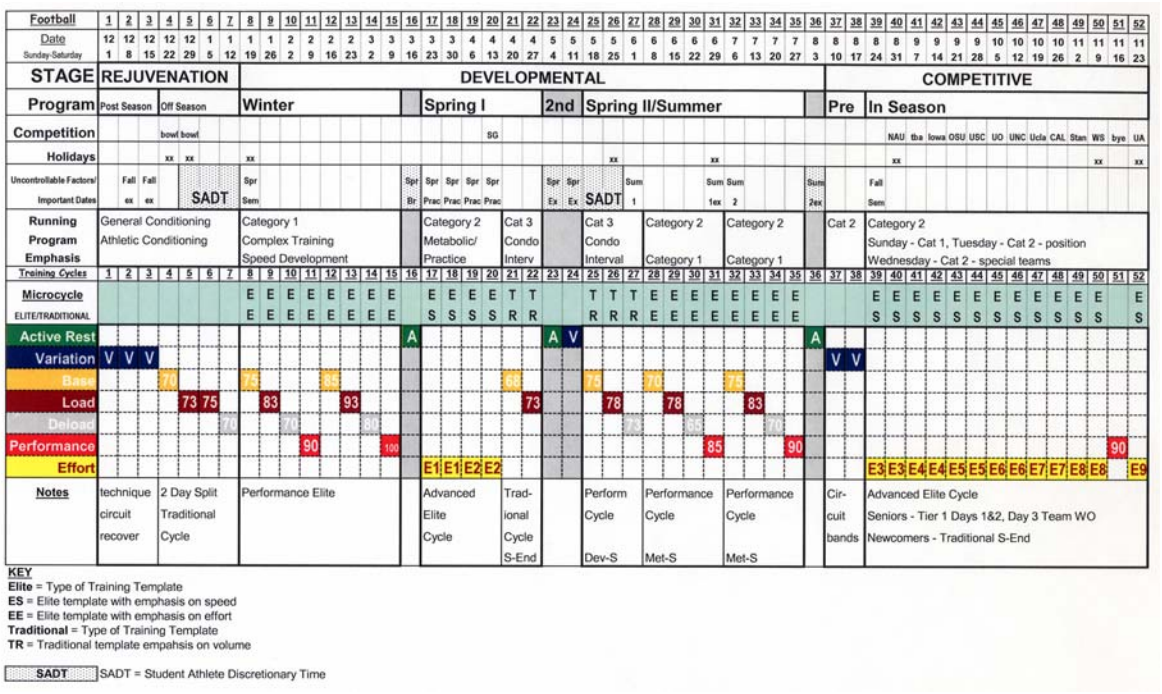


Figure 7 – Step 7 Develop a Training Intensity Cycle[s] for Each Program



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Section 4 Tier System

Note: This section is the foundation of our strength training program design. Since the development of the Tier System in 1992 while at Boise State University, the program has gone through many growing pains, adaptations and improvements. This was all done without breaking away from our main objective – a holistic approach to athletic strength development.

In this section we will cover almost everything that has been done with the Tier System. It is important that individuals who utilize this program understand the evolution of where we came from. There will be several models and principles that we no longer utilize but are still solid program ideas that needed to be covered.

Again, I believe it is important to cover ideas of the past and present in this section. This will help individuals who implement this program understand the direction and rationale of where we are heading. Athletic based strength training will always be a work in progress.

4.1 Overview

The objective when developing the Tier System was to create an athletic based strength-training model for athletes. We wanted an application system that would focus on the athletic ability and development of football players, gymnasts, wrestlers, and any other athlete who utilizes strength training as one of the focal points for the improved performance. This training system was developed to replace the more common protocols based on models and principles of the three strength disciplines, weightlifting, powerlifting, and bodybuilding. It is our belief that training in a particular discipline's modality would be counterproductive to the overall development of our athletes. The goals of the three disciplines are extremely different from one another, let alone the goals of high school, college, and professionals sport programs.

Of course, one must realize that these three disciplines play an important role in the development of athletes who participate in sports. In any sport, strength is a key ingredient and is extremely valuable to the athlete's improved performance. Every high school, college, and professional S/C coach across the country are using exercises and training methods of these disciplines to help enhance their athletes' abilities to succeed.

One of the many goals and objectives of the Tier System was to evaluate the principles and protocols of all three disciplines and develop a model of training that would enhance an athlete's

strength level in a manner in which it would help improve overall athletic ability. Each strength discipline has an important influence in the development of an athlete if used in combination with one another and utilized in a thought out approach.

The Tier System model is based on utilizing exercises and principles from all three disciplines integrated within one program. One aspect of the Tier system is training the athlete on a rotation of movements rather than body parts. Although we were generalizing movements into three categories, our goals became more specific after a 1999 visit to the University of Iowa to discuss training with Head Football Strength and Conditioning Coach Chris Doyle. Coach Doyle's approach to movement classification was the direction we wanted to move in and he helped us open our eyes to an efficient way of classifying our exercise pool in a highly specific manner.

In brief there are three major movements that can be accomplished during a specific exercise, total body, lower body, or upper body. Exercises are evaluated by what joints are involved during the execution of a movement and placed into one of these three categories. Movement planes, limb involvement, and movement actions further break down exercises.

A second aspect of the Tier System is the "whole body" approach to our training sessions. Although the majority of the exercises would be the same, this style of training is atypical to the split routines commonly seen in athletic strength training today. These programs usually have alternating lower and upper body training days with a day off in between. One of the Tier Systems training principles is based on body action. Since most physical activity involves using a synchronized movement pattern from the ankle to the neck joint in almost every task, why wouldn't we want to train the body in a similar manner? In one training session, movements that revolve around developing the "whole body" are implemented into each session.

The Tier System is primarily a multi-joint movement program. Athletic movement is made up of multiple joint actions of muscles. Although single joint or isolation exercises are important in developing muscles that stabilize movements or in assisting with other muscle actions, they are not as important in our tier system format as multi-jointed, whole body movements. This is why single joint or isolation movements are primarily used during auxiliary training.

4.2 4 Functions of the Tier System (Pre 1998)

1 – Rotate the order of exercises based on movement and strength developed.

2 – Implement a variety of exercises to develop the prime movers of the sport at numerous joint angles.

3 – Prioritize these exercises based on type of movement and strength developed and place them in order of importance.

4 – Control Volume by regulating the number of work sets that can be performed based on the level of tier and type of exercise that coincides with it.

Prior to 1998 these were our four main functions on how this model of strength training was designed. Although the approach is similar, these four points of emphasis have changed slightly.

The term "strength developed" is used in both points 1 and 3 and needs to be examined more closely. Like most coaches, we once believed there were slow, non-explosive lifts and fast, explosive lifts. Explosive lifts were those from the sport of weightlifting and non-explosive lifts came from powerlifting and bodybuilding.

As our knowledge in the principles and theories of the rate of force development, compensatory acceleration, maximum concentric acceleration, and progressive acceleration became greater, we determined that we could train any exercise as fast or as slow as needed. In addition, we became more involved with the training methodology of Westside Barbell. We found that any exercise can be trained as fast or as slow as needed based on applying a great amount of force against a given resistance. Since then we have dropped the explosive/non explosive moniker

because one of our primary objectives for athletic strength development is to move the load as fast a possible during the concentric phase of the movement. Athletes are specifically told when we are training at a slow methodical tempo.

Also, in terms of movement speed, we continued to evaluate our athletes training sessions under this new outlook. Based on our evaluations, we determined what we refer to as the ***85% Rule***. This rule is dictated on the notion that regardless of how you classify a movement as fast or slow after the athlete reaches 85% intensity or higher on a particular movement, the concentric portion slows down anyway. This was the main reason we replaced the term explosive movement with total body movement.

When we broke away from slow, non-explosive lifts and fast, explosive lifts this also changed a major factor in the rotation of exercises. When the Tier System was being developed we wanted to build a "conditioning" aspect into the program in reference to explosive movements. In most strength training protocols it is said that you should train fast movements before slow movements. Although this sounded logical for weightlifters most athletes need to perform multiple explosive types of movements over a long duration of time. That is why we rotated explosive movements throughout the microcycle, to train fast under a state of fatigue.

As most football coaches will say, "We need to be explosive in the 4th quarter." The fourth quarter is the final 15 minutes of the game, no mention of the first quarter usually occurs in those staff meetings. Now we train every movement with special attention to concentric bar speed.

In Point #2 our main training sessions were strictly based on what we perceived as the prime movers of the sport. This was more of a focus on upper body movements. Since most sports are pushing dominant (wrestling would be and exception) all upper body movements were

predominately-pressing movements. Stabilization and/or antagonistic work were usually saved for the auxiliary training program. We now focus more on a balanced relationship between pulling and pressing movements. This is based on repetition volume per microcycle.

Point #4 Volume control, was primarily based on our linear approach to cycling where repetitions matched for each exercise per movement category. Volume control is still a precedent but we now monitor volume by both exercise order and the type of strength emphasized.

As we have evolved, our 4 new functions of the Tier System are:

1 – Rotate the order of exercise based on movement.

2 – Implement a variety of movements to train in numerous planes within a microcycle.

3 – Prioritize movements based on big movements to functional movements

4 – Control volume by exercise order and emphasis on specific strength developed.

We refer to "Big" movements as barbell exercises that activate a large amount of muscle action. "Functional" movements focus on independent limb action. Without developing a solid strength base in the big exercises, it would be hard to utilize functional exercises as a means to increasing athletic ability.

Example:	Lower Body Big Exercises – Back Squat, Front Squat Lower Body Functional Exercises – Lunge, Step Up

4.3 The Tier Programs

The Tier System revolves around three main training sessions per microcycle. These sessions are rotated in either a Monday, Wednesday, Friday or a Tuesday, Thursday, Saturday schedule. Auxiliary programs (discussed later) maybe included into the microcycle at the coach and/or athlete's discretion.

There are 5 training templates developed around the Tier System philosophy: three, 3-day templates, a 4-day template (no longer utilized), and a 2-day template. The 2-day template is used primarily during the Competitive Stage for sports that have multiple competitions during a microcycle. This template is used when it is unlikely that the athlete will be able to participate in strength training for the typical three sessions.

4.3.1 What is a Tier?

The simplest definition is a tier represents a ranked exercise. In the basic tier programs, a daily training session can consist of 3,5, or 7 tiers (we no longer utilize the 7 tiered program). These numbers represent the number of exercises that are to be completed during the main session of the Daily Plan.

Each tier has 4 predetermined factors. Three of these factors, movement category, exercise classification, and strength development emphasis, restrict the choice of exercise per tier. The fourth factor is volume. Each tier has a predetermined number of sets prescribed based on the level of the tier and the template being implemented.

4.3.2 Coding the Programs

From a coaching standpoint, we code the programs to describe the type of tier program being utilized. Tier programs are named on a number and letter basis. The name of the program is based on the number of days per week the athlete trains, the number of exercises per session, and if there is any auxiliary work that is mandated in the microcycle. Below is a list of Tier Programs:

- **3x5** **primary program 1**
- **3x3** **primary program 2**
- **3[A]x3**
- **3x3[A]**
- **3[A]x5**
- **3x5[A]**
- **3x7**

- **2x3**
- **2x3[A]**
- **4x5**

The first number before the "x" represents the days per week the athlete trains. The second number represents the number of mandatory exercises that are to be completed in the main session of the daily plan. The letter "A" represents auxiliary training. An "A" designation before the "x" tells the coach and athlete that there will be an additional day of training for auxiliary work. An "A" after the "x" tells the coach and athlete that auxiliary work will be completed at the end of the daily plan's main session as well as posterior chain movement, before the athlete completes the post work out routine.

For Example

Each individual tier represents a mandatory exercise. Therefore, a 3x5-tier program tells the coach and athlete that the athlete is performing a strength-training program that involves 3 workouts per week with 5 mandatory exercises required per training session.

Our variations of the 3x5 program are the primary strength training programs for our athletes. We will utilize either a traditional or elite 3x5 template depending on the goals of the designated program and/or the training level of the athlete. These programs are highly utilized during the Developmental Stage.

3x3 programs are usually utilized in several ways. One way is during the competitive stage when the athlete has only one competition per microcycle and 3 training sessions can still be obtained. With the increased demand on skill development, time invested in strength training is decreased so more attention can be placed on practice and strategic planning. These programs may also be used when training time is reduced because of non-competitive official practice sessions (example: spring football practice, fall baseball practice).

Also, utilizing a 3x3 program with auxiliary work after the main session is an ideal way to develop athletes who participate in non contact sports where they can concentrate on strength

development and prehabilitation of specific joints. This is also beneficial for high school athletes who participate in weight training classes that last approximately 45 minutes in duration.

4.4 Building a Tier Program

Note: The following sub section will describe how we developed the rotation of our Tier Programs. The majority of this information is the premise of our Traditional Template. Several basic changes separate the Traditional and Elite templates of training we utilize.

4.4.1 Developing Movement Categories

Basic Terminology

Bilateral Movement - a barbell, dumbbell, or any other resistance exercise. When performing these movements the limbs involved work together simultaneously.
Unilateral Movement - a barbell, dumbbell, or any other resistance exercise. When performed these exercises have independent limb action. This can be done by alternating limbs or performing single limb sets.

EXERCISE POOL

Table 13 - Sample Mini-Pool

Exercises	Exercises
Power Clean	Jerk
Back Squat	Push Jerk
Bench Press	Push Press
Standing Shoulder Press	Step Up
Front Squat	Lunge
Hang Clean	Bent Over Row
Incline Press	Dumbbell Clean
Dips	Dumbbell Snatch
Pull Ups	Romanian Deadlift
Leg Press	Straight Leg Deadlift
Clean Pull	Incline Press
Power Snatch	Leg Curl
Hang Snatch	Leg Extension
Snatch Pull	Low Back Extension
Triceps Extension	Single Leg Squat
Biceps Curl	Close Grip Bench Press
Dumbbell Bench Press	Dumbbell Incline Press

The first step of our program design is to determine which exercises are being considered for a specific program (Table 13). We consider this list our exercise pool, and feel this is the first process that should be considered when designing a strength program.

There are two questions the S/C coach must ask when creating the exercise pool: can I teach it, and do I have the necessary equipment to safely implement this particular exercise? Once you have answered these questions, you can now create your pool.

Everyone's pool will be different based on the answers to the above questions. This pool will consist of all the exercises that are being considering for the specific program. This does not necessarily mean all of the exercises will be used, but, it allows us to evaluate each exercise and it's importance to the program.

In many cases when designing an athletic based program, a mini-pool may be developed for a specific program based on a more comprehensive pool. This comprehensive pool should list every exercise plus variations that you can teach and may utilize at some point in the annual plan. These lists can easily be over 1000 exercises with variations.

For a Complete List of Exercises - Appendix 3 – Comprehensive Exercise Pool

It should also be noted that when reviewing and analyzing the needs of a specific sport, that there are some exercises that may not be worth the risk to an athlete. These are exercises that although may be very good movements they may not be the "best" choice for a particular sport.

For Example:
Tennis Training
Although hip extension is a focal movement for the tennis athlete, it may not be in the best interest of the athlete to have them perform full pull and catch movements such as the power clean to help develop hip extension. This exercise may not be worth the risk of injury. The stress to the athlete's wrist from the force of catching the bar in a racked position could lead to injury. The hand and wrist are tremendously important to the tennis athlete and therefore an alternative exercise may be best suited to enhance hip extension and reduce the risk of injury. The alternative may lie with a dumbbell or barbell power pull or shrug pull where hip extension is still emphasized without the catch phases of a clean movement. These are questions that need to asked and answered when developing athletic based programs.

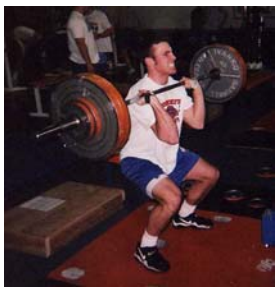
In the Tier System, any exercise that is being considered for a specific program will be placed into one of three general movement categories (Table 14). These three categories are: Total Body, Lower Body, and Upper Body Movements. Once the exercises are placed into one of the three general categories, it is listed as a specific movement based on joint action or movement plane.

Table 14 – Sample Exercise Pool per Movement Categories

Category T	Category L	Category U
Power Clean	Back Squat	Bench Press
Hang Clean	Front Squat	Incline Press
Clean Pull	Leg Press	Close Grip Bench Press
Power Snatch	Step Up	Dumbbell Bench Press
Hang Snatch	Lunge	Dumbbell Incline Press
Snatch Pull	Romanian Deadlift	Standing Shoulder Press
Jerk	Straight Leg Deadlift	Bent Over Row
Push Jerk	Single Leg Squat	Dips
Push Press	Leg Curl	Pull Ups
Dumbbell Clean	Leg Extension	Triceps Extension
Dumbbell Snatch	Low Back Extension	Biceps Curl

Our whole body approach is based on having at least one exercise per movement category in each training session. We focus on movements that will help improve athletic ability and reduce the chance of injury rather than develop specific areas of the body. This type of training is more beneficial for an athlete than typical body part training.

Category T - Total Body Movements



Total Body movements are represented by exercises that involve the following movements: knee extension, hip extension, plantar flexion, and shoulder elevation. Also, flexion and extension of the elbow may be involved in certain exercises. The movement of all these joints at one time in a synchronized fashion is related to the actual movements performed in sports at any level. Total Body exercises are primarily derived from the sport of Weightlifting. Total Body exercises are excellent movements for incorporating large-scale muscular activation.

Category L – Lower Body Movements

Lower Body movements are represented by exercises that involve the following movements: knee extension, hip extension, and plantar flexion. Lower body exercises are those exercises that will help increase strength in the lower back, quadriceps, hamstrings, gluteus muscle group, hip extensors, flexors, adductors, and abductors, and

the muscles of the lower leg (calf and ankle).

Category U – Upper Body Movements

Upper Body movements are represented by exercises that involve the following movements: rotation at the shoulder joint, elbow flexion and extension. Upper body exercises are those exercises that will help increase strength in the chest, upper back and trapezius, shoulder region, and arms (triceps, biceps, and forearms).

Movement Categories [Specific]

Once an exercise has been assigned a general category it is then placed in a specific group within the category. These specific groupings are based on the movement and/or actions of the exercise.

Category T Exercises

Table 15 - Category T – Exercise Breakdown [examples]

Pulling	Movements	Pushing	Movements	Hybrids
Full Pull and Catch	Hang Clean	**Presses**	Push Press	Hang Clean/Jerk
	Power Snatch	Unilateral	DB Push Press	Snatch/Overhead
Unilateral	Split Clean			Squat
Extension	Deadlift	**Jerks**	Split Jerk	
	Power Pull		Push Jerk	

Total Body exercises are going to be grouped into 3 sub categories. Exercises will be recognized as a, pulling, pushing, or hybrid movements (Table 15).

Pulling movements will be grouped as full pull and catch or extension movements. Full pull and catch movements are similar to the classical weightlifting exercises where the load is caught in the traditional completion of the clean or snatch. Extension movements are completed when hip, knee, and/or ankle (plantar flexion) are fully extended at the completion of the movement. Pulling movements can either begin from the ground or can be partial range of motion exercises.

Pushing movements are labeled either presses or jerks. Exercises are considered pressing movements when the athlete completes the movement with the knees and hips fully extended.

In Jerk movements, the athlete rebends the knee and hip and "catches" the load in a flexed knee position. Both movements are started with a slight bend of the hips and knees to create the initial drive. These exercises are started with the bar racked across the chest and shoulders or supported on the back and shoulders.

Hybrid movements are those exercises that combine two distinct movements within one repetition. Total Body hybrids always begin with the first movement being a total body movement. The second movement may be a total, lower or upper body exercise.

Total body exercises can also be unilateral movements also. This can be done with the utilization of dumbbells for independent limb actions of the arms as well as using a split catch technique. The split catch is a technique where the athlete splits the legs in a lunge position to catch the clean or snatch and then recovers to the standing upright position.

Category L Exercises

Table 16 - Category L – Exercise Breakdown [examples]

In	Place		Horizontal		Vertical	Posterior	Chain	Flexion	Extension	Hybrid
bilateral	**Back Squat**	forward/ backward	**Lunge**	Up/Down	**Hi Step Up**	Bent Leg	**Glute Ham Raise**	**Leg Curl**	**Leg Extension**	**Goodmorning/ Back Squat**
unilateral	**Split Squat**	Lateral	**45 degree Lunge**	Lateral	**Xover Step Up**	Str Leg	**Back Ext**			**Front Squat/Push Press**

There are 6 major groupings for Lower Body movements. Exercises can be designated as: in place, horizontal, vertical, posterior chain, flexion, extension, and hybrids (Table 16).

In place, horizontal, and vertical movements are based on leg and foot action. In Place movements are those exercises in which the athlete is in a position where foot placement is in a stable fixed position. These exercises can either be single leg (unilateral) or double leg (bi-lateral) movements.

Horizontal and Vertical movements are single leg movements where one foot leaves the ground and moves to a secondary position. Horizontal movements primarily come from

variations of lunges, where movements are forward and backwards. Vertical movements primarily come from variations of step ups and step downs, where movements are up and down and the athlete's movement limb is either stepping up or down from an object.

Movements that occur in the transverse plane or move outside the typical linear paths of forward/backward or up/down are considered lateral variations. These also come from variations of our lunge and step up progressions.

Posterior chain exercises represent movements that occur at the low back, glutes, hamstrings, and spinal erectors. Posterior Chain exercises are also broken down into bent legged or straight legged, and can be either a double or single leg movement. In athletics, this area of the body has been overlooked for a long time. Strength in this portion of the "power zone" is imperative. If the posterior chain, torso/abdominal region (power zone) is not strong, it does not matter how strong the athlete's limbs are.

Single joint movements that involve flexion or extension of the hip, knee, and ankle are utilized during auxiliary training, or the pre/post work out routines when necessary. We prefer to use multiple joint actions to develop these movements in a more athletic nature.

Lower body hybrids are multiple exercises performed within one repetition where the first movement is a lower body movement. The second movement may be a total, lower or upper body exercise.

Category U Exercises

Table 17 - Category U – Exercise Breakdown [examples]

	Horizontal		Vertical		Extension		Flexion	Shoulder Rotation	Hybrid
Push-Bi	**Bench Pr**	Push-Bi	**Standing Press**	Bilateral	**Pushdown**	Bilateral	**BB Curl**	**Fly**	**Shoulder Press/ Overhead Squat**
Push-Uni	**DB Incline Pr**	Push-Uni	**DB Press**	Unilateral	**DB Extension**	Unilateral	**DB Curl**	**Lateral Raise**	**Upright Row/Overhead Press**
Pull-Bi Pull-Uni	**Bent Row** **DB Row**	Pull-Bi Pull-Uni	**Pull Down** **SA Chin**						

There are 6 sub categories for Upper Body movements. They are: horizontal, vertical, extension, flexion, shoulder rotation, and hybrids (Table 17).

Horizontal and vertical movements are based on arm position from the body's anatomical starting point. Horizontal movements are those movements where the arm is held at approximately 90 degrees from the shoulder joint. When the athlete's arms are at 180 degrees from the shoulder joint, or in the overhead position, these are considered Vertical movements.

Differentiating horizontal and vertical pushes or pulls is based on the concentric muscle contraction or positive action of the movement. If the concentric action occurs when the resistance/load is moving away from the body, this is considered a push. When the resistance is coming towards the body, this is considered a pull.

Flexion and Extension exercises are single joint movements that occur at the elbow, wrist, and neck. Shoulder Rotation exercises includes the following movements: elevation, retraction, depression, rotation, protraction, abduction, adduction, and extension of the shoulder region. Most of these exercises will be single joint movements.

Upper body hybrids are multiple exercises performed within one repetition where the first movement is an upper body movement. The second movement may be a lower or upper body exercise.

Similar to total body movements, most upper body exercises could be done both bilaterally and unilaterally. Also, The utilization of dumbbells for movements increases range of motion as well as increasing the activation of the stabilizing muscles during the execution of the movement.

4.4.2 Exercise Classification

After the pool has been completed, the next step is to classify the exercises. Each exercise is classified as a foundation, supplemental, major assistance, or secondary assistance exercise. This is extremely helpful in ordering the exercises in proper sequences for the Tier System, as well as prioritizing exercises per category (Table 18).

Table 18 - Exercise Classification [examples]

	Category T Pulling Movement	Category T Pushing Movement	Category L	Category U
Foundation	Power Clean	N/A	Back Squat	Bench Press
Supplemental	Hang Clean Power Snatch Hang Snatch	Jerk	Front Squat Leg Press	Incline Press Close Grip Bench
Major Assistance	Clean Pull Snatch Pull Dumbbell Clean Dumbbell Snatch	Push Jerk Push Press	Step Up Lunge Romanian Deadlift Single Leg Squat	Dumbbell Bench Dumbbell Incline Shoulder Press Bent Over Row Dips Pull Ups
Secondary Assistance	N/A	N/A	Leg Curl Leg Extension	Triceps Extension Biceps Curl

Foundation Exercises

Foundation exercises are multi-joint barbell exercises. Preferably, one exercise per movement category should be a foundation exercise. These exercises are usually evaluated for repetition maximums. Generally, foundation exercises are chosen based on the fact that they will give the best indication of overall strength development for the specific movement category. These exercises are chosen based on the type of sport, contact versus non-contact, explosive versus non-explosive, and movement actions.

In the case of improving athletic ability the same exercises may be used for multiple sports. Foundation exercises should remain the same throughout multiple annual plans so the coach can chart individual and team improvement. In the case of changing foundation exercises make sure you establish a sound justification for making the switch and clearly evaluate the positives versus negatives in how it will benefit both individual and team improvement.

Foundation exercises are those exercises upon which the rest of the program is going to be built. Foundation exercises are those exercises that the coach believes will emphasize the development of the particular movement category it is associated with in the most efficient manner. In a nutshell, foundation exercises are those exercises that you ask yourself the question, if you could only train one exercise per movement category for a particular sport, what would it be?

In the case of testing two exercises from the same movement category, you must determine which one will be the primary and which one is the secondary foundation exercise. When choosing to implement two foundation exercises for a category, one exercise should give the best indication of overall strength for that specific category. We do not recommend testing two movements per category in a given testing period.

The exercise chosen as the primary foundation exercise is always a Tier 1 exercise in the weekly rotation of exercises. The secondary foundation exercise becomes the Tier 2 exercise if utilized for that movement category.

Examples:		
Total Body –	Power Clean from Deck	Primary Foundation
Total Body –	Hang Clean	Secondary Foundation
Lower Body –	Back Squat	Primary Foundation
Lower Body –	Front Squat	Secondary Foundation
Upper Body –	Bench Press	Primary Foundation
Upper Body –	Incline Press	Secondary Foundation

The main foundation exercises for our programs are: (Table 19).

Table 19 - Main Foundation Exercises

Total Body	**Lower Body**	**Upper Body**
Hang Clean	Back Squat	Bench Press
Power Pull from Deck/Hang	Front Squat	Standing Press

Obviously there may be situations where this changes based on needs analysis of the sport and working with the head sport coach to determine the true goals of the strength program.

Supplemental Exercises

Supplemental exercises have taken on new meaning in our training theory. Referred to as "special" exercises by the Westside Barbell Club, these exercises are still utilized to add variety and compliment the corresponding foundation exercise. They have also taken an identity of their own

In sports where maximum strength is of great importance, we will use supplemental exercises as secondary test movements throughout the annual plan. This is done to continuously improve strength. When these exercises are used in this manner we rotate them bi-monthly. Utilizing supplemental exercises in this mode allows for challenging and competitive training sessions among individuals and their teammates.

Supplemental exercises are extremely important as they enhance the athletes overall strength by training similar muscle actions as the foundation exercises in slightly different movement planes and angles.

These exercises are primarily multiple joint barbell exercises. Depending on the type of training template used, they may be either Tier 1 or Tier 2 exercises. Foundation and Supplemental exercises are also known as the "BIG" exercises. These exercises are implemented for the purpose of increasing the athlete's strength level.

Major Assistance Exercises

Major assistance exercises can benefit the athlete in two different ways. Major assistance exercises assist in the development of the muscle or muscle groups that are used in the execution of the foundation and supplemental exercises. Also, since some of the exercises work as stabilizers and the antagonistic muscle groups of the prime mover exercises, they help avoid muscular imbalances that can lead to injury.

Major Assistance exercises can also be classified as "Functional" exercises when it applies. These exercises are those that primarily allow independent movement actions of the limbs. This is an extremely important factor when using strength training as a building block for improving athletic ability. These types of exercises help in the development of mobility and help maintain or improve the athlete's flexibility. They can also aid in the improvement of balance, coordination, and proprioception. These movements, in terms of athletic development, cannot be overlooked. They serve as a true compliment to the foundation and supplemental exercise of our program.

Major Assistance exercises also house the gymnastic movements, i.e. bodyweight exercises. A lost art in most training scenarios utilizing movements that are primarily bodyweight oriented are purely functional exercises.

Major assistance exercises are usually multi-joint barbell, dumbbell, or alternative resistance exercises. These exercises are usually rotated in 2 or 4-week blocks as tier, 3,4, or 5 movements. These exercises play an important role in our Elite training template for the volume and mobility tiers.

Secondary Assistance Exercises

Secondary assistance exercises are single joint exercises and act as stabilizing exercises for the foundation and supplemental exercises. These exercises apply direct resistance to a specific muscle group. We use them primarily in our auxiliary program and pre/post work out routines. They may also be implemented individually for those athletes who may either be in a rehabilitation or prehabilitation process. They can also be used to strengthen weaker muscle groups that may affect performance.

4.4.3 Movement Category, Daily, and Weekly Sequence

Movement Category Sequence

One of the major intentions of the Tier System was to rotate the order of exercises based on movements. This would accomplish four important factors in the development of the microcycle strength training sessions.

The first factor was to develop a sequence in which each category would receive an equal number of exercises per microcycle. There is a 1/3 distribution of movement categories.

The second factor was to have an emphasis on the development of the hips and legs. 2/3's of the movement category distribution, 1/3 from the total body movements and 1/3 from the lower body movements, will improve strength levels in this region of the body. The level of strength developed from the torso down is the foundation of the athlete's success.

The third factor was to develop a sequence that would allow each category to be the priority emphasis for one of the daily training sessions of the microcycle. This would allow the foundation exercise for a specific category to be the first exercise of the daily session. The athlete should recognize this and understand this is *THE* movement of the session.

The fourth factor of the movement sequence was to rotate the movements so that two exercises from the same category would not be performed back to back in a daily training session. This primarily affects the 3x5, 3x7, and 4x5 tier programs. This was done to allow for built in recovery from exercise to exercise within one category to the next.

The following points determined the movement sequence for the microcycle. Point One: determine which movement category closely relates to athletic movement. Point Two: determine which movement category is the primary group for strength development. In other words, which

category has one exercise that is needed to drive the rest of the program. Point 3: how would the running plan per microcycle affect the strength sessions?

Based on these three points the movement sequence for the microcycle was developed in this manner (Table 20). The first training session of the week would be a total body priority session. The synchronized movement patterns of total body exercises have the most correlation in terms of athletic movement. The second session of the week would be the lower body priority session. It is our belief that the Squat primarily the Back Squat is the most important movement in terms of strength development. If an athlete could only train one exercise a week this would be the exercise recommended. It truly is the KING of ALL EXERCISES. The third and final session of the week would be the upper body priority session.

Table 20 - Microcycle Movement Sequence

	Session T Day 1	**Session L Day 2**	**Session U Day 3**
EMPHASIS	Category T Total Body	Category L Lower Body	Category U Upper Body

Our running plan also had an affect on the sequencing of the movement categories. A secondary factor in establishing this sequence was to eliminate the possibility of having a running session on the same day as our priority lower body training emphasis. Since our running program is a 4-day alternating program with a day off after 2 consecutive sessions, we planned for our lower body training session to be performed on non-running days. It is our belief that when we run and train heavy squats, athletes tend to back off on one or the other depending on their strong points.

For example:
Football Training
Most of our big skill athletes (linemen) would tend to back down during the running session knowing that they had a big squat work out ahead of them. Our skill 2 athletes (wr, rb, cb, saf) would train hard during the running session and try to back off during the squat work out. As much as we would like to say this doesn't happen, it does, it is human nature. This is one reason why we developed this training sequence.

+Plus, in the majority of our developmental stage programs, our lower body day falls on Wednesday. It has been known in the business industry for some time that the most productive workday of the week is Wednesday. Why would we want our athletes not training on this day?

Although we believe that total body movements are extremely beneficial to improving athletic ability, the primary movement of our program is the squat. The strength gained through this one exercise is a key ingredient to the improvement of total body movements, upper body movements, and speed development. Our athletes have dubbed our Wednesday's training session as "BIG SQUAT WEDNESDAY".

After the microcycle sequence was completed, it was now necessary to construct a daily training session sequence (Table 21). This sequence would take into account the microcycle rotation as well as how the categories were ranked based on the influence of improving athletic ability.

Table 21 - Daily Movement Category Sequence

EMPHASIS	Session T Day 1	Session L Day 2	Session U Day 3
Priority	Total Body	Lower Body	Upper Body
Major	Lower Body	Upper Body	Total Body
Minor	Upper Body	Total Body	Lower Body

Session T's (total body) rotation became identical to the microcycle rotation. A total body movement is the emphasis of the day followed by a lower body and an upper body movement. Session L's (lower body) emphasis is a lower body movement followed by an upper body and total body movement. Session U's (upper body) emphasis is an upper body movement followed by a total body and a lower body movement.

It was decided that we would consider the first movement of the day the priority emphasis, the second movement the major emphasis, and the third movement of the day the minor emphasis. This is the basis of our traditional training template. By sequencing the categories in the order we did, it allows each category to be the priority, major, and minor emphasis one time per microcycle.

Within the weekly sequence we rotate the categories in this order because we want a priority emphasis session to be followed by a minor emphasis session. Only the upper body movement

session does not conform to this standard. In this case, two consecutive non-lifting days follow the priority emphasis. This rotation will help promote a faster recovery from training session to training session for each category and will diminish the chance of the athlete over training.

Table 22 - 3x3 Tier Program - Tier Breakdown Based on Movement Category Sequence

TIER	Session T Day 1	Session L Day 2	Session U Day 3
One	Total Body	Lower Body	Upper Body
Two	Lower Body	Upper Body	Total Body
Three	Upper Body	Total Body	Lower Body

The movement sequence rotates the same way during the tier programs. In the 3x3-tier program (table 22), once the athlete has performed one exercise per category following the proper sequence for the daily session, the athlete has completed the required lifts for that session.

Table 23 - 3x5 Tier Program - Tier Breakdown Based on Movement Category Sequence

TIER	Session T Day 1	Session L Day 2	Session U Day 3
One	Total Body	Lower Body	Upper Body
Two	Lower Body	Upper Body	Total Body
Three	Upper Body	Total Body	Lower Body
Four	Total Body	Lower Body	Upper Body
Five	Lower Body	Upper Body	Total Body

In the 3x5-tier program (table 23) once the movement category sequence is completed with an exercise from each, the rotation begins again for that particular session. After the rotation has been completed the priority emphasis category of the day is repeated followed by the major emphasis of the day. Tier 4 exercises repeat the Tier 1 movement category and Tier 5 exercises repeat the Tier 2 movement categories. This gives you 2 priority emphasis exercises, 2 major emphasis exercises, and 1 minor emphasis exercise to be completed in a 3x5-tier program.

Table 24 - 3x7 Tier Program - Tier Breakdown Based on Movement Category Sequence

TIER	Session T Day 1	Session L Day 2	Session U Day 3
One	Total Body	Lower Body	Upper Body
Two	Lower Body	Upper Body	Total Body
Three	Upper Body	Total Body	Lower Body
Four	Total Body	Lower Body	Upper Body
Five	Lower Body	Upper Body	Total Body
Six	Upper Body	Total Body	Lower Body
Seven	Total Body	Lower Body	Upper Body

In the 3x7-tier program (Table 24) once the movement sequence for the daily training session has been completed, a full second rotation for that specific day is completed followed by another

priority emphasis exercise. This gives you 3 priority emphasis exercises, 2 major emphasis exercises, and 2 minor emphasis exercises to be completed in a 3x7-tier program.

There are two ways that a 2x3 program can be implemented. One program only utilizes sessions "T" and "L" during the microcycle. Changes in the exercise classification and specific movement sequence are adjusted based on program goals. The second is to rotate sessions through multiple microcycles (Table 25).

Table 25 – 2x3 Session Rotation

Week	Training Session 1	Training Session 2
ONE	Session T	Session L
TWO	Session U	Session T
THREE	Session L	Session U
FOUR	Session T	Session L

Note: The 4x5 program will be discussed in 4.7

4.4.4 EXERCISE CLASSIFICATION SEQUENCE

Table 26 - Tier Breakdown Based on Exercise Classification

Tier	Classification
One	Foundation
Two	Supplemental or Major Assistance
Three	Supplemental or Major Assistance
Four	Supplemental or Major Assistance
Five	Supplemental or Major Assistance
Six	Major or Secondary Assistance
Seven	Major or Secondary Assistance

There are corresponding classification that also restrict the choice of movement per tier (Table 26). These exercises are placed in order by the movement category sequence of the daily training session, as well as their classification within the category they are affiliated with. Foundation exercises will always start the daily training session for the traditional template followed by, supplemental exercises and/or major assistance exercises. Secondary Assistance exercises are not included in the main tier program we utilize today but were a consideration in the 3x7 tier program. Secondary Assistance exercises are an important part of our auxiliary training package.

Each tier has a choice of exercise variations based on classification and movement (Tables 27, 28, & 29). Choices have been given for some tiers because each sport has different needs. This allows for a variety of exercises to be done for the same tier throughout the year attacking and strengthening the body's joints at different angles.

Table 27 - Session T Exercise Classification and Movement Rotation

Tier Level	*Tier/Rotation*	*Classification*	*Movement*
One	Total Body	Foundation	**Foundation**
Two	Lower Body	Supplemental	**In Place Double Leg**
Three	Upper Body	Supplemental Major Assistance	**Horizontal or Vertical Movement – check for balance**
Four	Total Body	Supplemental Major Assistance	**Bilateral Extension, any Unilateral Movement, or and Total Body Hybrid**
Five	Lower Body	Major Assistance	**Horizontal, Vertical, or Unilateral Hybrid [H to V or V to H] opposite movement of Session L Tier 4**
Six	Upper Body	Secondary Assistance	**Flexion or Extension Elbow, Wrist**
Seven	Total Body	Major Assistance	**Choice Any Unilateral Movement w/ DB's**

Table 28 - Session L Exercise Classification and Movement Rotation

Tier Level	*Tier/Rotation*	*Classification*	*Movement*
One	Lower Body	Foundation	**Foundation**
Two	Upper Body	Supplemental Major Assistance	**Horizontal or Vertical Movement – check for balance**
Three	Total Body	Supplemental Major Assistance	**Any Overhead, Any Extension, or TB/TB, TB/LB, LB/TB hybrid**
Four	Lower Body	Major Assistance	**Vertical, Horizontal, or Unilateral Hybrid [V to H or H to V]**
Five	Upper Body	Supplemental Major Assistance	**Horizontal or Vertical Movement – check for balance**
Six	Total Body	Major Assistance	**Choice Any Unilateral Movement w/ DB's**
Seven	Lower Body	Secondary Assistance	**Flexion or Extension, Ankle, Knee, Hip**

Table 29 - Session U Exercise Classification and Movement Rotation

Tier Level	*Tier/Rotation*	*Classification*	*Movement*
One	Upper Body	Foundation	**Foundation**
Two	Total Body	Supplemental Major Assistance	**Bilateral Full Pull and Catch, Jerk (unilateral option), or Bilateral Extension**
Three	Lower Body	Supplemental Major Assistance	**In Place Double or Single Leg, or Vertical or Horizontal**
Four	Upper Body	Supplemental Major Assistance	**Horizontal or Vertical Movement – check for balance**
Five	Total Body	Major Assistance	**Choice Any Unilateral Movement**
Six	Lower Body	Secondary Assistance	**Flexion or Extension, Ankle, Knee, Hip**
Seven	Upper Body	Secondary Assistance	**Shoulder Rotation**

[Based on Traditional Template]

The Upper Body rotation for this model is based on rotating Horizontal and Vertical pushes and presses. The goal is to have a balance between Pushes and Pulls based on work set volume. The Foundation exercise does not factor into the rotation. When setting up this rotation it is

important that whichever movement is chosen for Tier 2 the complete opposite is placed in Tier 4. This rotation is formulated off of an 8-week plan rotating the movements throughout tiers 2-5 (Table 30). This rotation can and will be altered when implementing "bracketing" techniques to specific tiers (Section 4.9).

Table 30 – Upper Body Horizontal/Vertical Push/Pull Rotation

Weeks 1&2	**Session T**	**Session L**	**Session U**
Tier 1 – 6 sets			**Foundation**
Tier 2 – 5 sets		*Horizontal Pull*	
Tier 3 – 4 sets	*Horizontal Press*		
Tier 4 – 3 sets			*Vertical Press*
Tier 5 – 2 sets		*Vertical Pull*	
Weeks 3&4	**Session T**	**Session L**	**Session U**
Tier 1 – 6 sets			**Foundation**
Tier 2 – 5 sets		*Vertical Press*	
Tier 3 – 4 sets	*Vertical Pull*		
Tier 4 – 3 sets			*Horizontal Pull*
Tier 5 – 2 sets		*Horizontal Press*	
Weeks 5&6	**Session T**	**Session L**	**Session U**
Tier 1 – 6 sets			**Foundation**
Tier 2 – 5 sets		*Horizontal Press*	
Tier 3 – 4 sets	*Horizontal Pull*		
Tier 4 – 3 sets			*Vertical Pull*
Tier 5 – 2 sets		*Vertical Press*	
Weeks 7&8	**Session T**	**Session L**	**Session U**
Tier 1 – 6 sets			**Foundation**
Tier 2 – 5 sets		*Vertical Pull*	
Tier 3 – 4 sets	*Vertical Press*		
Tier 4 – 3 sets			*Horizontal Press*
Tier 5 – 2 sets		*Horizontal Pull*	

For most tiers there are numerous movement choices. The choice made for each particular tier is based on the particular goals and needs for the specific sport. The tremendous amount of variety in this program allows for more challenging training sessions and keeps the athletes mentally motivated.

Tier 1 represents the foundation exercise for the movement category that has the priority emphasis of the day. Tier 1 exercises are first in succession and are usually cycled off of a previous repetition maximum. A foundation exercise may be substituted for another exercise in Tier 1 if we are implementing a repeat session.

Tier 2 exercises are classified as supplemental or major assistance exercises. Tier 2 exercises are always second in succession and represent the major emphasis of the day. If a secondary foundation movement is utilized, this exercise is cycled from a previous repetition maximum.

Tier 3 exercises will either be classified as a supplemental or major assistance exercise. Tier 3 exercises are always the third exercise in succession and represent the minor emphasis of the day.

In a 3-Tier program this would be the last required lift of the session

Tier 4 exercises are fourth in succession and are either supplemental (upper body only) or major assistance exercises. Tier 4 exercises represent the same category as Tier 1, the priority emphasis of the day.

Tier 5 exercises are also supplemental (upper body only) or major assistance exercises. They are the fifth exercise of the day and represent the same movement category of Tier 2, the major emphasis of the day. These exercises are cycled similar to the major assistance exercises in tiers 3 and 4.

In a 5-Tier program this would be the last required lift of the session

Tier 6 exercises will either be major or secondary assistance exercises. The sixth exercise of the training session, these exercises represent the same movement category of Tier 3, the minor emphasis of the day.

Tier 7 is the last exercises for the daily session. Tier 7 exercises represent the priority emphasis of the day. Tier 7 exercises will either be major or secondary assistance exercises.

In a 7-Tier program this would be the last required lift of the session

Cycles for Tier 2-5 exercises are either percentage or repetition based from the foundation exercise. Both Tiers 6 and 7 exercises are repetition-based cycles.

When choosing opposite movement patterns for tier variation this relates to, pull/push movements for total and upper body movements, or horizontal/vertical movements for lower body. It should be understood that because of the numerous joints involved in the completion of a total body lift, this category will never have secondary assistance exercises.

4.4.5 RANKING YOUR POOL BASED ON TIER CONSIDERATIONS

Now that the movement sequence and exercise classification have been established, the S/C coach must rank in order the top three, five, or seven exercises per category. These exercises should be ranked based on importance to the improvement of athletic ability, relationship to the foundation movement, and how they coincide with the classification sequence and the goals of the program.

Once the seven exercises per category are chosen they are now plugged into the tier that coincides with its ranking. If you are implementing a 3x3-tier program the first three exercises per category will be used and so on for a 3x5 and 3x7 program. Remember that the exercises will be dispersed throughout the three training sessions of the microcycle (Table 31).

Table 31 - Order of Exercises per Movement Category

Session T		**Session L**		**Session U**	
Tier Level	Rotation/Rank	Tier Level	Rotation/Rank	Tier Level	Rotation/Rank
1	***Total 1***	1	***Lower 1***	1	***Upper 1***
2	***Lower 2***	2	***Upper 2***	2	***Total 2***
3	***Upper 3***	3	***Total 3***	3	***Lower 3***
4	***Total 4***	4	***Lower 4***	4	***Upper 4***
5	***Lower 5***	5	***Upper 5***	5	***Total 5***
6	***Upper 6***	6	***Total 6***	6	***Lower 6***
7	***Total 7***	7	***Lower 7***	7	***Upper 7***

As stated earlier, one of the keys of the Tier System is exercise variety. This is to develop joint strength and stability at different movement planes. The majority of movements will change either bimonthly or monthly to ensure variation, reduce staleness, and over training possibilities.

4.4.6 Volume in Work Sets

Table 32 - Volume - Based on Work Sets per Tier

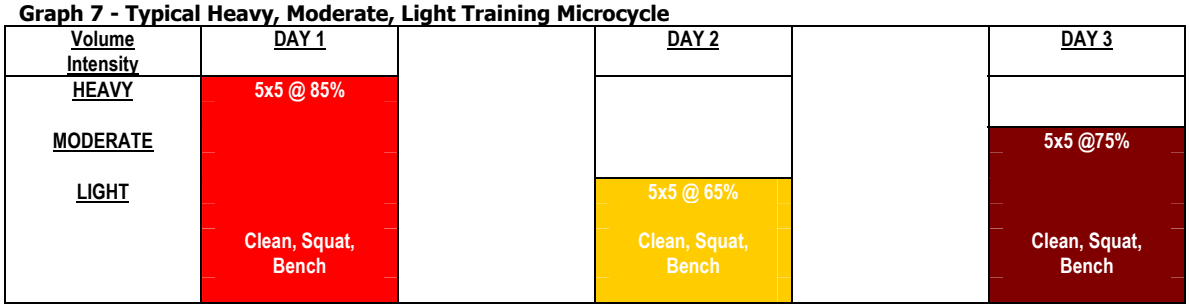
Tier Level	3x3 Traditional	3x5 Traditional	3x7 Traditional	Olympic Sports High School option	3x5 Elite-Effort	3x3 Elite-Speed
One	**6**	**6**	**6**	**5**	**6-10**	**8-10**
Two	**5**	**5**	**5**	**4**	**5-8**	**5+**
Three	**4**	**4**	**4**	**3**	**3-4**	**2-3**
Four		**3**	**3**	**2**	**2**	
Five		**2**	**3**	**2**	**2**	
Six			**2**	**2**		
Seven			**2**	**2**		

As well as the movement categories and classification of exercises, each tier has a predetermined amount of work sets that are recommended for that exercise (Table 32). We manipulated the work sets per tier for the traditional model based on the type of exercise, order in the work out, and the heavy, moderate, and light training sessions per week. The elite model is similar with the difference being the emphasis on effort, speed, and volume versus the heavy, moderate, and light principle. Daily and Weekly volume are maintained by the number of work sets allotted per tier and the reps per set based on the training cycle being used. Each tier has a pre-set number or range of work sets that correlates with the order of the session (traditional) or the strength emphasis of the tier (elite).

Work set volume was chosen over repetition volume because we implement several types of intensity cycles during the annual plan depending on the goals of the specific program. This allowed us to design our foundation training intensity cycles off of a six work set routine and then deduct training sets from the cycle per tier level.

In the traditional model, where repetitions per set match every exercise per category the volume can be manipulated on a standard heavy, moderate, and light training session approach. The movement sequence of the Tier System allows us to gain what we believe is the most efficient use of this approach. Let's examine the typical heavy, moderate, and light training approach (Graph 7) and then proceed to the Tier System adjustments.

Graph 7 - Typical Heavy, Moderate, Light Training Microcycle



This is an example of a typical 3-day per week training cycle with one peak, the heavy day. In this particular cycle the athlete is performing a 5x5 routine for three exercises, the clean, the squat, and the bench press. On each day this will be the exercise order.

Day 1 Work Out

Day One's work out is considered the heavy day of the week. The athlete's goal is to complete 5 sets of 5 repetitions at 85% of a 1 repetition maximum for each exercise. The athlete methodically progresses through the clean, to the squat, and finally to the bench press. At this load, there is a high probability that the athlete will not achieve the repetition goal for each set in the latter stages of the squat and bench press portion of the work out. Therefore this session would not have accomplished its goal, as the athlete was unable to achieve all the repetitions required.

Day 2 Work Out

Following the heavy session for the week Day 2's work out is considered the light session. The athlete is required to perform the same set/rep scheme as Day 1 but the training intensity has been reduced to 65%. The athlete is able to cruise through this work out with little stress to the body. In most cases this work out is to easy and not much has been accomplished in the terms of improving athletic ability.

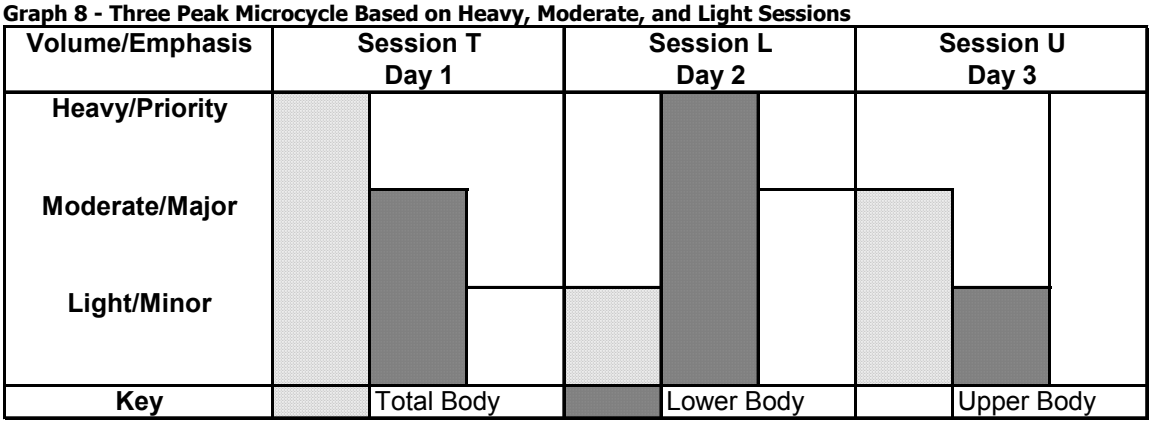
Day 3 Work Out

The moderate day of the week falls on Day 3. The training intensity for this session is 75%. As with the other two sessions the athlete's goal is to perform 5x5 at each exercise. This session seems to be ideal. The athlete accomplishes the goal reps for each exercise and the workload was favorable for strength development.

As a coach evaluating this microcycle it is quite obvious that 1 of the three sessions was what we would consider a quality session, Day 3 (the moderate training day). As the Tier System was being developed this scenario was closely examined. Since the moderate day was determined to be the most efficient and productive session of the week, how could we design a program where the workload of each session would mimic the moderate day?

After reviewing our daily rotation of the movement categories and establishing set patterns per tier, the following 3-peak microcycle was developed for the traditional model (Graph 8). This 3-peak microcycle is based on each movement category having a "heavy emphasis" on separate training sessions.

Graph 8 - Three Peak Microcycle Based on Heavy, Moderate, and Light Sessions



As mentioned earlier the first three tiers represent the priority, major, and minor emphasis of the session. With this in mind we classified the priority movement of the session the heavy emphasis, the major movement the moderate emphasis, and the minor movement the light emphasis. This rotation created a "moderate" approach to the training session that would allow the athlete to train heavy, moderate, and light sessions within one work out and allow for a more efficient plan of training throughout the microcycle.

Heavy, Moderate, and Low Volume Sessions

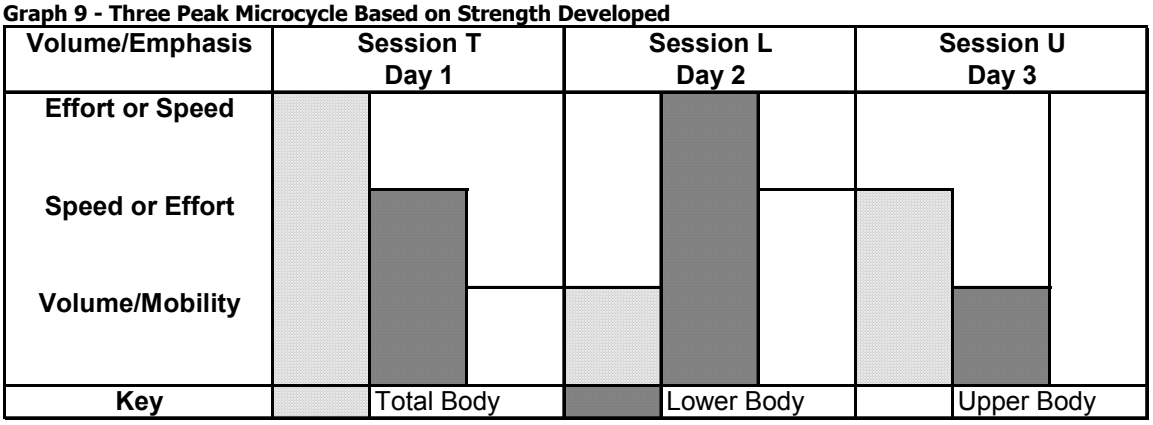
By manipulating volume we could coincide the amount of work sets with the emphasis of the session. That would make the priority emphasis a high volume workout, the major emphasis a moderate volume workout, and the minor emphasis a low volume work out. For example, if a total body movement was the priority emphasis for the daily training session, the amount of the work sets for this category would be the greatest (Table 33).

Table 33 - Volume - Based on Total Prescribed Sets per Daily Emphasis [Traditional]

Volume/Emphasis	3x3 Tier Program	3x5 Tier Program	3x7 Tier Program
High/Priority	6 sets of 15	9 sets of 20	11 sets of 25
Moderate/Major	5 sets of 15	7 sets of 20	8 sets of 25
Low/Minor	4 sets of 15	4 sets of 20	6 sets of 25

Approximately 43% of the total work sets are allocated for the priority emphasis for the daily session. 33% of the total work sets are allocated for the major emphasis of the day, and 23% of the total work sets are allocated for the minor emphasis of the day. By implementing a heavy, moderate, and low volume work out for each category, this gives the athlete ample time to recover from session to session and decreases the chance of over training.

Graph 9 - Three Peak Microcycle Based on Strength Developed



In the Elite model, the same 3-peak microcycle is implemented but the emphasis is based on type of strength developed (Graph 9). Sets and reps are based on the strength goal of the tier. Effort represents the highest training intensity for the movement category. Speed represents the lowest training intensity with the most emphasis on force development. Volume represents the highest repetition volume per set with emphasis on strength endurance and increasing lean body mass.

4.5 The Traditional Template

Table 34 - Example of a 3x5 Traditional Tier Program

Session T Tier	Emphasis	Category	Classification	Exercise
One	**Priority**	**Total Body**	Foundation	***Hang Clean***
Two	**Major**	**Lower Body**	Supplemental	***Front Squat***
Three	**Minor**	**Upper Body**	Supplemental	***Standing Overhead Press***
Four		**Total Body**	Major Assistance	***Shrug Pull from Deck***
Five		**Lower Body**	Major Assistance	***Walking Lunge***

Session L Tier	Emphasis	Category	Classification	Exercise
One	**Priority**	**Lower Body**	Foundation	***Back Squat***
Two	**Major**	**Upper Body**	Supplemental	***Incline Press***
Three	**Minor**	**Total Body**	Major Assistance	***Snatch Grip Power Pull***
Four		**Lower Body**	Major Assistance	***16" Step Up***
Five		**Upper Body**	Major Assistance	***Chin Ups***

Session U Tier	Emphasis	Category	Classification	Exercise
One	**Priority**	**Upper Body**	Foundation	***Bench Press***
Two	**Major**	**Total Body**	Supplemental	***Power Jerk***
Three	**Minor**	**Lower Body**	Major Assistance	***Split Squat***
Four		**Upper Body**	Major Assistance	***Bent Row***
Five		**Total Body**	Major Assistance	***Dumbbell Snatch***

The Traditional Template is based on a 3-peak microcycle (Graph 8). Each of the movement categories represents one of the peaks. Our daily sessions revolve around a priority, major, and minor emphasis for each category as well as the manipulation of volume for each category based on their emphasis for the session. A rotational sequence of the three categories determines which category is the priority emphasis, major emphasis or minor emphasis for that particular session (Table 34).

This rotation allows us to emphasize the foundation exercise as the primary exercise for each session. The rotation allows the athlete to prepare both physically and mentally for the demands placed on the body for the duration of a practice or competition.

4.5.1 Priority Emphasis

A Movement Category is the priority emphasis of the day when the first exercise for the training session is a Tier 1, foundation exercise. The total volume of work sets for the category is higher than the other two categories. Intensity is the highest for this category during this session, as it relates to percentage of repetition maximum. Priority emphasis exercises will be Tier 1, 4, and 7 depending on the length of the program.

4.5.2 Major Emphasis

A Movement Category will be the major emphasis of the day when the first exercise of the training session is a Tier 2, supplemental exercise. The total volume of work sets for this category is considered moderate. Major emphasis exercises will be incorporated in Tier 2 and Tier 5 exercises depending on the length of the program.

4.5.3 Minor Emphasis

A Movement Category will be the minor emphasis of the day when the first exercise of the training session is a Tier 3, supplemental or major assistance exercise. The total volume of work

sets for this category is considered light. In a 3x7 program, Tier 6 also represent the minor emphasis of the session.

As mentioned earlier, traditional training is based on linear periodization. Repetitions per set are solely based on the repetition cycle of the foundation lifts. If the repetitions per set for the back Squat is 10, every lower body movement will perform sets of 10 repetitions per exercise.

It is our approach to do a great job of varying the exercises throughout the microcycle. Our goal is to never repeat the exact same exercise with in the 3-day rotation. This allows for true athletic strength development. We are focusing on whole body development rather then specific increases in one particular movement or developing specific body parts.

4.6 The Elite Template

Table 35 - Example of a 3x5 Elite Developmental Tier Program

Session T Tier	Emphasis	Category	Classification	Exercise
One	**Effort**	**Total Body**	Foundation	***Hang Clean***
Two	**Speed**	**Lower Body**	Supplemental	***Pause Squat***
Three	**Volume**	**Upper Body**	Supplemental	***Standing Overhead Press***
Four	**Mobility**	**Total Body**	Major Assistance	***DB Hang Clean***
Five	**Mobility**	**Lower Body**	Major Assistance	***Walking Lunge***

Session L Tier	Emphasis	Category	Classification	Exercise
One	**Effort**	**Lower Body**	Foundation	***Back Squat***
Two	**Speed**	**Upper Body**	Supplemental	***Varied Grip Bench Press***
Three	**Volume**	**Total Body**	Major Assist	***Snatch Grip Power Pull***
Four	**Mobility**	**Lower Body**	Major Assist	***16" Step Up***
Five	**Mobility**	**Upper Body**	Major Assist	***Chin Ups***

Session U Tier	Emphasis	Category	Classification	Exercise
One	**Effort**	**Upper Body**	Foundation	***Bench Press***
Two	**Speed**	**Total Body**	Supplemental	***Clean from the Deck***
Three	**Volume**	**Lower Body**	Major Assist	***Split Squat***
Four	**Mobility**	**Upper Body**	Major Assist	***DB Row***
Five	**Mobility**	**Total Body**	Major Assist	***Dumbbell Snatch***

The Elite Template is also based on a 3-peak volume microcycle (Graph 9). Each of the movement categories represents one of the peaks. Our daily session revolves around an effort,

speed, and volume/mobility emphasis for each category, as well as the manipulation of volume for each category based on their emphasis for the session. A rotational sequence of the three categories determines which category is the effort emphasis, speed emphasis or volume/mobility emphasis for that particular session (Table 35).

This rotation allows us to emphasize a specific strength developed per movement category during each session. This rotation allows the athlete to develop the three main strength emphasis on physical development, maximum strength, explosive strength, and strength endurance within a daily session and an individual microcycle.

The Elite Template evolved from the traditional template based on our growing influence of the training philosophy of Westside Barbell Club and also their non-linear approach to periodization. Most of the principles that are applied are similar to the basic principles of the Tier System model and the Traditional Template. Our Elite Template is now our primary training template of the Annual Plan. We utilize a 3x5 program primarily during the Developmental Stage and the 3x3 program during the Competitive Stage.

4.6.1 Heavy, Moderate, Light versus Effort, Speed, Volume

Table 36 – 3 x 5 Elite Template Movement Sequence – Emphasis

Tier Level/Emphasis	Strength	Session T	Session L	Session U
One – Effort	Developmental/Maximum	Total	Lower	Upper
Two – Speed	Explosive	Lower	Upper	Total
Three – Volume	Endurance	Upper	Total	Lower
Four – Mobility		Total	Lower	Upper
Five - Mobility		Lower	Upper	Total

Table 37 – 3 x 3 Elite Template Movement Sequence – Emphasis

Tier Level/Emphasis	Strength	Session T	Session L	Session U
One – Speed	Explosive	Total	Lower	Upper
Two – Effort	Developmental/Maximum	Lower	Upper	Total
Three – Mobility	Endurance based	Upper	Total	Lower

The major difference between the traditional and elite model is the non-linear approach to cyclical training. Where the goal in the traditional template is to maintain volume through a rotation of heavy, moderate, or light training movements within a session (linear cycling), the elite model is based on a rotation of strength development (Tables 36 & 37). Our goal in the elite template is to improve maximum strength, explosive strength, and strength endurance (hypertrophy) within a daily session, and within the microcycle. This is done based on an individual cyclical approach for the first three tiers of the elite model.

Effort

The Effort Tier is either a Tier 1 or Tier 2 exercise depending on the plan. The effort movement represents the exercise per movement category that will have the highest workload in terms of training intensity. Effort work is geared around either training on a cyclical system based on standard percentage based cycles for foundation movements or is based on repetition maximum training utilizing a constant rotation of supplemental exercise. The effort tier replaces the heavy emphasis.

Speed

The Speed Tier is always the opposite of the Effort tier. If effort is a Tier 1 movement, then speed is Tier 2 and vice versa. The speed tier replaces the light emphasis. During this tier the load is low and bar speed is at a high priority. We are training to improve strength-speed and speed-strength.

Exercises utilized for speed development per movement category are very selective. Each category has set choices (Table 38). We will use bands, chains, or a combination of both as additional means to improve strength-speed for lower and upper body exercises.

Table 38 - Elite Template Speed Movements

Total Body Movements	Lower Body Movements	Upper Body Movements
Clean from the Deck Power Pull from the Deck Deadlift	Box Squat Pause Squat	Varied Grip (4 grips) Bench Press

Volume

Tier 3 is the Volume Tier in a 3x5 program and a Volume/Mobility Tier in a 3x3 program. This tier replaces the moderate training session. As you can guess, repetitions are the highest per set in this Tier compared to Tiers 1 and 2. This tier compliments the work from Tiers 1 and 2 by improving strength endurance and increasing lean body mass. In the 3x3 program this tier's movement is related to mobility training so exercises chosen are generally those that are independent limb movements. We use these to improve athletic ability, improve stabilization body awareness, and improve range of motion.

Mobility

Tiers 4 and 5 are specifically geared to mobility strength training. Most of these exercises would be classified as major assistance/functional exercises. Each tier has two prescribed work sets and the repetition volume per set will be similar to Tier 3's workload. These movements really give this template a great balance of strength development and the exercises implemented in these tiers are extremely beneficial in improving athletic ability.

In this template, total body movements are trained slightly different then lower and upper body movements. When using the foundation movement as the effort exercise, we will train off of a standard training intensity cycle. When using a supplemental movement we will primarily train for conditioning (Louie Simmons) and perform a higher volume emphasis during this tier. On occasion we may take a supplemental movement for a 1 rep maximum.

This Elite Template is truly an athletic based training approach as we improve four very important components of athletic development within one session/microcycle:

- **Strength – maximum**
- **Strength – explosive**
- **Strength – endurance**
- **Mobility**

4.7 THE 4x5 TIER PROGRAM

The 4-day Tier Program was developed for the highly trained and motivated athlete. What made this program challenging is the limited recovery times between exercises of the same movement category. This program was designed to stay within the typical 4 day per week training approach that is still common, while not abandoning our whole body focus of the daily training sessions. This program was used only once during the 1997 summer program. After evaluating the program it was determined that with the combination of the running plan, the 3-day strength training approach was still the most efficient training scenario.

The 4x5 tier program was based on training 2 consecutive days followed by an off day followed by two more consecutive days of training. This could occur in a Monday, Tuesday, Thursday, Friday or a Tuesday, Wednesday, Friday, Saturday rotation. The challenging aspect of this rotation is that multi joint complex exercises from the same movement categories are trained on consecutive training sessions.

After some trial and error and feedback from our athletes, we manipulated the program so that we can further enhance athletic performance without over training the athlete. It was determined that this program be utilized for 1-2 four week mesocycles before having to return to a 3 day tier program.

The 4x5-Tier Program gives a slightly greater emphasis on total and lower body movements. The microcycle consists of 7 exercises for both the total and lower body movement categories and 6 exercises for upper body movements.

4.7.1 *Movement Category Sequence*

With the addition of the fourth training session a second total body priority day was implemented. The second total body session was the third training session of the microcycle (Table 39). The movement category sequence added an additional total body training session.

Table 39 - 4x5 Microcycle Movement Category Sequence

	Session T **MONDAY**	**Session L** **TUESDAY**	**Session T1** **THURSDAY**	**Session U** **FRIDAY**
Emphasis	Total Body	Lower Body	Total Body	Upper Body

The rotation of movement categories per training session stayed the same as a typical 3-day approach. The additional total body session is why there is a greater number of total and lower body lifts during the microcycle (Tables 40 & 41).

Table 40 - Daily Movement Category Sequence

Emphasis	**Session T** **MONDAY**	**Session L** **TUESDAY**	**Session T1** **THURSDAY**	**Session U** **FRIDAY**
Priority	Total Body	Lower Body	Total Body	Upper Body
Major	Lower Body	Upper Body	Lower Body	Total Body
Minor	Upper Body	Total Body	Upper Body	Lower Body

Table 41 - 4x5 Tier Program – Daily Movement Category Rotation

Tier	**Session T** **MONDAY**	**Session L** **TUESDAY**	**Session T1** **THURSDAY**	**Session U** **FRIDAY**
One	Total Body	Lower Body	Total Body	Upper Body
Two	Lower Body	Upper Body	Lower Body	Total Body
Three	Upper Body	Total Body	Upper Body	Lower Body
Four	Total Body	Lower Body	Total Body	Upper Body
Five	Lower Body	Upper Body	Lower Body	Total Body

4.7.2 Exercise Classification Sequence

The 4x5-tier program follows many of the 3-day program's principles, but to give the athlete the best chance of a thorough recovery, we have isolated the choices of exercises per tier. This was done to manipulate exercises from the same movement category in a sequence that gives the athlete the ability to recover. Table 42 will show the classification sequence, Table 43 will show the specific exercises to choose from and Table 44 is a sample program.

Table 42 - 4x5 Exercise Classification Sequence

Tier	Session T MONDAY	Session L TUESDAY	Session T1 THURSDAY	Session U FRIDAY
One	Foundation	Foundation	Supplemental	Foundation
Two	Major Assistance	Supplemental or Major Assistance	Supplemental	Supplemental or Major Assistance
Three	Major Assistance	Supplemental or Major Assistance	Supplemental or Major Assistance	Major Assistance
Four	Supplemental or Major Assistance	Major Assistance	Supplemental or Major Assistance	Major Assistance
Five	Major Assistance	Major Assistance	Major Assistance	Major Assistance

Table 43 - 4x5 Exercise/Movement Choices

Tier	Session T MONDAY	Session L TUESDAY	Session T1 THURSDAY	Session U FRIDAY
One	Foundation	Foundation	Opposite Movement of Session T, Tier 1	Foundation
Two	Step Up Variation	Horizontal Press	Double Leg In Place Movement	Pull or Press movement
Three	Horizontal Pull	Extension	Vertical Press	Step Up Variation
Four	Extension	Single Leg In Place Movement	Extension	Vertical Pull
Five	Lunge Variation	Horizontal Pull	Lunge Variation	Pull or Press movement DB

Table 44 - Example of a 4x5 Tier Program

Tier	Session T MONDAY	Session L TUESDAY	Session T1 THURSDAY	Session U FRIDAY
One	Hang Clean	Back Squat	Jerk	Bench Press
Two	16" Step Up	Incline Press	Box Squat	Split Clean
Three	Bent Over Row	Snatch Gr. Shrug Pull	Front Press	Lateral Step Up
Four	Clean Grip Power Pull	Split Squat	Clean Grip Shrug Pull	Chin Up
Five	Standard Lunge	DB Row	Lateral Lunge	Dumbbell Snatch

4.8 Tier Rotations, Repeat Tiers, Special Tier

4.8.1 Tier Rotations

Although it is highly recommended to maintain the total body, lower body, upper body rotation throughout the microcycle, in some cases it may be in the best interest of the S/C coach to

rotate the sessions within one training day (Table 45). This is extremely helpful when your facility has limited equipment and your group is large.

For Example:
One group may start on Session T, another on Session L, and a third on Session U. This allows the athletes to maintain a good training pace. The rotation of exercises allows for little interference between groups. As group "T" moves from platform work to the lower body movement, group "L" moves from the squat rack to the upper body movement, and the "U" group moves from the bench to the platform. We had very good success rotating sessions in 1994 and 1995 when our facility was not equipped to handle large training groups participating in the same training sessions during the developmental stage.

Table 45 - Tier Rotations

	Day 1	***Auxiliary***	***Day 2***	***Day 3***
Standard 3 day	Session T		Session L	Session U
Standard 3 day + auxiliary session	Session T	Session A	Session L	Session U
Track	Session T		Session L	Session T
Soccer	Session L		Session T	Session L
Variations	L U T L U T L L U U		U T U T L U T U E L	T L L U T T L L U U

4.8.2 Repeat Tiers

In some cases, where one movement category is not as involved in a particular sport we may restructure the tier program and have a repeat session. This generally occurs in the sports of soccer and track (sprints, jumps, distance) where upper body movements are not as critical as the total body and lower body movements.

When implementing repeat sessions we have found that we are generally removing the session in which the upper body movement is the priority and we add an additional total body or lower body emphasis session. When structuring a program with a repeat tier, the two sessions that are repeated are going to be the first and last sessions of the microcycle with the single session being the middle training day.

The repeat session follows the same order and rotation as normal. There will be slight adjustments to exercise classification and specific movement patterns based on the first session of the microcycle.

As mentioned earlier, you may include auxiliary training after the three main sessions. If you decide to add the auxiliary day as a fourth training day it should be implemented on the Tuesday or Thursday opposite of Session U.

4.8.3 The Special Tier

The special tier was developed when we still focused on linear periodization and was utilized during our conversion to power phases. This was done to add an additional total body/explosive exercise to the beginning of the work out, as is typical weightlifting protocol - fast lifts before slow lifts. Obviously, we do not utilize this tier in our program today but it should be noted.

A special tier exercise was implemented before the Tier 1 exercise. This movement category for this tier is total body and the exercise choice was preferably a hybrid movement. It was done after the pre work out, as part of a specific training phase.

These exercises were done in an explosive manner with bar acceleration and speed of movement being the main focus. The combination lift always included a total body movement as the first part of the hybrid. Examples of hybrid movements are snatch to overhead squat; hang clean to front squat, or a hang clean to jerk.

4.9 Additional Principles of Tier Training

The following five principles: complex sets, combo sets, super sets, tri sets, and coupling are ways we try to increase work capacity within a specific session. Complex, Combo, Super, and Tri Sets each add additional work to the training session with the goal being to complete the

workout in the same time allotment that was determined without the extra movements and sets. Coupling does not add workload but decreases overall work out time by pairing tiers together.

4.9.1 Complex Set

The complex set is based on training a plyometric exercise following a strength training movement. This occurs for the first two tiers of training only. This is usually implemented during our developmental stage. Based on our conversations with Martin Rooney of the Parisi School of Sport, we utilize this training approach as it applies to complex sets. After the athlete completes the strength training movement the rest interval is 15-18 seconds before the plyometric activity is performed. As Martin related to us, performing the activity to soon after the strength movement will lead to a loss of the nervous system affect and, after 30 seconds, the athlete will loose the strength training affect.

4.9.2 Combo Set

The simplest pairing of exercises within a single tier is a combo set. This is primarily a principle for lower and upper body movements. A combo set is combining any two upper or lower body movements into the same tier. This means double the work for that tier emphasis of the session.

4.9.3 Super Set

The pairing of antagonistic muscle groups is the simplest definition of super setting. This is a set rule in the tier system. In tier system training there are primarily three types of superset pairings: horizontal push/horizontal pull, vertical push/vertical pull (these represent upper body movements), and flexion/extension. Flexion/extension movements can occur at the hip, knee and elbow joint.

4.9.4 Tri Set

The Tri Set is a mini circuit of three exercises. The tri set principle can be implemented after the main session in conjunction with the posterior chain movement of the session. During a tri set, we include a weighted torso movement and a horizontal or vertical pull movement within the posterior chain tier. Tri Sets are usually warranted when there is a tremendous amount of horizontal and vertical pressing movements occurring during the tier programs.

Rest time between exercises for the Combo, Super, and Tri sets are done within 30 seconds of the first exercise of the set.

4.9.5 Coupling

Coupling is a principle we utilize in the tier system for two reasons. One is to increase work capacity within the daily session, and the second is to "create" a whole body training affect. Coupling is a specific tier system principle in which we pair two movements in succession. These movements are always lower and upper body tiers. By coupling these two tiers we can simulate a total body action. Similar to the above set schemes, these exercises are done within 30 seconds of one another.

Within the traditional 3x5-training model there are three opportunities to couple lower and upper body movements:

Session T	couple Tier 2 and Tier 3
Session L	couple Tier 4 and Tier 5
Session U	couple Tier 3 and Tier 4

The elite 3x5-training model has only one opportunity to couple a lower and upper body movement:

Session L	couple Tier 4 and Tier 5

This is because Tiers 1-3 in the elite model have different strength emphasis goals compared to the same goals per tier for the traditional model.

TWO RULES OF THUMB WHEN UTILIZING THESE PRINCIPLES:

- In the Traditional model, foundation exercises are never used in bracketing movements. In the Elite model, effort exercises are never bracketed.
- Total body movements regardless of tier position are not utilized. They already give us a whole body training affect.

Note: Bracketing encompasses all the advanced sets of training

4.10 Auxiliary Training

Auxiliary training is a very important part of our weekly plan. It accomplishes many goals and objectives as it relates to improving athletic ability. This type of training can be structured as a separate training day, performed after the main session of the daily work out, or as mini circuits in our extra workouts.

Auxiliary training is utilized to improve work capacity, general physical preparedness (GPP), specific physical preparedness (SPP), and weak areas. These programs are also used in both the prehabilitation and rehabilitation of athletes. Auxiliary training when implemented correctly can be done 5-7 times per week under supervision from the S/C coach.

Appendix 4 – Auxiliary Programs

4.10.1 The Auxiliary Training Day

A specific training day for auxiliary training is no longer a main priority within our program. This day was important to us when we directed most of the main sessions work to prime movers of the upper body with limited emphasis on antagonistic muscle groups. This day served primarily as a prehabilitation day for the upper body with particular emphasis on the upper back and shoulder region of the body. It is grouped in 3 sections (Table 46).

Table 46 - Session A Exercise Classification and Movement Rotation

Group	***Classification***	***Movement***
1	Major Assistance	Vertical Pull
1	Major Assistance	Horizontal Pull
2	Major or Secondary Assistance	Shoulder Rotation
2	Major or Secondary Assistance	Shoulder Rotation
2	Major or Secondary Assistance	Shoulder Rotation
3	Secondary Assistance	Elbow Extension
3	Secondary Assistance	Elbow Flexion

With the exception of the sport of wrestling, most sports are primarily pressing sports. This session allows us to implement exercises that represent vertical and horizontal pull movements that are antagonist's movers and stabilizers to the upper body press work the athlete does during the Big 3 sessions. These exercises represent group 1.

Exercises that help develop the shoulder region of the body are also implemented during this session. The shoulder joint is probably the most vulnerable joint in the body because of its configuration and tremendous range of motion it has. We dedicate 3 exercises to this region for the three heads of the shoulder: anterior, medial, posterior: the rotator cuff muscles, and middle trap region. These are group 2 exercises.

Also included in this session are exercises for elbow flexion and extension. Wrist flexion and extension exercises may also be done. These are group 3 exercises.

4.10.2 Extra Work outs

With a renewed emphasis on the overall development of the body during the main session of the strength-training program, we have come up with a new streamline approach to Auxiliary training. Auxiliary training is now based on individual one on one instruction with the athlete and coach.

Each program is based on no more than 20 minutes of work performed in a circuit approach with H.I.T training principles involved. These workouts are fast paced and highly demanding in some instances. During auxiliary training many movements may be done on a tempo approach rather then the speed emphasis of the concentric action, as stressed in the main tier programs.

Auxiliary training may include programs that develop general fitness, or GPP. These programs are generally flexibility programs, weight loss (aerobic training), power zone development, sled

dragging and the utilization of strongman/woman events to elevate conditioning and whole body strength.

Power Zone development is movements that concentrate of the midsection of the body. Most of the work during these programs should focus on the stabilization of the hips, stomach and back. Most people now refer to this as core training.

Strongman/woman event training should be limited in load as we are not utilizing this training to develop strongman/women competitors but as an additional training tool to enhance our athletes overall development. Athletes who would partake in this type of extra training are generally football players, rugby athletes, wrestlers, and field event athletes.

Specific Physical Preparedness, Prehabilitation, and Rehabilitation types of training can also be done during this part of the weekly routine. Generally, routines that occur for these factors are based on the athlete's sport specific need and relate to common injury prone areas of the body.

Similar to SPP, Prehab and Rehab is the auxiliary programs usefulness in improving weak points. If they athlete has been evaluated and has a certain deficiency in a muscle group this is a time when specific emphasis to that weak point can be addressed.

These programs have become a major emphasis in our overall structure. They have been highly successful in helping to achieve our overall goals of improving athletic abilities. To personalize each program for a specific sport we have created names for the extra work out programs:

- ❑ Football - Blitz Packages
- ❑ Basketball - Fast Breaks
- ❑ Wrestling - Take Downs
- ❑ Gymnastics - Perfect Tens
- ❑ Baseball/Softball - Home Runs
- ❑ Tennis - Aces
- ❑ Golf - Hole in Ones
- ❑ Volleyball - Spikes
- ❑ Swimming/Track - Sprints

Section 4[A] Specifics

Section 4[A] Putting It Together pg. 92

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Step 3 Classify each Exercise per Movement and Label it as a Specific Movement pg. 94

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Figure 8 – Actual Bi Monthly Traditional Training Template pg. 97

Figure 9 – Actual Bi Monthly Elite 3x5 Developmental Stage Training Template pg. 97

Figure 10 – Actual Bi Monthly Elite 3x3 Competitive Stage Training Template pg. 98

Section 4[A] Putting it Together

4[A].1 Creating Your Exercise Program

To simplify all the material in section 4 we will go through 5 basic steps in choosing exercises for a specific program. At this time, because you have already completed your annual plan, the template and cycle you will utilize is already set.

3x5 Example

Step 1. Create an Exercise Pool.

Step 2. Separate Exercises into 3 Movement Categories

Step 3. Classify Each Exercise per Movement Category and Label it as a Specific Movement

i. **Total Body Exercises**

ii. **Lower Body Exercises**

iii. **Upper Body Exercises**

Step 4. Rank Exercises per Movement Category

Step 5. Input Exercises into Template

iv. **Input Total Body Exercises**

v. **Input Lower Body Exercises**

vi. **Input Upper Body Exercises**

Step 1 – Create an Exercise Pool

Back Squat
Bench Press
Clean from Deck
Hang Clean
High Step Up
Standard Lunge
DB Incline Press
Snatch Grip Power Pull
Snatch Grip Shrug Pull
Clean Grip Shrug Pull
Clean Grip Power Pull
DB Clean
DB Single Arm Snatch
Chin Ups
Standing Press
Grip3 Bench Press
Front Squat
Leg Press
Hammer Row
Lateral Lunge
Incline Press
DB Press
Reverse Lunge
Split Clean from Hang
Split Jerk
Push Press
Inverted Pull Up
Deadlift
Low Step Up
Overhead Squat

Step 2 – Separate into 3 Movement Categories

Total Body Movements	**Lower Body Movements**	**Upper Body Movements**
Clean from Deck	Back Squat	Bench Press
Hang Clean	High Step Up	DB Incline Press
Snatch Grip Power Pull	Standard Lunge	Chin Ups
Snatch Grip Shrug Pull	Front Squat	Standing Press
Clean Grip Shrug Pull	Leg Press	Grip3 Bench Press
Clean Grip Power Pull	Lateral Lunge	Hammer Row
DB Clean	Reverse Lunge	Incline Press
DB Single Arm Snatch	Low Step Up	DB Press
Split Clean from Hang	Overhead Squat	Inverted Pull Up
Split Jerk		
Push Press		
Deadlift		

Step 3 - Classify Each Exercise per Movement Category and Label it as a Specific Movement

Total Body Movements	Classification	Specific Movement
Clean from Deck	Supplemental	Full Pull and Catch Bilateral
Hang Clean	Foundation	Full Pull and Catch Bilateral
Snatch Grip Power Pull	Major Assistance	Extension
Snatch Grip Shrug Pull	Major Assistance	Extension
Clean Grip Shrug Pull	Major Assistance	Extension
Clean Grip Power Pull	Major Assistance	Extension
DB Clean	Major Assistance	Full Pull and Catch Unilateral
DB Single Arm Snatch	Major Assistance	Full Pull and Catch Unilateral
Split Clean from Hang	Supplemental	Full Pull and Catch Unilateral
Split Jerk	Supplemental	Full Pull and Catch Unilateral
Push Press	Major Assistance	Pushing - Press
Deadlift	Supplemental	Extension

Lower Body Movements	Classification	Specific Movement
Back Squat	Foundation	In Place Double Leg
High Step Up	Major Assistance	Vertical
Standard Lunge	Major Assistance	Horizontal
Front Squat	Supplemental	In Place Double Leg
Leg Press	Supplemental	In Place Double Leg
Lateral Lunge	Major Assistance	Horizontal
Reverse Lunge	Major Assistance	Horizontal
Low Step Up	Major Assistance	Vertical
Overhead Squat	Supplemental	In Place Double Leg

Upper Body Movements	Classification	Specific Movement
Bench Press	Foundation	Horizontal Bilateral
DB Incline Press	Major Assistance	Horizontal Unilateral
Chin Ups	Major Assistance	Vertical Bilateral
Standing Press	Major Assistance	Vertical Bilateral
Grip3 Bench Press	Supplemental	Horizontal Bilateral
Hammer Row	Major Assistance	Horizontal Unilateral
Incline Press	Supplemental	Horizontal Bilateral
DB Press	Major Assistance	Vertical Unilateral
Inverted Pull Up	Major Assistance	Horizontal Bilateral

Step 4 – Rank Each Exercise per Movement Category

Total Body Movements	Classification	Specific Movement
Clean from Deck	Supplemental	Full Pull and Catch Bilateral
Hang Clean **[1]**	Foundation	Full Pull and Catch Bilateral
Snatch Grip Power Pull **[3]**	Major Assistance	Extension
Snatch Grip Shrug Pull	Major Assistance	Extension
Clean Grip Shrug Pull **[4]**	Major Assistance	Extension
Clean Grip Power Pull	Major Assistance	Extension
DB Clean	Major Assistance	Full Pull and Catch Unilateral
DB Single Arm Snatch **[5]**	Major Assistance	Full Pull and Catch Unilateral
Split Clean from Hang	Supplemental	Full Pull and Catch Unilateral
Split Jerk **[2]**	Supplemental	Full Pull and Catch Unilateral
Push Press	Major Assistance	Pushing - Press
Deadlift	Supplemental	Extension

Lower Body Movements	Classification	Specific Movement
Back Squat **[1]**	Foundation	In Place Double Leg
High Step Up **[4]**	Major Assistance	Vertical
Standard Lunge **[5]**	Major Assistance	Horizontal
Front Squat **[2]**	Supplemental	In Place Double Leg
Leg Press **[3]**	Supplemental	In Place Double Leg
Lateral Lunge	Major Assistance	Horizontal
Reverse Lunge	Major Assistance	Horizontal
Low Step Up	Major Assistance	Vertical
Overhead Squat	Supplemental	In Place Double Leg

Upper Body Movements	Classification	Specific Movement
Bench Press **[1]**	Foundation	Horizontal Bilateral
DB Incline Press **[2]**	Major Assistance	Horizontal Unilateral
Chin Ups **[4]**	Major Assistance	Vertical Bilateral
Standing Press **[5]**	Major Assistance	Vertical Bilateral
Grip3 Bench Press	Supplemental	Horizontal Bilateral
Hammer Row	Major Assistance	Horizontal Unilateral
Incline Press	Supplemental	Horizontal Bilateral
DB Press	Major Assistance	Vertical Unilateral
Inverted Pull Up **[3]**	Major Assistance	Horizontal Bilateral

Step 5 Input Exercise in Template

Input Total Body Exercises

Rotation	Session T	Rotation	Session L	Rotation	Session U
Total 1	Hang Clean	**Lower 1**		**Upper 1**	
Lower 2		**Upper 2**		**Total 2**	Split Jerk
Upper 3		**Total 3**	Snatch Grip Power Pull	**Lower 3**	
Total 4	Clean Grip Shrug Pull	**Lower 4**		**Upper 4**	
Lower 5		**Upper 5**		**Total 5**	DB Single Arm Snatch

Add Lower Body Exercises

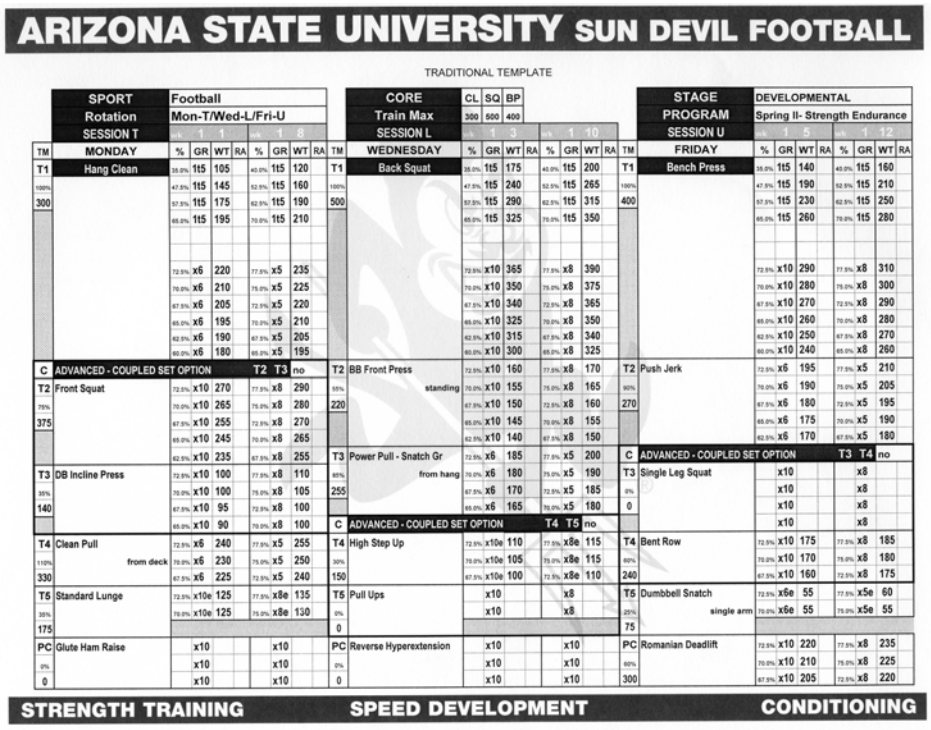
Rotation	Session T	Rotation	Session L	Rotation	Session U
Total 1	Hang Clean	**Lower 1**	Back Squat	**Upper 1**	
Lower 2	Front Squat	**Upper 2**		**Total 2**	Split Jerk
Upper 3		**Total 3**	Snatch Grip Power Pull	**Lower 3**	Leg Press
Total 4	Clean Grip Shrug Pull	**Lower 4**	High Step Up	**Upper 4**	
Lower 5	Standard Lunge	**Upper 5**		**Total 5**	DB Single Arm Snatch

Add Upper Body Exercises

Rotation	Session T	Rotation	Session L	Rotation	Session U
Total 1	Hang Clean	**Lower 1**	Back Squat	**Upper 1**	Bench Press
Lower 2	Front Squat	**Upper 2**	DB Incline Press	**Total 2**	Split Jerk
Upper 3	Inverted Pull Up	**Total 3**	Snatch Grip Power Pull	**Lower 3**	Leg Press
Total 4	Clean Grip Shrug Pull	**Lower 4**	High Step Up	**Upper 4**	Chin Ups
Lower 5	Standard Lunge	**Upper 5**	Standing Press	**Total 5**	DB Single Arm Snatch

Actual Bi Monthly Training Templates Used By Our Athletes

Figure 8 - Actual Bimonthly Traditional Training Template



ARIZONA STATE UNIVERSITY SUN DEVIL FOOTBALL

TRADITIONAL TEMPLATE

SPORT	Football
Rotation	Mon-T/Wed-L/Fri-U
SESSION T	wk 1 1 wk 3 8

TM	MONDAY	%	GR	WT	RA	%	GR	WT	RA
T1	Hang Clean	35.0%	1t5	105		40.0%	1t5	120	
100%		47.5%	1t5	145		52.5%	1t5	160	
300		57.5%	1t5	175		62.5%	1t5	190	
		65.0%	1t5	195		70.0%	1t5	210	
		72.5%	x6	220		77.5%	x5	235	
		70.0%	x6	210		75.0%	x5	225	
		67.5%	x6	205		72.5%	x5	220	
		65.0%	x6	195		70.0%	x5	210	
		62.5%	x6	190		67.5%	x5	205	
		60.0%	x6	180		65.0%	x5	195	
C	ADVANCED - COUPLED SET OPTION				T2	T3	no		
T2	Front Squat	72.5%	x10	270		77.5%	x8	290	
75%		70.0%	x10	265		75.0%	x8	280	
375		67.5%	x10	255		72.5%	x8	270	
		65.0%	x10	245		70.0%	x8	265	
		62.5%	x10	235		67.5%	x8	255	
T3	DB Incline Press	72.5%	x10	100		77.5%	x8	110	
35%		70.0%	x10	100		75.0%	x8	105	
140		67.5%	x10	95		72.5%	x8	100	
		65.0%	x10	90		70.0%	x8	100	
T4	Clean Pull	72.5%	x6	240		77.5%	x5	255	
110%	from deck	70.0%	x6	230		75.0%	x5	250	
330		67.5%	x6	225		72.5%	x5	240	
T5	Standard Lunge	72.5%	x10e	125		77.5%	x8e	135	
35%		70.0%	x10e	125		75.0%	x8e	130	
175									
PC	Glute Ham Raise		x10				x10		
0%			x10				x10		
0			x10				x10		

CORE	CL	SQ	BP
Train Max	300	500	400
SESSION L	wk 1 3		wk 1 10

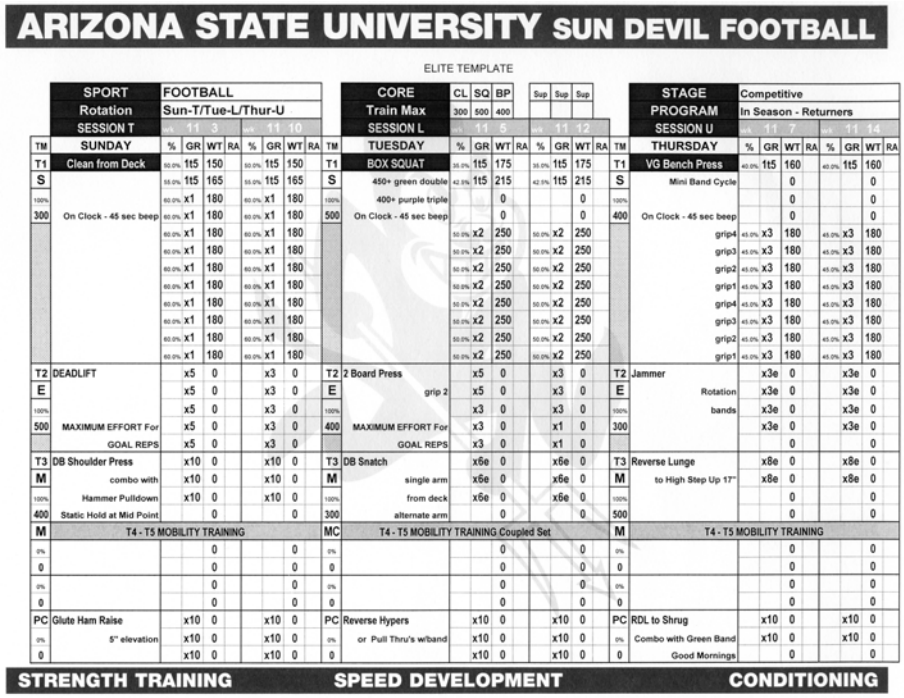
TM	WEDNESDAY	%	GR	WT	RA	%	GR	WT	RA
T1	Back Squat	35.0%	1t5	175		40.0%	1t5	200	
100%		47.5%	1t5	240		52.5%	1t5	265	
500		57.5%	1t5	290		62.5%	1t5	315	
		65.0%	1t5	325		70.0%	1t5	350	
		72.5%	x10	365		77.5%	x8	390	
		70.0%	x10	350		75.0%	x8	375	
		67.5%	x10	340		72.5%	x8	365	
		65.0%	x10	325		70.0%	x8	350	
		62.5%	x10	315		67.5%	x8	340	
		60.0%	x10	300		65.0%	x8	325	
T2	BB Front Press	72.5%	x10	160		77.5%	x8	170	
55%	standing	70.0%	x10	155		75.0%	x8	165	
220		67.5%	x10	150		72.5%	x8	160	
		65.0%	x10	145		70.0%	x8	155	
		62.5%	x10	140		67.5%	x8	150	
T3	Power Pull - Snatch Gr	72.5%	x6	185		77.5%	x5	200	
65%	from hang	70.0%	x6	180		75.0%	x5	190	
255		67.5%	x6	170		72.5%	x5	185	
		65.0%	x6	165		70.0%	x5	180	
C	ADVANCED - COUPLED SET OPTION				T4	T5	no		
T4	High Step Up	72.5%	x10e	110		77.5%	x8e	115	
30%		70.0%	x10e	105		75.0%	x8e	115	
150		67.5%	x10e	100		72.5%	x8e	110	
T5	Pull Ups		x10				x8		
0%			x10				x8		
0									
PC	Reverse Hyperextension		x10				x10		
0%			x10				x10		
0			x10				x10		

STAGE	DEVELOPMENTAL
PROGRAM	Spring II- Strength Endurance
SESSION U	wk 1 5 wk 1 12

TM	FRIDAY	%	GR	WT	RA	%	GR	WT	RA
T1	Bench Press	35.0%	1t5	140		40.0%	1t5	160	
100%		47.5%	1t5	190		52.5%	1t5	210	
400		57.5%	1t5	230		62.5%	1t5	250	
		65.0%	1t5	260		70.0%	1t5	280	
		72.5%	x10	290		77.5%	x8	310	
		70.0%	x10	280		75.0%	x8	300	
		67.5%	x10	270		72.5%	x8	290	
		65.0%	x10	260		70.0%	x8	280	
		62.5%	x10	250		67.5%	x8	270	
		60.0%	x10	240		65.0%	x8	260	
T2	Push Jerk	72.5%	x6	195		77.5%	x5	210	
90%		70.0%	x6	190		75.0%	x5	205	
270		67.5%	x6	180		72.5%	x5	195	
		65.0%	x6	175		70.0%	x5	190	
		62.5%	x6	170		67.5%	x5	180	
C	ADVANCED - COUPLED SET OPTION				T3	T4	no		
T3	Single Leg Squat		x10				x8		
0%			x10				x8		
0			x10				x8		
			x10				x8		
T4	Bent Row	72.5%	x10	175		77.5%	x8	185	
80%		70.0%	x10	170		75.0%	x8	180	
240		67.5%	x10	160		72.5%	x8	175	
T5	Dumbbell Snatch	72.5%	x6e	55		77.5%	x5e	60	
20%	single arm	70.0%	x6e	55		75.0%	x5e	55	
75									
PC	Romanian Deadlift	72.5%	x10	220		77.5%	x8	235	
60%		70.0%	x10	210		75.0%	x8	225	
300		67.5%	x10	205		72.5%	x8	220	

STRENGTH TRAINING SPEED DEVELOPMENT CONDITIONING

Figure 9 - Actual Bimonthly Elite 3x5 Developmental Stage Training Template



ARIZONA STATE UNIVERSITY SUN DEVIL FOOTBALL

ELITE TEMPLATE

SPORT	FOOTBALL
Rotation	Sun-T/Tue-L/Thur-U
SESSION T	wk 11 3 wk 11 10

TM	SUNDAY	%	GR	WT	RA	%	GR	WT	RA
T1	Clean from Deck	50.0%	1t5	150		50.0%	1t5	150	
S		55.0%	1t5	165		55.0%	1t5	165	
100%		60.0%	x1	180		60.0%	x1	180	
300	On Clock - 45 sec beep	60.0%	x1	180		60.0%	x1	180	
		60.0%	x1	180		60.0%	x1	180	
		60.0%	x1	180		60.0%	x1	180	
		60.0%	x1	180		60.0%	x1	180	
		60.0%	x1	180		60.0%	x1	180	
		60.0%	x1	180		60.0%	x1	180	
		60.0%	x1	180		60.0%	x1	180	
		60.0%	x1	180		60.0%	x1	180	
		60.0%	x1	180		60.0%	x1	180	
T2	DEADLIFT		x5	0			x3	0	
E			x5	0			x3	0	
100%			x5	0			x3	0	
500	MAXIMUM EFFORT For		x5	0			x3	0	
	GOAL REPS		x5	0			x3	0	
T3	DB Shoulder Press		x10	0			x10	0	
M	combo with		x10	0			x10	0	
100%	Hammer Pulldown		x10	0			x10	0	
400	Static Hold at Mid Point			0				0	
M	T4 - T5 MOBILITY TRAINING								
0%				0				0	
0				0				0	
0%				0				0	
0				0				0	
PC	Glute Ham Raise		x10	0			x10	0	
0%	5" elevation		x10	0			x10	0	
0			x10	0			x10	0	

CORE	CL	SQ	BP	Sup	Sup	Sup
Train Max	300	500	400			
SESSION L	wk 11 5			wk 11 12		

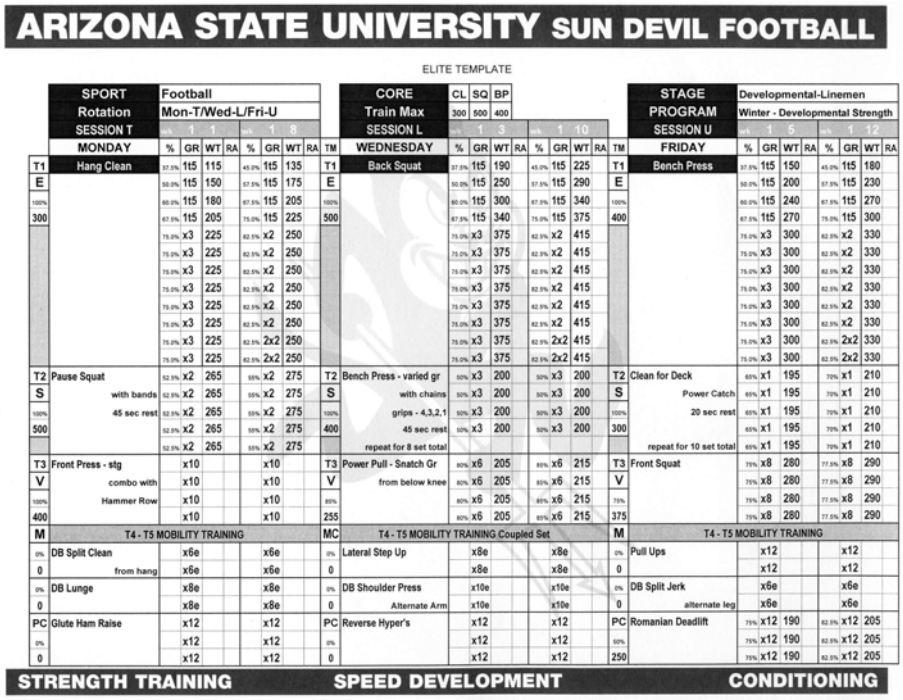
TM	TUESDAY	%	GR	WT	RA	%	GR	WT	RA
T1	BOX SQUAT	35.0%	1t5	175		35.0%	1t5	175	
S	450+ green double	42.5%	1t5	215		42.5%	1t5	215	
100%	400+ purple triple			0				0	
500	On Clock - 45 sec beep			0				0	
		50.0%	x2	250		50.0%	x2	250	
		50.0%	x2	250		50.0%	x2	250	
		50.0%	x2	250		50.0%	x2	250	
		50.0%	x2	250		50.0%	x2	250	
		50.0%	x2	250		50.0%	x2	250	
		50.0%	x2	250		50.0%	x2	250	
		50.0%	x2	250		50.0%	x2	250	
		50.0%	x2	250		50.0%	x2	250	
T2	2 Board Press		x5	0			x3	0	
E	grip 2		x5	0			x3	0	
100%			x3	0			x3	0	
400	MAXIMUM EFFORT For		x3	0			x1	0	
	GOAL REPS		x3	0			x1	0	
T3	DB Snatch		x6e	0			x6e	0	
M	single arm		x6e	0			x6e	0	
100%	from deck		x6e	0			x6e	0	
300	alternate arm			0				0	
MC	T4 - T5 MOBILITY TRAINING Coupled Set								
0%				0				0	
0				0				0	
0%				0				0	
0				0				0	
PC	Reverse Hypers		x10	0			x10	0	
0%	or Pull Thru's w/band		x10	0			x10	0	
0			x10	0			x10	0	

STAGE	Competitive
PROGRAM	In Season - Returners
SESSION U	wk 11 7 wk 11 14

TM	THURSDAY	%	GR	WT	RA	%	GR	WT	RA
T1	VG Bench Press	40.0%	1t5	160		40.0%	1t5	160	
S	Mini Band Cycle			0				0	
100%				0				0	
400	On Clock - 45 sec beep			0				0	
	grip4	45.0%	x3	180		45.0%	x3	180	
	grip3	45.0%	x3	180		45.0%	x3	180	
	grip2	45.0%	x3	180		45.0%	x3	180	
	grip1	45.0%	x3	180		45.0%	x3	180	
	grip4	45.0%	x3	180		45.0%	x3	180	
	grip3	45.0%	x3	180		45.0%	x3	180	
	grip2	45.0%	x3	180		45.0%	x3	180	
	grip1	45.0%	x3	180		45.0%	x3	180	
T2	Jammer		x3e	0			x3e	0	
E	Rotation		x3e	0			x3e	0	
100%	bands		x3e	0			x3e	0	
300			x3e	0			x3e	0	
				0				0	
T3	Reverse Lunge		x8e	0			x8e	0	
M	to High Step Up 17"		x8e	0			x8e	0	
100%				0				0	
500				0				0	
M	T4 - T5 MOBILITY TRAINING								
0%				0				0	
0				0				0	
0%				0				0	
0				0				0	
PC	RDL to Shrug		x10	0			x10	0	
0%	Combo with Green Band		x10	0			x10	0	
0	Good Mornings			0				0	

STRENGTH TRAINING SPEED DEVELOPMENT CONDITIONING

Figure 10 - Actual Bimonthly Elite 3x3 Competitive Stage Training Template



ARIZONA STATE UNIVERSITY SUN DEVIL FOOTBALL

ELITE TEMPLATE

SPORT	Football
Rotation	Mon-T/Wed-L/Fri-U

	CL	SQ	BP
CORE	CL	SQ	BP
Train Max	300	500	400

STAGE	Developmental-Linemen
PROGRAM	Winter - Developmental Strength

	SESSION T	wk 1 1				wk 1 8			
TM	MONDAY	%	GR	WT	RA	%	GR	WT	RA
T1	Hang Clean	37.5%	1t5	115		45.0%	1t5	135	
E		50.0%	1t5	150		57.5%	1t5	175	
100%		60.0%	1t5	180		67.5%	1t5	205	
300		67.5%	1t5	205		75.0%	1t5	225	
		75.0%	x3	225		82.5%	x2	250	
		75.0%	x3	225		82.5%	x2	250	
		75.0%	x3	225		82.5%	x2	250	
		75.0%	x3	225		82.5%	x2	250	
		75.0%	x3	225		82.5%	x2	250	
		75.0%	x3	225		82.5%	x2	250	
		75.0%	x3	225		82.5%	2x2	250	
		75.0%	x3	225		82.5%	2x2	250	
T2	Pause Squat	52.5%	x2	265		55%	x2	275	
S	with bands	52.5%	x2	265		55%	x2	275	
100%	45 sec rest	52.5%	x2	265		55%	x2	275	
500		52.5%	x2	265		55%	x2	275	
		52.5%	x2	265		55%	x2	275	
T3	Front Press - stg		x10				x10		
V	combo with		x10				x10		
100%	Hammer Row		x10				x10		
400			x10				x10		
M	T4 - T5 MOBILITY TRAINING								
0%	DB Split Clean		x6e				x6e		
0	from hang		x6e				x6e		
0%	DB Lunge		x8e				x8e		
0			x8e				x8e		
PC	Glute Ham Raise		x12				x12		
0%			x12				x12		
0			x12				x12		

	SESSION L	wk 1 3				wk 1 10			
TM	WEDNESDAY	%	GR	WT	RA	%	GR	WT	RA
T1	Back Squat	37.5%	1t5	190		45.0%	1t5	225	
E		50.0%	1t5	250		57.5%	1t5	290	
100%		60.0%	1t5	300		67.5%	1t5	340	
500		67.5%	1t5	340		75.0%	1t5	375	
		75.0%	x3	375		82.5%	x2	415	
		75.0%	x3	375		82.5%	x2	415	
		75.0%	x3	375		82.5%	x2	415	
		75.0%	x3	375		82.5%	x2	415	
		75.0%	x3	375		82.5%	x2	415	
		75.0%	x3	375		82.5%	x2	415	
		75.0%	x3	375		82.5%	2x2	415	
		75.0%	x3	375		82.5%	2x2	415	
T2	Bench Press - varied gr	50%	x3	200		50%	x3	200	
S	with chains	50%	x3	200		50%	x3	200	
100%	grips - 4,3,2,1	50%	x3	200		50%	x3	200	
400	45 sec rest	50%	x3	200		50%	x3	200	
	repeat for 8 set total								
T3	Power Pull - Snatch Gr	80%	x6	205		85%	x6	215	
V	from below knee	80%	x6	205		85%	x6	215	
85%		80%	x6	205		85%	x6	215	
255		80%	x6	205		85%	x6	215	
MC	T4 - T5 MOBILITY TRAINING Coupled Set								
0%	Lateral Step Up		x8e				x8e		
0			x8e				x8e		
0%	DB Shoulder Press		x10e				x10e		
0	Alternate Arm		x10e				x10e		
PC	Reverse Hyper's		x12				x12		
0%			x12				x12		
0			x12				x12		

	SESSION U	wk 1 5				wk 1 12			
TM	FRIDAY	%	GR	WT	RA	%	GR	WT	RA
T1	Bench Press	37.5%	1t5	150		45.0%	1t5	180	
E		50.0%	1t5	200		57.5%	1t5	230	
100%		60.0%	1t5	240		67.5%	1t5	270	
400		67.5%	1t5	270		75.0%	1t5	300	
		75.0%	x3	300		82.5%	x2	330	
		75.0%	x3	300		82.5%	x2	330	
		75.0%	x3	300		82.5%	x2	330	
		75.0%	x3	300		82.5%	x2	330	
		75.0%	x3	300		82.5%	x2	330	
		75.0%	x3	300		82.5%	x2	330	
		75.0%	x3	300		82.5%	2x2	330	
		75.0%	x3	300		82.5%	2x2	330	
T2	Clean for Deck	65%	x1	195		70%	x1	210	
S	Power Catch	65%	x1	195		70%	x1	210	
100%	20 sec rest	65%	x1	195		70%	x1	210	
300		65%	x1	195		70%	x1	210	
	repeat for 10 set total	65%	x1	195		70%	x1	210	
T3	Front Squat	75%	x8	280		77.5%	x8	290	
V		75%	x8	280		77.5%	x8	290	
75%		75%	x8	280		77.5%	x8	290	
375		75%	x8	280		77.5%	x8	290	
M	T4 - T5 MOBILITY TRAINING								
0%	Pull Ups		x12				x12		
0			x12				x12		
0%	DB Split Jerk		x6e				x6e		
0	alternate leg		x6e				x6e		
PC	Romanian Deadlift	75%	x12	190		82.5%	x12	205	
50%		75%	x12	190		82.5%	x12	205	
250		75%	x12	190		82.5%	x12	205	

STRENGTH TRAINING SPEED DEVELOPMENT CONDITIONING

Section 5 Specifics

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Section 5 The Daily and Weekly Plan

5.1 The Daily Plan

The daily strength training session consists of 4 parts; the Pre Work Out Routine, the Main Session, Posterior Chain Tier, and the Post Work Out Routine. Each has certain aspects that help the development of athletic abilities in the process of whole body training. As a guide, the daily plan is based on a 90-minute training session. In reality, our athlete's goal is to train efficiently for 75 minutes max. We have exceptional athletes who are extremely conditioned and efficient, that can complete the entire plan in less then 60 minutes.

We recommend 2-3 athletes per station when training. The most efficient ways for partners to work out are to train lightest to heaviest in terms of load per exercise. Another rotation is based on performance. Lifter A goes from performing the exercise, to changing weights, to changing weights and spotting. Lifters B and C rotate based on start points. This gives you ample time to recover and allows for smooth transitions between sets and exercises. Ideally, the Tier programs work the best in a self-contained power unit. This is because it eliminates dead time by keeping the athlete in one designated area for the majority of the work out.

5.1.1 The Pre Work Out – 10 minutes

The Pre Work Out begins the daily session. It includes a general warm up drill, power zone development, dynamic flexibility/mobility drills.

General Warm Up Drill

This drill is generally a quick foot drill such as: jump rope, agility ladders, mini hurdles, and line drills. It is used to elevate the heart rate and dynamically warm up the body. This drill is usually 3 minutes in duration.

Power Zone Development

Power Zone development or torso training has become a more integral part of our daily plan. Without a strong mid section it is irrelevant how strong your limbs are. Our power zone development is based on training the abdominal, glutes, erectors, oblique, and hamstrings, or, everything from the mid thigh to bottom of the chest (Mike Boyle). We will incorporate flexion extension, lateral flexion, stabilization, rotation, and posterior chain exercises to improve power zone strength. We will perform abdominal and oblique training before our main strength sessions, and glutes, hamstrings, and erector exercises (posterior chain) after the main session.

Dynamic Flexibility/Mobility Drills

The dynamic flexibility program consists of hurdle mobility drills and lower and upper body movements done with the use of PVC, standard barbell, and mini bands. Basic Hurdle drills such as walk over, lateral walk over, and duck under are utilized for hip flexibility. Overhead squats are a staple to the pre work out plan. This is a great movement for hip, low back and shoulder flexibility. We also add shoulder elevation to this exercise before the athlete descends into the squat position. We also implement internal and external rotation, flys, and upright rows utilizing the mini bands for upper body dynamic flexibility. When the dynamic flexibility/mobility work is finished the athlete now moves into the main session.

In addition to the above drills if a specific sport has the head and neck involved in performance, we include neck exercises in the pre/post work out routines. Manual resistance, bands, or a resistance machine does this.

5.1.2 The Main Session – 60 minutes

The Main Session is the tier program that is being implemented. This section when performed properly should have a maximum time limit of 60 minutes for a 3x5 program. We allocate time for each tier to help the athlete keep the proper pace during the work out (Table 47).

Table 47 – Basic Time Allotments

Tier Level	Time Allotment
One	***22 minutes***
Two	***12 minutes***
Three	***10 minutes***
Four	***8 minutes***
Five	***8 minutes***

Our goal in the main session is to improve work capacity by finishing the main session in the least amount of time as possible. We do not want this to be done in place of decreasing technical efficiency of exercises and/or skipping sets. The more work the athlete can accomplish in a specific time period allows the body to adapt to the continuous stress that is added each week. Also, decreasing rest time between sets helps in the recruitment of new muscle fiber.

The following tables (48 & 49) represent data taken from actual workouts by the strength staff. It includes 2 weeks of data collected by performing a standard traditional template for one week followed by a standard traditional template with coupled sets the second week.

These tables show the efficiency, condition, and tempo of training for the 3 staff members. The tables include the time allotment for each tier, actual time it took the 3 individuals to complete each tier, if they were below or above the goal time, and how we restructured the time period based on the results. It also includes exercises utilized, the number of sets and reps done for each.

As you will see there was an average of 35 sets per training session including a posterior chain tri set, with the average work out duration of approximately 61:30 for the standard session which was then lowered to approximately 49:50 with the implementation of coupled sets.

Table 48 - Traditional Model 3x5 – Time per Tier Data - Standard

Standard Session

Time Allotments

Session T	Category	Allot	Act Time	[+] or [-]	RESTRUCT	ReStruct	#of group	Exercise	Warm Ups	Work Sets	Cycle	Reps
Tier 1	T-Core	22:00	*14:50*	*[-] 7:10*	**20:00**	18:00	T	**Hang Clean**	4 sets	6 sets	3Wave	5
Tier 2	L-Squat	12:00	*11:40*	*[-] 0:20*	**12:00**	12:00	H	**Front Squat**	1 set	5 sets	ProStable	5
Tier 3	U-Hpress	10:00	*7:50*	*[-] 2:10*	**9:00**	8:00	R	**DB SB BP**		4 sets	Stable	10
Tier 4	T-	8:00	*6:45*	*[-] 1:15*	**7:30**	7:00	E	**Steel Log Clean to Push Press**		3 sets	Stable	5
Tier 5	L-Lunge	8:00	*7:05*	*[-] 0:55*	**7:30**	7:00	E	**Reverse Lunge**		3 sets	Stable	6e
PC+	Tri-Set	10:00	*9:05*	*[-] 0:55*	**10:00**	10:00		**GBGM+Row+GB Side Bends**		9 sets	Stable	10's
Total		[]70:00	*[]57:15*	*[-]12:45*	**[]66:00**	[]62:00						

Notes: This session did not include coupled or combo sets. It did include a tri set at the PC tier. This is one of the methods to raise work capacity at the end of a session.

Session L	Category	Allot	Act Time	[+] or [-]	RESTRUCT	ReStruct	#of group	Exercise	Warm Ups	Work Sets	Cycle	Reps
Tier 1	L-Squat	22:00	*28.05*	*[+] 6:05*	**25.00**		T	**Back Squat w/ chains**	5 sets	6 sets	Stable	5
Tier 2	U-Hpress	12:00	*11:30*	*[-] 0:30*	**12:00**		H	**Super Bar H bench**	1 set	5 sets	ProStable	5
Tier 3	T-	10:00	*9:15*	*[-] 0:45*	**10:00**		R	**Steel Log Push Press**		4 sets	ProStable	5
Tier 4	L-StepUp	8:00	*8:55*	*[+] 0:05*	**8:00**		E	**Step Ups**		3 sets	Stable	6e
Tier 5	U-Vpress	8:00	*4:15*	*[-] 3:45*	**5:00**		E	**DB Press balance board**		3 sets	Stable	10
PC+	Tri-Set	10:00	*9:45*	*[-] 0:15*	**10:00**			**GHR + Pulldown+ WoodChop**		9 sets	Stable	10
Total		[]70:00	*[]71:45*	*[+] 1:45*	**[]70:00**							

Notes: This session did not include coupled or combo sets. It did include a tri set at the PC tier. This is one of the methods to raise work capacity at the end of a session.

Session U	Category	Allot	Act Time	[+] or [-]	ReStruct	RESTRUCT	#of group	Exercise	Warm Ups	Work Sets	Cycle	Reps
Tier 1	U-Bench	22:00	*15:20*	*[-] 6:40*	20:00	**18:00**	T	**Grip1 Incline Press**	4	6	ProStable	5
Tier 2	T-Pull	12:00	*10:15*	*[-] 1:45*	12:00	**12:00**	H	**Power Clean from Floor**	1	5	Stable	3
Tier 3	L-Squat	10:00	*8:20*	*[-] 1:40*	10:00	**10:00**	R	**Safety Bar Squat free hand**		4	ProStable	8
Tier 4	U-Vpress	8:00	*4:55*	*[-] 3:05*	6:00	**5:00**	E	**Overhead Press**		3	Stable	8
Tier 5	T-	8:00	*5:00*	*[-] 3:00*	6:00	**5:00**	E	**Hammer Jammer**		3	Stable	6
PC+	Tri-Set	10:00	*8:30*	*[-] 1:30*	10:00	**10:00**		**RDL + Row + GB Stg Abs**		9	Stable	10
Total		[]70:00	*[]52:20*	*[-] 17:40*	[]64:00	**[]60:00**						

Notes: This session did not include coupled or combo sets. It did include a tri set at the PC tier. This is one of the methods to raise work capacity at the end of a session.

Table 49 - Traditional Model 3x5 – Time per Tier Data - with Coupled Sets

Coupled Session

Time Allotments

Session T	Category	Allot	Act Time	[+] or [-]	ReStruct	ReStruct	#of group	Exercise	Warm Ups	Work Sets	Cycle	Reps
Tier 1	T-Core	22:00	*10:50*	*[-] 11:10*	**18:00**	**16:00**	T	**Hang Clean**	4 sets	6 sets	3Wave	5
Tier 2	L-Squat	12:00	*coupled 13:10*	*coupled [-] 8:50*	**coupled 15:00**	**coupled 15:00**	H	***Front Squat***	1 set	5 sets	ProStable	5
Tier 3	U-Hpress	10:00					R	***DB SB BP***		4 sets	Stable	8
Tier 4	T-	8:00	*6:20*	*[-] 1:40*	**7:30**	**7:00**	E	**Steel Log Clean to Push Press**		3 sets	Stable	5
Tier 5	L-Lunge	8:00	*6:40*	*[-] 1:20*	**7:30**	**7:00**	E	**Reverse Lunge**		3 sets	Stable	6e
PC+	Tri-Set	10:00	*8:00*	*[-] 2:00*	**10:00**	**10:00**		**GBGM+Pulldown+WoodChop**		9 sets	Stable	10's
Total		[]70:00	*[]45:00*	*[-] 25:00*	**[]58:00**	**[] 55:00**			5 sets	30 sets		

Notes: In this session Tier 2 and Tier 3 were "coupled". The PC Tier was a tri-set. These two methods help increase work capacity within the structure of our standard model.

Session L	Category	Allot	Act Time	[+] or [-]	ReStruct	ReStruct	#of group	Exercise	Warm Ups	Work Sets	Cycle	Reps
Tier 1	L-Squat	22:00	*23.30*	*[+] 1:30*	**25.00**	**25.00**	T	**Back Squat**	5 sets	6 sets	ProStable	5
Tier 2	U-Hpress	12:00	*10:25*	*[-] 1:35*	**12:00**	**12:00**	H	**Super Bar H bench**	1 set	5 sets	ProStable	5
Tier 3	T-	10:00	*8:15*	*[-] 1:45*	**10:00**	**9:00**	R	**Barbell BH Push Press**		4 sets	ProStable	5
Tier 4	L-StepUp	8:00	*coupled 8:15*	*coupled [-] 7:45*	**coupled 10:00**	**coupled 10:00**	E	***Step Ups***		3 sets	Stable	6e
Tier 5	U-Vpress	8:00					E	***BB Front Press***		3 sets	Stable	10
PC+	Tri-Set	10:00	*6:15*	*[-] 3:45*	**10:00**	**9:00**		**Pull thru's, Band Stg Abs, Band Back**		9 sets	Stable	10
Total		[]70:00	*[]58:40*	*[-] 13:15*	**[]67:00**	**[]65:00**			6 sets	30 sets		

Notes: In this session Tier 4 and Tier 5 were "coupled". The PC Tier was a tri-set. These two methods help increase work capacity within the structure of our standard model.

Session U	Category	Allot	Act Time	[+] or [-]	ReStruct	ReStruct	#of group	Exercise	Warm Ups	Work Sets	Cycle	Reps
Tier 1	U-Bench	22:00	*14:35*	*[-] 7:25*	**18:00**	**18:00**	T	**Grip1 Incline Press**	4	6	ProStable	5
Tier 2	T-Pull	12:00	*9:10*	*[-] 2:50*	**10:00**	**12:00**	H	**Power Clean from Floor**	1	5	Stable	3
Tier 3	L-Squat	10:00	*coupled 8:45*	*coupled [-] 9:15*	**coupled 10:00**	**coupled 10:00**	R	***Safety Bar Squat free hand***		4	ProStable	8
Tier 4	U-Vpress	8:00					E	***Overhead Press***		3	Stable	8
Tier 5	T-	8:00	*4:15*	*[-] 3:45*	**5:00**	**5:00**	E	**Hammer Jammer**		3	Stable	6
PC+	Tri-Set	10:00	*7:05*	*[-] 2:55*	**8:00**	**8:00**		**RDL + Row + Band Side Bend**		9	Stable	10
Total		[]70:00	*[] 43:50*	*[-] 26:10*	**[] 51:00**	**[] 53:00**			5 sets	30 sets		

Notes: In this session Tier 3 and Tier 4 were "coupled". The PC Tier was a tri-set. These two methods help increase work capacity within the structure of our standard model.

5.1.3 Posterior Chain Tier – 10 minutes

As we mentioned earlier with the increased importance of power zone development into our training principles the posterior chain exercise of the session is a major importance. We will always conclude the strength training work out with a movement that specifically develops the hamstrings, glutes, and erectors. This is generally a 3 set tier and the volume is usually high, 10-15 repetitions per set. Additional work may be implemented in this tier as a tri set or combo set. If a combo set is used in the posterior chain tier, the posterior chain exercise is combined with a resistance torso exercise. *Coach Uye's favorite is plate side bends*.

5.1.4 The Post Work Out – 10 minutes

The post work out is the final part of the daily training plan. The post work out includes dynamic flexibility/mobility drills, joint integrity drills, and static flexibility.

Dynamic Flexibility/Mobility Drills

Basic Hurdle drills similar to the pre work out also are done at the completion of the session. A hybrid movement combining a barbell good morning to a snatch balance is used as the dynamic flexibility drill.

Joint Integrity

Joint Integrity is a section of the work out where the athlete performs several exercises or drills for the 3 main joints that are affected the most by injury during athletics, the ankle, knee, and shoulder. These are generally done for high volume and may include proprioception work.

Static Flexibility

To conclude the session we do static movements for the hip flexors, hamstrings, and chest/shoulder regions of the body.

Table 50 - The Daily Plan

Pre Work Out 10 minutes	Main Session 60 minutes	Posterior Chain Tier 10 minutes	Post Work Out 10 minutes
General Warm Up Power Zone Training Dynamic Flex/Mobility Neck/Traps – option	Tier 1 Tier 2 Tier 3 Tier 4 Tier 5	PC Tier – 3 sets Tri Set/ Combo Set option	Dynamic Flex/Mobility Joint Integrity Static Flex Neck/Traps - option

When school is in session, each work out begins by having the group come together for the goals, expectations, review of the work out and miscellaneous information needed to begin. The majority of the training sessions end the same way. The group usually will break out together. During the end of the session break out, individuals have the opportunity to speak about how the work out went as well as coaches giving their input based on the effort of the group and if there were any outstanding performances.

Some of the exercises and drills for the pre and post work out routines derive from physical therapy and athletic training protocols. We utilize exercises from these disciplines in this portion of the daily plan in terms of improving joint integrity and improving balance, coordination, and proprioception.

5.2 The Weekly Plan (Microcycle)

Below are two examples of weekly plans that are utilized.

Table 51 – Summer Program Microcycle

Monday	Tuesday	Wednesday	Thursday	Friday
AM Running Plan Speed Development	AM or PM Running Plan Conditioning	AM Strength Session L	AM or PM Running Plan Conditioning	AM Running Plan Speed Development
AM Strength Session T				AM Strength Session U
PM Extra Work Out option	AM or PM Extra Work Out option	PM Extra Work Out option	AM or PM Extra Work Out option	PM Extra Work Out option

Table 52 – Winter Program Microcycle

Monday	Tuesday	Wednesday	Thursday	Friday
AM Strength Session T	PM Running Plan Speed Development	AM Strength Session L	PM Running Plan Speed Development	AM Running Plan Conditioning
PM Running Plan Conditioning				AM Strength Session U
PM Extra Work Out option	AM or PM Extra Work Out option	PM Extra Work Out option	AM or PM Extra Work Out option	PM Extra Work Out option

When doubling up on a training day with running and strength training we prefer to perform our running plan first and then proceed directly into the strength-training program. This is primarily done with speed development sessions. When performing a running session after a lifting session we prefer to give the athlete at least 3 hours of recovery between the strength session and running session. Extra workouts are generally done 3 hours after the main work out of the day. If time is limited we will make exceptions.

Section 6 Summary

There are many ways to perform and develop a strength-training program for athletic development. This is just one way. In a quest to continue to improve this program, it is necessary to embrace other programs of similar and different beliefs to make our program stronger. Athletes deserve coaches who are willing to strive to find out any and all information that may have the ability to improve athletic performance.

Our program is a true conglomeration of many of the programs that are being utilized today. We feel extremely pleased with the direction in which we are heading as we have continued to see the results on and off the playing field with our athletes. The Tier System is unique in some ways, and basic in others. We still believe that there are some exercises and movements that cannot be omitted in a quest for improving strength in an athlete. But in athletics, the body is asked to do more then just stay in one place and react, therefore many movements must be involved to improve athletic ability which likely will lead to enhanced skill development when working with the sport coach.

The goals of our strength program are simple: produce a sound training program for our athletes, evaluate all sports and develop programs that will strengthen injury prone areas, have our athletes be the best conditioned team competing, and give them the opportunity to WIN CHAMPIONSHIPS.

Championships are not won in the office, but won with athletes and coaches who give everything they have to become the best. We feel we have a fine application package to offer the athlete.

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APPENDIX A
TRAINING CYCLES

- Training Cycles
- General Conditioning 4-week Cycle – Traditional – Total, Lower, Upper
- Strength Endurance 4-week Cycles – Traditional – Total
- Strength Endurance 4-week Cycles – Traditional – Lower, Upper
- Developmental Strength 4-week Cycles – Traditional 3 set – Total
- Developmental Strength 4-week Cycles – Traditional 6 set – Total
- Developmental Strength 4-week Cycles – Traditional 3 set – Lower, Upper
- Developmental Strength 4-week Cycles – Traditional 6 set – Lower, Upper
- Developmental Strength 4-week Cycles – Performance – Lower, Upper
- Prilepin Developmental 4-week Cycles – Performance

- Training Cycles

60% CYCLES

SIXTY	PrilipenH-1		PrilipenH-2		PrilipenH-3		PrilipenO-1		PrilipenO-2		PrilipenO-3		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Descending							
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	22.5%	1t5	22.5%	1t5	22.5%	1t5	22.5%	1t5	22.5%	1t5	22.5%	1t5	22.5%	1t5	22.5%	1t5	42.5%	x5	22.5%	1t5			22.5%	1t5						
warm up 2	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	55.0%	x4	35.0%	1t5	25.0%	1t5	35.0%	1t5						
warm up 3	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	65.0%	x3	45.0%	1t5	35.0%	1t5	45.0%	1t5						
warm up 4	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	72.5%	x2	52.5%	1t5	42.5%	1t5	52.5%	1t5						
work set A					60.0%	x3					60.0%	x3					60.0%	x15+												
work set B					60.0%	x3					60.0%	x3																		
work set C			60.0%	x5	60.0%	x3			60.0%	x4	60.0%	x3			60.0%	x3			60.0%	x12			60.0%	x15						
work set D	60.0%	x6	60.0%	x5	60.0%	x3			60.0%	x4	60.0%	x3			60.0%	x3			60.0%	x12	50.0%	x8	57.5%	x15						
work set E	60.0%	x6	60.0%	x5	60.0%	x3	60.0%	x6	60.0%	x4	60.0%	x3			60.0%	x3			60.0%	x12	55.0%	x8	55.0%	x15						
work set F	60.0%	x6	60.0%	x5	60.0%	x3	60.0%	x6	60.0%	x4	60.0%	x3	60.0%	x6	60.0%	x3			60.0%	x12	60.0%	x15	52.5%	x15						
work set G	60.0%	x6	60.0%	x5	60.0%	2x3	60.0%	x6	60.0%	x4	60.0%	x3	60.0%	x6	60.0%	x3			60.0%	x12	60.0%	x15	50.0%	x15						
work set H	60.0%	x6	60.0%	x5	60.0%	2x3	60.0%	x6	60.0%	x4	60.0%	x3	60.0%	x6	60.0%	x3			60.0%	x12	60.0%	x15	47.5%	x15						

95% CYCLES

NINETY FIVE	PrilipenH-1		PrilipenH-2		PrilipenO-1		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Wave		Wave-3		Descending		Ascending		↑ Pyramid		↑HPyramid		Regress △	
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1					57.5%	1t5					52.5%	x5	57.5%	1t5	42.5%	1t5	50.0%	1t5	45.0%	1t5			32.5%	1t5	22.5%	1t5	37.5%	1t5	57.5%	1t5
warm up 2					70.0%	1t5					67.5%	x4	70.0%	1t5	55.0%	1t5	62.5%	1t5	57.5%	1t5			45.0%	1t5	35.0%	1t5	50.0%	1t5	70.0%	1t5
warm up 3					80.0%	1t5					80.0%	x3	80.0%	1t5	65.0%	1t5	72.5%	1t5	67.5%	1t5			55.0%	1t5	45.0%	1t5	60.0%	1t5	80.0%	1t5
warm up 4					87.5%	1t5					87.5%	x2	87.5%	1t5	72.5%	1t5	80.0%	1t5	75.0%	1t5			62.5%	1t5	52.5%	1t5	67.5%	1t5	87.5%	1t5
work set A											95.0%	x2+																		
work set B					95.0%	x1																								
work set C					95.0%	x1							95.0%	x1	80.0%	x1	87.5%	x2	82.5%	x2			70.0%	x1					95.0%	x1+
work set D													95.0%	x1	85.0%	x1	95.0%	x1	90.0%	x1			75.0%	x1	60.0%	x10	75.0%	x5	95.0%	x1+
work set E													95.0%	x1	90.0%	x1	87.5%	x2	95.0%	x1			80.0%	x1	72.5%	x8	80.0%	x4	95.0%	x1+
work set F													95.0%	x1	95.0%	x1+	95.0%	x1	82.5%	x2			85.0%	x1	82.5%	x6	85.0%	x3	90.0%	xm4
work set G													95.0%	x1	95.0%	x1+	87.5%	x2	90.0%	x1			90.0%	x1	90.0%	x4	90.0%	x2	82.5%	xm7
work set H													95.0%	x1	95.0%	x1+	95.0%	x1	95.0%	x1			95.0%	x1	95.0%	x2+	95.0%	x1	70.0%	xm13

92.5% CYCLES

NINETY TWO.FIVE	PrilipenH-1		PrilipenH-2		PrilipenO-1		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Wave		Wave-3		Descending		Ascending		↑ Pyramid		↑HPyramid		Regress △	
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	47.5%	x5	55.0%	1t5	40.0%	1t5	47.5%	1t5	42.5%	1t5			30.0%	1t5			35.0%	1t5	55.0%	1t5
warm up 2	67.5%	1t5	67.5%	1t5	67.5%	1t5	67.5%	1t5	67.5%	1t5	62.5%	x4	67.5%	1t5	52.5%	1t5	60.0%	1t5	55.0%	1t5			42.5%	1t5			47.5%	1t5	67.5%	1t5
warm up 3	77.5%	1t5	77.5%	1t5	77.5%	1t5	77.5%	1t5	77.5%	1t5	75.0%	x3	77.5%	1t5	62.5%	1t5	70.0%	1t5	65.0%	1t5			52.5%	1t5			57.5%	1t5	77.5%	1t5
warm up 4	85.0%	1t5	85.0%	1t5	85.0%	1t5	85.0%	1t5	85.0%	1t5	85.0%	x2	85.0%	1t5	70.0%	1t5	77.5%	1t5	72.5%	1t5			60.0%	1t5	45.0%	1t5	65.0%	1t5	85.0%	1t5
work set A			92.5%	x1							92.5%	x3+																		
work set B			92.5%	x1	92.5%	x1																								
work set C			92.5%	x1	92.5%	x1							92.5%	x2	77.5%	x1	85.0%	x2	80.0%	x2			67.5%	x3					92.5%	x3
work set D	92.5%	x2	92.5%	x1	92.5%	x1							92.5%	x2	82.5%	x1	92.5%	x3	87.5%	x2			72.5%	x3	57.5%	x10	72.5%	x5	92.5%	x3
work set E	92.5%	x2	92.5%	x1	92.5%	x1			92.5%	x1			92.5%	x2	87.5%	x1	85.0%	x2	92.5%	x3			77.5%	x3	70.0%	x8	77.5%	x4	92.5%	x3
work set F	92.5%	x2	92.5%	x1	92.5%	x1			92.5%	x1			92.5%	x2	92.5%	x3	92.5%	x3	80.0%	x2			82.5%	x3	80.0%	x6	82.5%	x3	87.5%	xm5
work set G	92.5%	x2	92.5%	2x1	92.5%	x1	92.5%	x2	92.5%	x1			92.5%	x2	92.5%	x3	85.0%	x2	87.5%	x2			87.5%	x3	87.5%	x4	87.5%	x2	80.0%	xm8
work set H	92.5%	x2	92.5%	2x1	92.5%	x1	92.5%	x2	92.5%	x1			92.5%	x2	92.5%	x3	92.5%	x3	92.5%	x3			92.5%	x3	92.5%	x2+	92.5%	x1	70.0%	xm13

90% CYCLES

NINETY	PrilipenH-1		PrilipenH-2		PrilipenO-1		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Wave		Wave-3		Descending		Ascending		↑ Pyramid		↑HPyramid		Regress △	
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	45.0%	x5	52.5%	1t5	37.5%	1t5	45.0%	1t5	40.0%	1t5							32.5%	1t5	52.5%	1t5
warm up 2	65.0%	1t5	65.0%	1t5	65.0%	1t5	65.0%	1t5	65.0%	1t5	60.0%	x4	65.0%	1t5	50.0%	1t5	57.5%	1t5	52.5%	1t5			35.0%	1t5			45.0%	1t5	65.0%	1t5
warm up 3	75.0%	1t5	75.0%	1t5	75.0%	1t5	75.0%	1t5	75.0%	1t5	72.5%	x3	75.0%	1t5	60.0%	1t5	67.5%	1t5	62.5%	1t5			45.0%	1t5			55.0%	1t5	75.0%	1t5
warm up 4	82.5%	1t5	82.5%	1t5	82.5%	1t5	82.5%	1t5	82.5%	1t5	82.5%	x2	82.5%	1t5	67.5%	1t5	75.0%	1t5	70.0%	1t5			57.5%	1t5	45.0%	1t5	62.5%	1t5	82.5%	1t5
work set A			90.0%	x1							90.0%	x3+																		
work set B			90.0%	x1	90.0%	x1																								
work set C			90.0%	x1	90.0%	x1							90.0%	x2	75.0%	x1	82.5%	x2	77.5%	x2			65.0%	x3					90.0%	x3
work set D	90.0%	x2	90.0%	x1	90.0%	x1							90.0%	x2	80.0%	x1	90.0%	x3	85.0%	x2			70.0%	x3	55.0%	x10	70.0%	x5	90.0%	x3
work set E	90.0%	x2	90.0%	x1	90.0%	x1			90.0%	x1			90.0%	x2	85.0%	x1	82.5%	x2	90.0%	x3			75.0%	x3	67.5%	x8	75.0%	x4	90.0%	x3
work set F	90.0%	x2	90.0%	x1	90.0%	x1			90.0%	x1			90.0%	x2	90.0%	x3	90.0%	x3	77.5%	x2			80.0%	x3	77.5%	x6	80.0%	x3	85.0%	xm6
work set G	90.0%	x2	90.0%	2x1	90.0%	x1	90.0%	x2	90.0%	x1			90.0%	x2	90.0%	x3	82.5%	x2	85.0%	x2			85.0%	x3	85.0%	x4	85.0%	x2	77.5%	xm9
work set H	90.0%	x2	90.0%	2x1	90.0%	x1	90.0%	x2	90.0%	x1			90.0%	x2	90.0%	x3	90.0%	x3	90.0%	x3			90.0%	x3	90.0%	x2+	90.0%	x1	67.5%	xm14

87.5% CYCLES

EIGHTY SEVEN.FIVE	PrilipenH-1		PrilipenH-2		PrilipenO-1		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Wave		Wave-3		Descending		Ascending		↑ Pyramid		↑HPyramid		Regress △	
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5			42.5%	x5	50.0%	1t5	35.0%	1t5	42.5%	1t5	37.5%	1t5			25.0%	1t5			30.0%	1t5	50.0%	1t5
warm up 2	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5			57.5%	x4	62.5%	1t5	47.5%	1t5	55.0%	1t5	50.0%	1t5			37.5%	1t5			42.5%	1t5	62.5%	1t5
warm up 3	72.5%	1t5	72.5%	1t5	72.5%	1t5	72.5%	1t5			70.0%	x3	72.5%	1t5	57.5%	1t5	65.0%	1t5	60.0%	1t5			47.5%	1t5			52.5%	1t5	72.5%	1t5
warm up 4	80.0%	1t5	80.0%	1t5	80.0%	1t5	80.0%	1t5			80.0%	x2	80.0%	1t5	65.0%	1t5	72.5%	1t5	67.5%	1t5			55.0%	1t5	45.0%	1t5	60.0%	1t5	80.0%	1t5
work set A			87.5%	x2							87.5%	x5+																		
work set B			87.5%	x2																										
work set C			87.5%	x2									87.5%	x3	72.5%	x2	80.0%	x2	75.0%	x2			62.5%	x4					87.5%	x4
work set D	87.5%	x4	87.5%	x2	87.5%	x3	87.5%	x2					87.5%	x3	77.5%	x2	87.5%	x4	82.5%	x2			67.5%	x4	52.5%	x10	67.5%	x5	87.5%	x4
work set E	87.5%	x4	87.5%	x2	87.5%	x3	87.5%	x2					87.5%	x3	82.5%	x2	80.0%	x2	87.5%	x4			72.5%	x4	65.0%	x8	72.5%	x4	87.5%	x4
work set F	87.5%	x4	87.5%	x2	87.5%	x3	87.5%	x2					87.5%	x3	87.5%	x4	87.5%	x4	75.0%	x2			77.5%	x4	75.0%	x6	77.5%	x3	82.5%	xm6
work set G	87.5%	x4	87.5%	2x2	87.5%	x3	87.5%	x2					87.5%	x3	87.5%	x4	80.0%	x2	82.5%	x2			82.5%	x4	82.5%	x4	82.5%	x2	75.0%	xm10
work set H	87.5%	x4	87.5%	2x2	87.5%	x3	87.5%	x2					87.5%	x3	87.5%	x4	87.5%	x4	87.5%	x4			87.5%	x4	87.5%	x2+	87.5%	xm	65.0%	xm15

85% CYCLES

EIGHTY FIVE	PrilipenH-1		PrilipenH-2		PrilipenO-1		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Wave		Wave-3		Descending		Ascending		↑ Pyramid		↑HPyramid		Regress △	
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5			40.0%	x5	47.5%	1t5	32.5%	1t5	45.0%	1t5	35.0%	1t5			22.5%	1t5			27.5%	1t5	47.5%	1t5
warm up 2	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5			55.0%	x4	60.0%	1t5	45.0%	1t5	57.5%	1t5	47.5%	1t5			35.0%	1t5			40.0%	1t5	60.0%	1t5
warm up 3	70.0%	1t5	70.0%	1t5	70.0%	1t5	70.0%	1t5			67.5%	x3	70.0%	1t5	55.0%	1t5	67.5%	1t5	57.5%	1t5			45.0%	1t5			50.0%	1t5	70.0%	1t5
warm up 4	77.5%	1t5	77.5%	1t5	77.5%	1t5	77.5%	1t5			77.5%	x2	77.5%	1t5	62.5%	1t5	70.0%	1t5	65.0%	1t5			52.5%	1t5	45.0%	1t5	57.5%	1t5	77.5%	1t5
work set A			85.0%	x2							85.0%	x6+																		
work set B			85.0%	x2																										
work set C			85.0%	x2									85.0%	x3	70.0%	x2	77.5%	x2	72.5%	x2			60.0%	x4					85.0%	x4
work set D	85.0%	x4	85.0%	x2	85.0%	x3	85.0%	x2					85.0%	x3	75.0%	x2	85.0%	x4	80.0%	x2			65.0%	x4	50.0%	x10	65.0%	x5	85.0%	x4
work set E	85.0%	x4	85.0%	x2	85.0%	x3	85.0%	x2					85.0%	x3	80.0%	x2	77.5%	x2	85.0%	x4			70.0%	x4	62.5%	x8	70.0%	x4	85.0%	x4
work set F	85.0%	x4	85.0%	x2	85.0%	x3	85.0%	x2					85.0%	x3	85.0%	x4	85.0%	x4	72.5%	x2			75.0%	x4	72.5%	x6	75.0%	x3	80.0%	xm8
work set G	85.0%	x4	85.0%	2x2	85.0%	x3	85.0%	x2					85.0%	x3	85.0%	x4	77.5%	x2	80.0%	x2			80.0%	x4	80.0%	x4	80.0%	x2	72.5%	xm12
work set H	85.0%	x4	85.0%	2x2	85.0%	x3	85.0%	x2					85.0%	x3	85.0%	x4	85.0%	x4	85.0%	x4			85.0%	x4	85.0%	x2+	85.0%	xm	62.5%	xm15

82.5% CYCLES

EIGHTY TWO.FIVE	PrilipenH-1		PrilipenH-2		PrilipenO-1		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Wave		Wave-3		Descending		Ascending		↑ Pyramid		↑ HPyramid		Regress △	
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5			37.5%	x5	45.0%	1t5	30.0%	1t5	37.5%	1t5	32.5%	1t5			20.0%	1t5			35.0%	1t5	45.0%	1t5
warm up 2	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5			52.5%	x4	57.5%	1t5	42.5%	1t5	50.0%	1t5	45.0%	1t5			32.5%	1t5			37.5%	1t5	57.5%	1t5
warm up 3	67.5%	1t5	67.5%	1t5	67.5%	1t5	67.5%	1t5			65.0%	x3	67.5%	1t5	52.5%	1t5	60.0%	1t5	55.0%	1t5			42.5%	1t5			47.5%	1t5	67.5%	1t5
warm up 4	75.0%	1t5	75.0%	1t5	75.0%	1t5	75.0%	1t5			75.0%	x2	75.0%	1t5	60.0%	1t5	67.5%	1t5	62.5%	1t5			50.0%	1t5			55.0%	1t5	75.0%	1t5
work set A			82.5%	x2							82.5%	x7+																		
work set B			82.5%	x2																										
work set C			82.5%	x2									82.5%	x4	67.5%	x3	75.0%	x3	70.0%	x3			57.5%	x5					82.5%	x5
work set D	82.5%	x4	82.5%	x2	82.5%	x3	82.5%	x2					82.5%	x4	72.5%	x3	82.5%	x5	77.5%	x3			62.5%	x5	47.5%	x10	62.5%	x5	82.5%	x5
work set E	82.5%	x4	82.5%	x2	82.5%	x3	82.5%	x2					82.5%	x4	77.5%	x3	75.0%	x3	82.5%	x5			67.5%	x5	60.0%	x8	67.5%	x4	82.5%	x5
work set F	82.5%	x4	82.5%	x2	82.5%	x3	82.5%	x2					82.5%	x4	82.5%	x5	82.5%	x5	70.0%	x3			72.5%	x5	70.0%	x6	72.5%	x3	77.5%	xm8
work set G	82.5%	x4	82.5%	2x2	82.5%	x3	82.5%	x2					82.5%	x4	82.5%	x5	75.0%	x3	77.5%	x3			77.5%	x5	77.5%	x4	77.5%	x2	70.0%	xm13
work set H	82.5%	x4	82.5%	2x2	82.5%	x3	82.5%	x2					82.5%	x4	82.5%	x5	82.5%	x5	82.5%	x5			82.5%	x5	82.5%	x2+	82.5%	xm	60.0%	xm15

80% CYCLES

EIGHTY	PrilipenH-1		PrilipenH-2		PrilipenO-1		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Wave		Wave-3		Descending		Ascending		↑ Pyramid		↑ HPyramid		Regress △	
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	42.5%	1t5	42.5%	1t5	42.5%	1t5	42.5%	1t5			35.0%	x5	42.5%	1t5	27.5%	1t5	35.0%	1t5	30.0%	1t5							22.5%	1t5	42.5%	1t5
warm up 2	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5			50.0%	x4	55.0%	1t5	40.0%	1t5	47.5%	1t5	42.5%	1t5			30.0%	1t5			35.0%	1t5	55.0%	1t5
warm up 3	65.0%	1t5	65.0%	1t5	65.0%	1t5	65.0%	1t5			62.5%	x3	65.0%	1t5	50.0%	1t5	57.5%	1t5	52.5%	1t5			40.0%	1t5			45.0%	1t5	65.0%	1t5
warm up 4	72.5%	1t5	72.5%	1t5	72.5%	1t5	72.5%	1t5			72.5%	x2	72.5%	1t5	57.5%	1t5	65.0%	1t5	60.0%	1t5			47.5%	1t5			52.5%	1t5	72.5%	1t5
work set A			80.0%	x2							80.0%	x8+																		
work set B			80.0%	x2																										
work set C			80.0%	x2									80.0%	x5	65.0%	x3	72.5%	x3	67.5%	x3			55.0%	x6					80.0%	x6
work set D	80.0%	x4	80.0%	x2	80.0%	x3	80.0%	x2					80.0%	x5	70.0%	x3	80.0%	x6	75.0%	x3			60.0%	x6	45.0%	x10	60.0%	x5	80.0%	x6
work set E	80.0%	x4	80.0%	x2	80.0%	x3	80.0%	x2					80.0%	x5	75.0%	x3	72.5%	x3	80.0%	x6			65.0%	x6	57.5%	x8	65.0%	x4	80.0%	x6
work set F	80.0%	x4	80.0%	x2	80.0%	x3	80.0%	x2					80.0%	x5	80.0%	x6	80.0%	x6	67.5%	x3			70.0%	x6	67.5%	x6	70.0%	x3	75.0%	xm10
work set G	80.0%	x4	80.0%	2x2	80.0%	x3	80.0%	x2					80.0%	x5	80.0%	x6	72.5%	x3	75.0%	x3			75.0%	x6	75.0%	x4	75.0%	x2	67.5%	xm13
work set H	80.0%	x4	80.0%	2x2	80.0%	x3	80.0%	x2					80.0%	x5	80.0%	x6	80.0%	x6	80.0%	x6			80.0%	x6	80.0%	x2+	80.0%	xm		

77.5% CYCLES

SEVENTY SEVEN.FIVE	PrilipenH-1		PrilipenH-2		PrilipenH-3		PrilipenO-1		PrilipenO-2		PrilipenL-1		PrilipenL-2		PrilipenL-3		1 set special		Advanced		Progressive		Descending		Regress △					
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	42.5%	x5	40.0%	1t5	25.0%	1t5	40.0%	1t5	40.0%	1t5				
warm up 2	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	55.0%	x4	52.5%	1t5	37.5%	1t5	52.5%	1t5	52.5%	1t5				
warm up 3	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	65.0%	x3	62.5%	1t5	47.5%	1t5	62.5%	1t5	62.5%	1t5				
warm up 4	70.0%	1t5	70.0%	1t5	70.0%	1t5	70.0%	1t5	70.0%	1t5	70.0%	1t5	70.0%	1t5	70.0%	1t5	72.5%	x2	70.0%	1t5	55.0%	1t5	70.0%	1t5	70.0%	1t5				
work set A					77.5%	x3											77.5%	x9+												
work set B					77.5%	x3																								
work set C			77.5%	x4	77.5%	x3			77.5%	x3									77.5%	x6	62.5%	x4	77.5%	x8	77.5%	x7				
work set D			77.5%	x4	77.5%	x3			77.5%	x3									77.5%	x6	67.5%	x4	75.0%	x8	77.5%	x7				
work set E	77.5%	x6	77.5%	x4	77.5%	x3			77.5%	x3					77.5%	x3			77.5%	x6	72.5%	x4	72.5%	x8	77.5%	x7				
work set F	77.5%	x6	77.5%	x4	77.5%	x3	77.5%	x6	77.5%	x3			77.5%	x4	77.5%	x3			77.5%	x6	77.5%	x7	70.0%	x8	72.5%	xm12				
work set G	77.5%	x6	77.5%	x4	77.5%	x3	77.5%	x6	77.5%	x3	77.5%	x6	77.5%	x4	77.5%	x3			77.5%	x6	77.5%	x7	67.5%	x8	65.0%	xm15				
work set H	77.5%	x6	77.5%	x4	77.5%	x3	77.5%	x6	77.5%	x3	77.5%	x6	77.5%	x4	77.5%	x3			77.5%	x6	77.5%	x7	65.0%	x8						

75% CYCLES

SEVENTY FIVE	PrilipenH-1		PrilipenH-2		PrilipenH-3		PrilipenO-1		PrilipenO-2		PrilipenL-1		PrilipenL-2		PrilipenL-3		1 set special		Advanced		Progressive		Descending		Regress △					
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	42.5%	x5	37.5%	1t5	22.5%	1t5	37.5%	1t5	37.5%	1t5				
warm up 2	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	55.0%	x4	50.0%	1t5	35.0%	1t5	50.0%	1t5	50.0%	1t5				
warm up 3	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	65.0%	x3	60.0%	1t5	45.0%	1t5	60.0%	1t5	60.0%	1t5				
warm up 4	67.5%	1t5	67.5%	1t5	67.5%	1t5	67.5%	1t5	67.5%	1t5	67.5%	1t5	67.5%	1t5	67.5%	1t5	72.5%	x2	67.5%	1t5	52.5%	1t5	67.5%	1t5	67.5%	1t5				
work set A					75.0%	x3											75.0%	x10+												
work set B					75.0%	x3																								
work set C			75.0%	x4	75.0%	x3			75.0%	x3									75.0%	x6	60.0%	x4	75.0%	x8	75.0%	x7				
work set D			75.0%	x4	75.0%	x3			75.0%	x3									75.0%	x6	65.0%	x4	72.5%	x8	75.0%	x7				
work set E	75.0%	x6	75.0%	x4	75.0%	x3			75.0%	x3					75.0%	x3			75.0%	x6	70.0%	x4	70.0%	x8	75.0%	x7				
work set F	75.0%	x6	75.0%	x4	75.0%	x3	75.0%	x6	75.0%	x3			75.0%	x4	75.0%	x3			75.0%	x6	75.0%	x7	67.5%	x8	70.0%	xm12				
work set G	75.0%	x6	75.0%	x4	75.0%	x3	75.0%	x6	75.0%	x3	75.0%	x6	75.0%	x4	75.0%	x3			75.0%	x6	75.0%	x7	65.0%	x8	62.5%	xm15				
work set H	75.0%	x6	75.0%	x4	75.0%	x3	75.0%	x6	75.0%	x3	75.0%	x6	75.0%	x4	75.0%	x3			75.0%	x6	75.0%	x7	62.5%	x8						

72.5% CYCLES

SEVENTY TWO.FIVE	PrilipenH-1		PrilipenH-2		PrilipenH-3		PrilipenO-1		PrilipenO-2		PrilipenL-1		PrilipenL-2		PrilipenL-3		1 set special		Advanced		Progressive		Descending		Regress △					
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	35.0%	1t5	42.5%	x5	35.0%	1t5	20.0%	1t5	35.0%	1t5	35.0%	1t5				
warm up 2	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	55.0%	x4	47.5%	1t5	32.5%	1t5	47.5%	1t5	47.5%	1t5				
warm up 3	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	65.0%	x3	57.5%	1t5	42.5%	1t5	57.5%	1t5	57.5%	1t5				
warm up 4	65.0%	1t5	65.0%	1t5	65.0%	1t5	65.0%	1t5	65.0%	1t5	65.0%	1t5	65.0%	1t5	65.0%	1t5	72.5%	x2	65.0%	1t5	50.0%	1t5	65.0%	1t5	65.0%	1t5				
work set A					72.5%	x3											72.5%	x12+												
work set B					72.5%	x3																								
work set C			72.5%	x4	72.5%	x3			72.5%	x3									72.5%	x8	57.5%	x5	72.5%	x10	72.5%	x10				
work set D			72.5%	x4	72.5%	x3			72.5%	x3									72.5%	x8	62.5%	x5	70.0%	x10	72.5%	x10				
work set E	72.5%	x6	72.5%	x4	72.5%	x3			72.5%	x3					72.5%	x3			72.5%	x8	67.5%	x5	67.5%	x10	72.5%	x10				
work set F	72.5%	x6	72.5%	x4	72.5%	x3	72.5%	x6	72.5%	x3			72.5%	x4	72.5%	x3			72.5%	x8	72.5%	x10	65.0%	x10	67.5%	xm12				
work set G	72.5%	x6	72.5%	x4	72.5%	x3	72.5%	x6	72.5%	x3	72.5%	x6	72.5%	x4	72.5%	x3			72.5%	x8	72.5%	x10	62.5%	x10	60.0%	xm15				
work set H	72.5%	x6	72.5%	x4	72.5%	x3	72.5%	x6	72.5%	x3	72.5%	x6	72.5%	x4	72.5%	x3			72.5%	x8	72.5%	x10	60.0%	x10						

70% CYCLES

SEVENTY	PrilipenH-1		PrilipenH-2		PrilipenH-3		PrilipenO-1		PrilipenO-2		PrilipenL-1		PrilipenL-2		PrilipenL-3		1 set special		Advanced		Progressive		Descending		Regress △					
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	32.5%	1t5	32.5%	1t5	32.5%	1t5	32.5%	1t5	32.5%	1t5	32.5%	1t5	32.5%	1t5	32.5%	1t5	42.5%	x5	32.5%	1t5			32.5%	1t5	32.5%	1t5				
warm up 2	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	45.0%	1t5	55.0%	x4	45.0%	1t5	30.0%	1t5	45.0%	1t5	45.0%	1t5				
warm up 3	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	65.0%	x3	55.0%	1t5	40.0%	1t5	55.0%	1t5	55.0%	1t5				
warm up 4	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	62.5%	1t5	72.5%	x2	62.5%	1t5	47.5%	1t5	62.5%	1t5	62.5%	1t5				
work set A					70.0%	x3											70.0%	x13+												
work set B					70.0%	x3																								
work set C			70.0%	x4	70.0%	x3			70.0%	x3									70.0%	x8	55.0%	x5	70.0%	x10	70.0%	x10				
work set D			70.0%	x4	70.0%	x3			70.0%	x3									70.0%	x8	60.0%	x5	67.5%	x10	70.0%	x10				
work set E	70.0%	x6	70.0%	x4	70.0%	x3			70.0%	x3					70.0%	x3			70.0%	x8	65.0%	x5	65.0%	x10	70.0%	x10				
work set F	70.0%	x6	70.0%	x4	70.0%	x3	70.0%	x6	70.0%	x3			70.0%	x4	70.0%	x3			70.0%	x8	70.0%	x10	62.5%	x10	65.0%	xm12				
work set G	70.0%	x6	70.0%	x4	70.0%	x3	70.0%	x6	70.0%	x3	70.0%	x6	70.0%	x4	70.0%	x3			70.0%	x8	70.0%	x10	60.0%	x10						
work set H	70.0%	x6	70.0%	x4	70.0%	x3	70.0%	x6	70.0%	x3	70.0%	x6	70.0%	x4	70.0%	x3			70.0%	x8	70.0%	x10	57.5%	x10						

67.5% CYCLES

SIXTY SEVEN.FIVE	PrilipenH-1		PrilipenH-2		PrilipenH-3		PrilipenO-1		PrilipenO-2		PrilipenO-3		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Descending							
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	30.0%	1t5	30.0%	1t5	30.0%	1t5	30.0%	1t5	30.0%	1t5	30.0%	1t5	30.0%	1t5	30.0%	1t5	42.5%	x5	30.0%	1t5			30.0%	1t5						
warm up 2	42.5%	1t5	42.5%	1t5	42.5%	1t5	42.5%	1t5	42.5%	1t5	42.5%	1t5	42.5%	1t5	42.5%	1t5	55.0%	x4	42.5%	1t5	27.5%	1t5	42.5%	1t5						
warm up 3	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	52.5%	1t5	65.0%	x3	52.5%	1t5	37.5%	1t5	52.5%	1t5						
warm up 4	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	60.0%	1t5	72.5%	x2	60.0%	1t5	45.0%	1t5	60.0%	1t5						
work set A					67.5%	x3					67.5%	x3					67.5%	x14+												
work set B					67.5%	x3					67.5%	x3																		
work set C			67.5%	x5	67.5%	x3			67.5%	x4	67.5%	x3			67.5%	x3			67.5%	x10	52.5%	x6	67.5%	x12						
work set D	67.5%	x6	67.5%	x5	67.5%	x3			67.5%	x4	67.5%	x3			67.5%	x3			67.5%	x10	57.5%	x6	65.0%	x12						
work set E	67.5%	x6	67.5%	x5	67.5%	x3	67.5%	x6	67.5%	x4	67.5%	x3			67.5%	x3			67.5%	x10	62.5%	x6	62.5%	x12						
work set F	67.5%	x6	67.5%	x5	67.5%	x3	67.5%	x6	67.5%	x4	67.5%	x3	67.5%	x6	67.5%	x3			67.5%	x10	67.5%	x12	60.0%	x12						
work set G	67.5%	x6	67.5%	x5	67.5%	2x3	67.5%	x6	67.5%	x4	67.5%	x3	67.5%	x6	67.5%	x3			67.5%	x10	67.5%	x12	57.5%	x12						
work set H	67.5%	x6	67.5%	x5	67.5%	2x3	67.5%	x6	67.5%	x4	67.5%	x3	67.5%	x6	67.5%	x3			67.5%	x10	67.5%	x12	55.0%	x12						

65% CYCLES

SIXTY FIVE	PrilipenH-1		PrilipenH-2		PrilipenH-3		PrilipenO-1		PrilipenO-2		PrilipenO-3		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Descending							
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	27.5%	1t5	27.5%	1t5	27.5%	1t5	27.5%	1t5	27.5%	1t5	27.5%	1t5	27.5%	1t5	27.5%	1t5	42.5%	x5	27.5%	1t5			27.5%	1t5						
warm up 2	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	40.0%	1t5	55.0%	x4	40.0%	1t5	25.0%	1t5	40.0%	1t5						
warm up 3	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	50.0%	1t5	65.0%	x3	50.0%	1t5	35.0%	1t5	50.0%	1t5						
warm up 4	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	57.5%	1t5	72.5%	x2	57.5%	1t5	42.5%	1t5	57.5%	1t5						
work set A					65.0%	x3					65.0%	x3					65.0%	x15+												
work set B					65.0%	x3					65.0%	x3																		
work set C			65.0%	x5	65.0%	x3			65.0%	x4	65.0%	x3			65.0%	x3			65.0%	x10	50.0%	x6	65.0%	x12						
work set D	65.0%	x6	65.0%	x5	65.0%	x3			65.0%	x4	65.0%	x3			65.0%	x3			65.0%	x10	55.0%	x6	62.5%	x12						
work set E	65.0%	x6	65.0%	x5	65.0%	x3	65.0%	x6	65.0%	x4	65.0%	x3			65.0%	x3			65.0%	x10	60.0%	x6	60.0%	x12						
work set F	65.0%	x6	65.0%	x5	65.0%	x3	65.0%	x6	65.0%	x4	65.0%	x3	65.0%	x6	65.0%	x3			65.0%	x10	65.0%	x12	57.5%	x12						
work set G	65.0%	x6	65.0%	x5	65.0%	2x3	65.0%	x6	65.0%	x4	65.0%	x3	65.0%	x6	65.0%	x3			65.0%	x10	65.0%	x12	55.0%	x12						
work set H	65.0%	x6	65.0%	x5	65.0%	2x3	65.0%	x6	65.0%	x4	65.0%	x3	65.0%	x6	65.0%	x3			65.0%	x10	65.0%	x12	52.5%	x12						

62.5% CYCLES

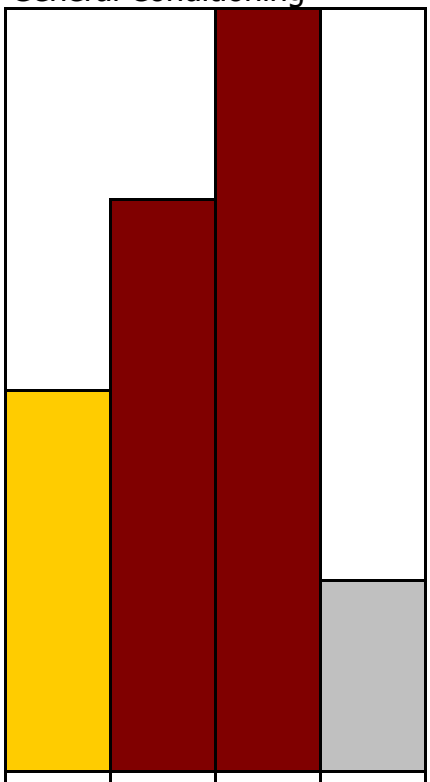
SIXTY TWO.FIVE	PrilipenH-1		PrilipenH-2		PrilipenH-3		PrilipenO-1		PrilipenO-2		PrilipenO-3		PrilipenL-1		PrilipenL-2		1 set special		Advanced		Progressive		Descending							
	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR	%	GR
warm up 1	25.0%	1t5	25.0%	1t5	25.0%	1t5	25.0%	1t5	25.0%	1t5	25.0%	1t5	25.0%	1t5	25.0%	1t5	42.5%	x5	25.0%	1t5			25.0%	1t5						
warm up 2	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	37.5%	1t5	55.0%	x4	37.5%	1t5	27.5%	1t5	37.5%	1t5						
warm up 3	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	47.5%	1t5	65.0%	x3	47.5%	1t5	37.5%	1t5	47.5%	1t5						
warm up 4	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	55.0%	1t5	72.5%	x2	55.0%	1t5	45.0%	1t5	55.0%	1t5						
work set A					62.5%	x3					62.5%	x3					62.5%	x15+												
work set B					62.5%	x3					62.5%	x3																		
work set C			62.5%	x5	62.5%	x3			62.5%	x4	62.5%	x3			62.5%	x3			62.5%	x12			62.5%	x15						
work set D	62.5%	x6	62.5%	x5	62.5%	x3			62.5%	x4	62.5%	x3			62.5%	x3			62.5%	x12	52.5%	x8	60.0%	x15						
work set E	62.5%	x6	62.5%	x5	62.5%	x3	62.5%	x6	62.5%	x4	62.5%	x3			62.5%	x3			62.5%	x12	57.5%	x8	57.5%	x15						
work set F	62.5%	x6	62.5%	x5	62.5%	x3	62.5%	x6	62.5%	x4	62.5%	x3	62.5%	x6	62.5%	x3			62.5%	x12	62.5%	x15	55.0%	x15						
work set G	62.5%	x6	62.5%	x5	62.5%	2x3	62.5%	x6	62.5%	x4	62.5%	x3	62.5%	x6	62.5%	x3			62.5%	x12	62.5%	x15	52.5%	x15						
work set H	62.5%	x6	62.5%	x5	62.5%	2x3	62.5%	x6	62.5%	x4	62.5%	x3	62.5%	x6	62.5%	x3			62.5%	x12	62.5%	x15	50.0%	x15						

- General Conditioning 4-week Cycle – Traditional – Total, Lower, Upper

4 Week Strength General

LOWER UPPER BODY

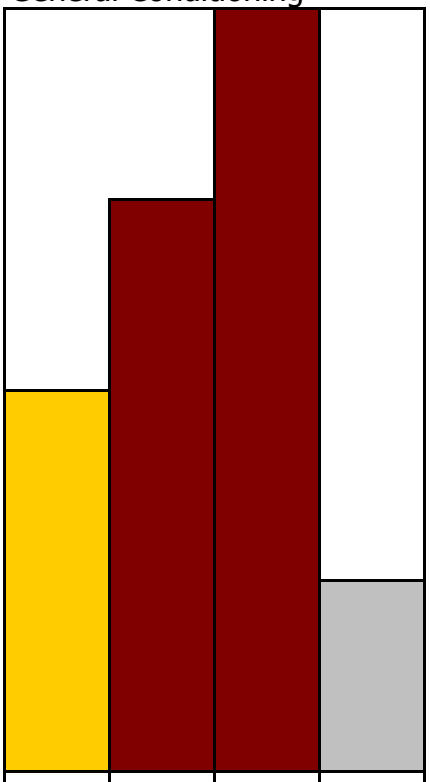
General Conditioning



	Base		Load		Load		UnLoad	
Weekly %	62.5%		65.0%		67.5%		60.0%	
differential	[-] 5%		[-] 5%		Top %		[-] 7.5%	
WORK SETS	3 sets		3 sets		3 sets		3 sets	
TOP SETS	3 sets		3 sets		3 sets		3 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	27.5%	1t5	30.0%	1t5	32.5%	1t5	15.0%	1t5
wu-b	40.0%	1t5	42.5%	1t5	45.0%	1t5	30.0%	1t5
wu-c	50.0%	1t5	52.5%	1t5	55.0%	1t5	42.5%	1t5
wu-d	57.5%	1t5	60.0%	1t5	62.5%	1t5	52.5%	1t5
w1	62.5%	x10	65.0%	x10	67.5%	x10	60.0%	x8
w2	62.5%	x10	65.0%	x10	67.5%	x10	60.0%	x8
w3	62.5%	x10	65.0%	x10	67.5%	x10	60.0%	x8
w4								
w5								
w6								

TOTAL BODY

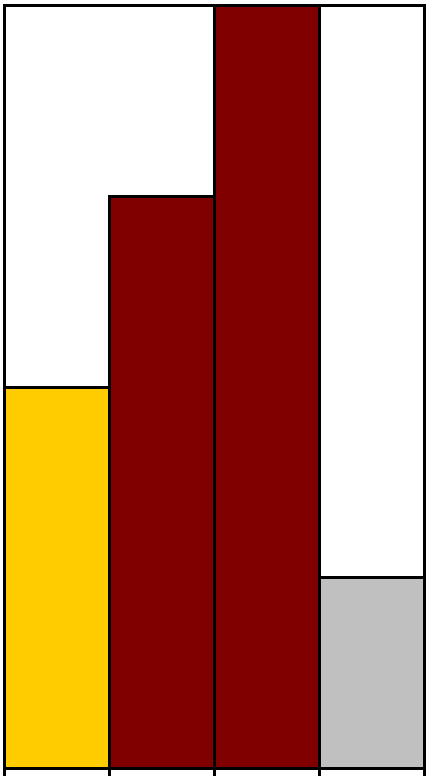
General Conditioning



	Base		Load		Load		UnLoad	
Weekly %	62.5%		65.0%		67.5%		60.0%	
differential	[-] 5%		[-] 5%		Top %		[-] 7.5%	
WORK SETS	3 sets		3 sets		3 sets		3 sets	
TOP SETS	3 sets		3 sets		3 sets		3 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	27.5%	1t5	30.0%	1t5	32.5%	1t5	15.0%	1t5
wu-b	40.0%	1t5	42.5%	1t5	45.0%	1t5	30.0%	1t5
wu-c	50.0%	1t5	52.5%	1t5	55.0%	1t5	42.5%	1t5
wu-d	57.5%	1t5	60.0%	1t5	62.5%	1t5	52.5%	1t5
w1	62.5%	x6	65.0%	x6	67.5%	x6	60.0%	x4
w2	62.5%	x6	65.0%	x6	67.5%	x6	60.0%	x4
w3	62.5%	x6	65.0%	x6	67.5%	x6	60.0%	x4
w4								
w5								
w6								

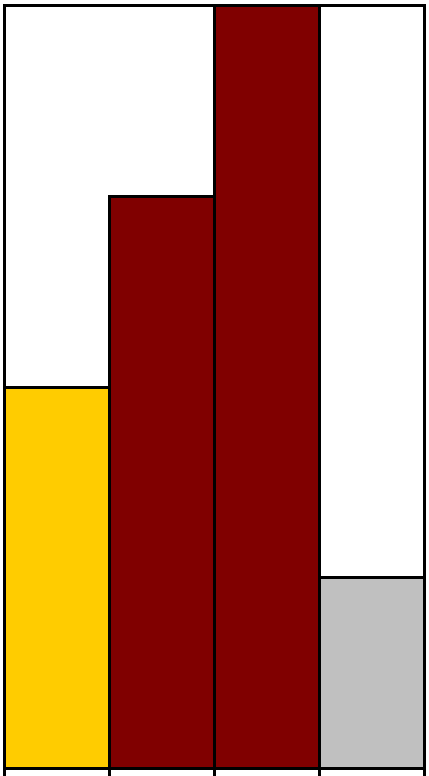
- Strength Endurance 4-week Cycles – Traditional – Total

STRENGTH ENDURANCE



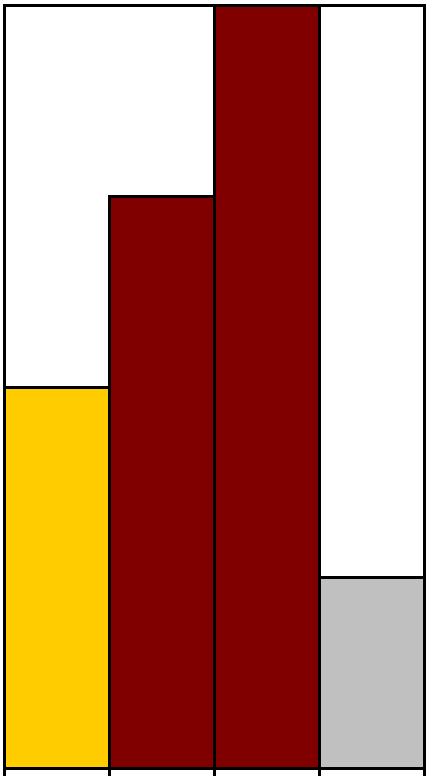
	Base		Load		Load		UnLoad	
Weekly %	60.0%		65.0%		70.0%		62.5%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK**	**1**	**WK**	**2**	**WK**	**3**	**WK**	**4**
wu-a	22.5%	**1t5**	27.5%	**1t5**	32.5%	**1t5**	25.0%	**1t5**
wu-b	35.0%	**1t5**	40.0%	**1t5**	45.0%	**1t5**	37.5%	**1t5**
wu-c	45.0%	**1t5**	50.0%	**1t5**	55.0%	**1t5**	47.5%	**1t5**
wu-d	52.5%	**1t5**	57.5%	**1t5**	62.5%	**1t5**	55.0%	**1t5**
wA								
wB								
wC	60.0%	**x6**	65.0%	**x6**	70.0%	**x6**	62.5%	**x3**
wD	57.5%	**x6**	62.5%	**x6**	67.5%	**x6**	60.0%	**x3**
wE	55.0%	**x6**	60.0%	**x6**	65.0%	**x6**	57.5%	**x3**
wF	52.5%	**x6**	57.5%	**x6**	62.5%	**x6**	55.0%	**x3**
wG	50.0%	**x6**	55.0%	**x6**	60.0%	**x6**		
wH			52.5%	**x6**	57.5%	**x6**		

STRENGTH ENDURANCE



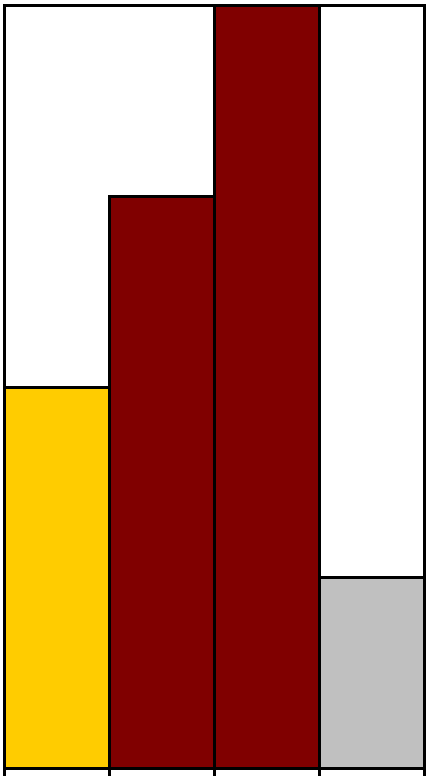
	Base		Load		Load		UnLoad	
Weekly %	62.5%		67.5%		72.5%		65.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	25.0%	**1t5**	30.0%	**1t5**	35.0%	**1t5**	27.5%	**1t5**
wu-b	37.5%	**1t5**	42.5%	**1t5**	47.5%	**1t5**	40.0%	**1t5**
wu-c	47.5%	**1t5**	52.5%	**1t5**	57.5%	**1t5**	50.0%	**1t5**
wu-d	55.0%	**1t5**	60.0%	**1t5**	65.0%	**1t5**	57.5%	**1t5**
wA								
wB								
wC	62.5%	**x6**	67.5%	**x6**	72.5%	**x6**	65.0%	**x3**
wD	60.0%	**x6**	65.0%	**x6**	70.0%	**x6**	62.5%	**x3**
wE	57.5%	**x6**	62.5%	**x6**	67.5%	**x6**	60.0%	**x3**
wF	55.0%	**x6**	60.0%	**x6**	65.0%	**x6**	57.5%	**x3**
wG	52.5%	**x6**	57.5%	**x6**	62.5%	**x6**		
wH			55.0%	**x6**	60.0%	**x6**		

STRENGTH ENDURANCE



	Base		Load		Load		UnLoad	
Weekly %	65.0%		70.0%		75.0%		67.5%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	27.5%	**1t5**	32.5%	**1t5**	37.5%	**1t5**	30.0%	**1t5**
wu-b	40.0%	**1t5**	45.0%	**1t5**	50.0%	**1t5**	42.5%	**1t5**
wu-c	50.0%	**1t5**	55.0%	**1t5**	60.0%	**1t5**	52.5%	**1t5**
wu-d	57.5%	**1t5**	62.5%	**1t5**	67.5%	**1t5**	60.0%	**1t5**
wA								
wB								
wC	65.0%	**x6**	70.0%	**x6**	75.0%	**x6**	67.5%	**x3**
wD	62.5%	**x6**	67.5%	**x6**	72.5%	**x6**	65.0%	**x3**
wE	60.0%	**x6**	65.0%	**x6**	70.0%	**x6**	62.5%	**x3**
wF	57.5%	**x6**	62.5%	**x6**	67.5%	**x6**	60.0%	**x3**
wG	55.0%	**x6**	60.0%	**x6**	65.0%	**x6**		
wH			57.5%	**x6**	62.5%	**x6**		

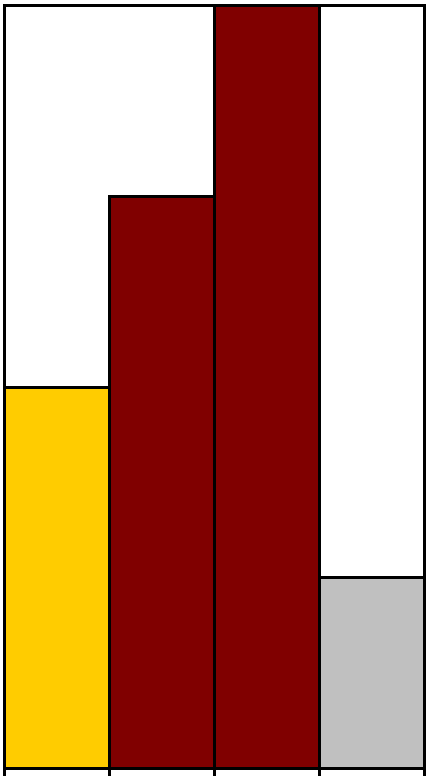
STRENGTH ENDURANCE



	Base		Load		Load		UnLoad	
Weekly %	67.5%		72.5%		77.5%		70.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	30.0%	**1t5**	35.0%	**1t5**	40.0%	**1t5**	32.5%	**1t5**
wu-b	42.5%	**1t5**	47.5%	**1t5**	52.5%	**1t5**	45.0%	**1t5**
wu-c	52.5%	**1t5**	57.5%	**1t5**	62.5%	**1t5**	55.0%	**1t5**
wu-d	60.0%	**1t5**	65.0%	**1t5**	70.0%	**1t5**	62.5%	**1t5**
wA								
wB								
wC	67.5%	**x6**	72.5%	**x6**	77.5%	**x5**	70.0%	**x3**
wD	65.0%	**x6**	70.0%	**x6**	75.0%	**x5**	67.5%	**x3**
wE	62.5%	**x6**	67.5%	**x6**	72.5%	**x5**	65.0%	**x3**
wF	60.0%	**x6**	65.0%	**x6**	70.0%	**x5**	62.5%	**x3**
wG	57.5%	**x6**	62.5%	**x6**	67.5%	**x5**		
wH			60.0%	**x6**	65.0%	**x5**		

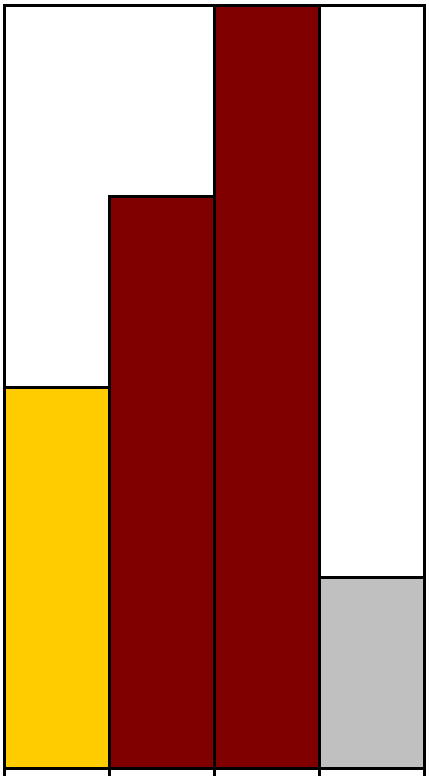
- Strength Endurance 4-week Cycles – Traditional – Lower, Upper

STRENGTH ENDURANCE



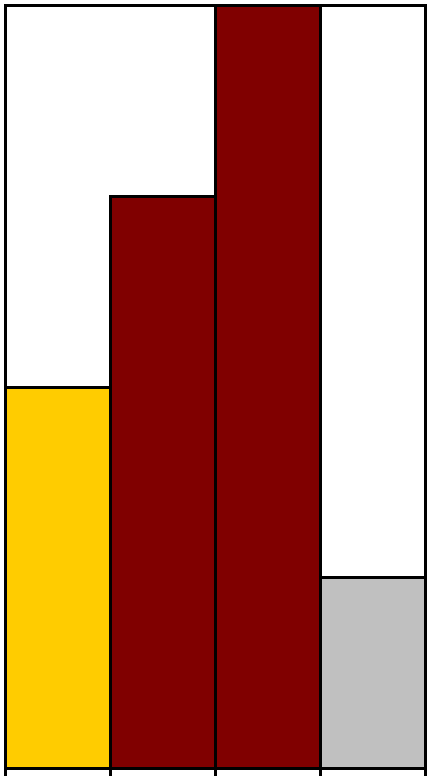
	Base		Load		Load		UnLoad	
Weekly %	60.0%		65.0%		70.0%		62.5%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	22.5%	**1t5**	27.5%	**1t5**	32.5%	**1t5**	25.0%	**1t5**
wu-b	35.0%	**1t5**	40.0%	**1t5**	45.0%	**1t5**	37.5%	**1t5**
wu-c	45.0%	**1t5**	50.0%	**1t5**	55.0%	**1t5**	47.5%	**1t5**
wu-d	52.5%	**1t5**	57.5%	**1t5**	62.5%	**1t5**	55.0%	**1t5**
wA								
wB								
wC	60.0%	**x15**	65.0%	**x12**	70.0%	**x10**	62.5%	**x12**
wD	57.5%	**x15**	62.5%	**x12**	67.5%	**x10**	60.0%	**x12**
wE	55.0%	**x15**	60.0%	**x12**	65.0%	**x10**	57.5%	**x12**
wF	52.5%	**x15**	57.5%	**x12**	62.5%	**x10**	55.0%	**x12**
wG	50.0%	**x15**	55.0%	**x12**	60.0%	**x10**		
wH			52.5%	**x12**	57.5%	**x10**		

STRENGTH ENDURANCE



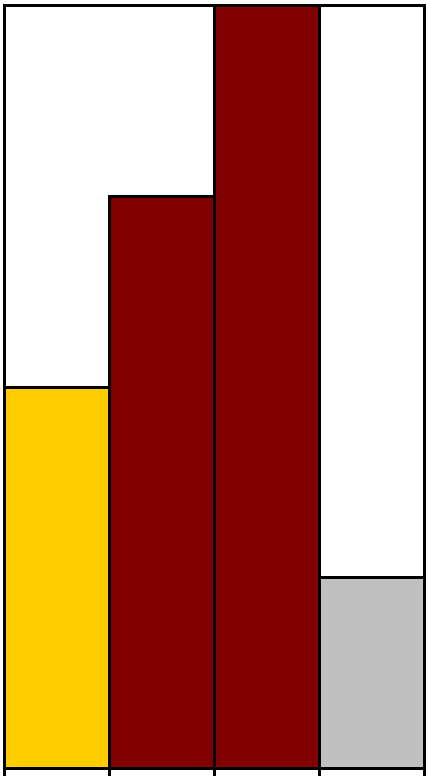
	Base		Load		Load		UnLoad	
Weekly %	62.5%		67.5%		72.5%		65.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	25.0%	**1t5**	30.0%	**1t5**	35.0%	**1t5**	27.5%	**1t5**
wu-b	37.5%	**1t5**	42.5%	**1t5**	47.5%	**1t5**	40.0%	**1t5**
wu-c	47.5%	**1t5**	52.5%	**1t5**	57.5%	**1t5**	50.0%	**1t5**
wu-d	55.0%	**1t5**	60.0%	**1t5**	65.0%	**1t5**	57.5%	**1t5**
wA								
wB								
wC	62.5%	**x6**	67.5%	**x6**	72.5%	**x6**	65.0%	**x3**
wD	60.0%	**x6**	65.0%	**x6**	70.0%	**x6**	62.5%	**x3**
wE	57.5%	**x6**	62.5%	**x6**	67.5%	**x6**	60.0%	**x3**
wF	55.0%	**x6**	60.0%	**x6**	65.0%	**x6**	57.5%	**x3**
wG	52.5%	**x6**	57.5%	**x6**	62.5%	**x6**		
wH			55.0%	**x6**	60.0%	**x6**		

STRENGTH ENDURANCE



	Base		Load		Load		UnLoad	
Weekly %	65.0%		70.0%		75.0%		67.5%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	27.5%	**1t5**	32.5%	**1t5**	37.5%	**1t5**	30.0%	**1t5**
wu-b	40.0%	**1t5**	45.0%	**1t5**	50.0%	**1t5**	42.5%	**1t5**
wu-c	50.0%	**1t5**	55.0%	**1t5**	60.0%	**1t5**	52.5%	**1t5**
wu-d	57.5%	**1t5**	62.5%	**1t5**	67.5%	**1t5**	60.0%	**1t5**
wA								
wB								
wC	65.0%	**x12**	70.0%	**x10**	75.0%	**x8**	67.5%	**x10**
wD	62.5%	**x12**	67.5%	**x10**	72.5%	**x8**	65.0%	**x10**
wE	60.0%	**x12**	65.0%	**x10**	70.0%	**x8**	62.5%	**x10**
wF	57.5%	**x12**	62.5%	**x10**	67.5%	**x8**	60.0%	**x10**
wG	55.0%	**x12**	60.0%	**x10**	65.0%	**x8**		
wH			57.5%	**x10**	62.5%	**x8**		

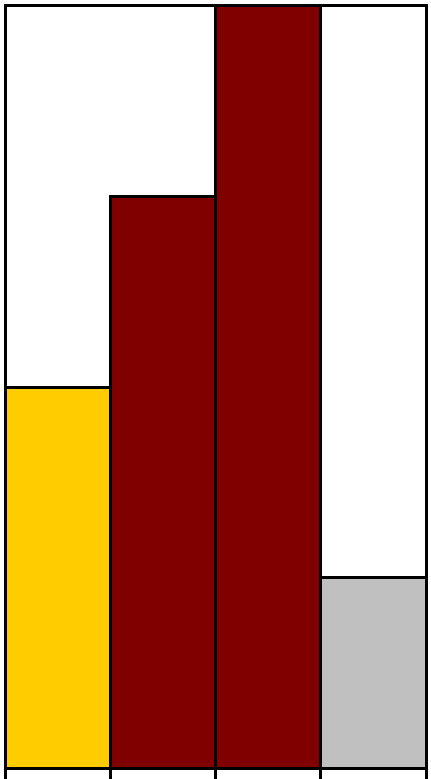
STRENGTH ENDURANCE



	Base		Load		Load		UnLoad	
Weekly %	67.5%		72.5%		77.5%		70.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	30.0%	**1t5**	35.0%	**1t5**	40.0%	**1t5**	32.5%	**1t5**
wu-b	42.5%	**1t5**	47.5%	**1t5**	52.5%	**1t5**	45.0%	**1t5**
wu-c	52.5%	**1t5**	57.5%	**1t5**	62.5%	**1t5**	55.0%	**1t5**
wu-d	60.0%	**1t5**	65.0%	**1t5**	70.0%	**1t5**	62.5%	**1t5**
wA								
wB								
wC	67.5%	**x12**	72.5%	**x10**	77.5%	**x8**	70.0%	**x8**
wD	65.0%	**x12**	70.0%	**x10**	75.0%	**x8**	67.5%	**x8**
wE	62.5%	**x12**	67.5%	**x10**	72.5%	**x8**	65.0%	**x8**
wF	60.0%	**x12**	65.0%	**x10**	70.0%	**x8**	62.5%	**x8**
wG	57.5%	**x12**	62.5%	**x10**	67.5%	**x8**		
wH			60.0%	**x10**	65.0%	**x8**		

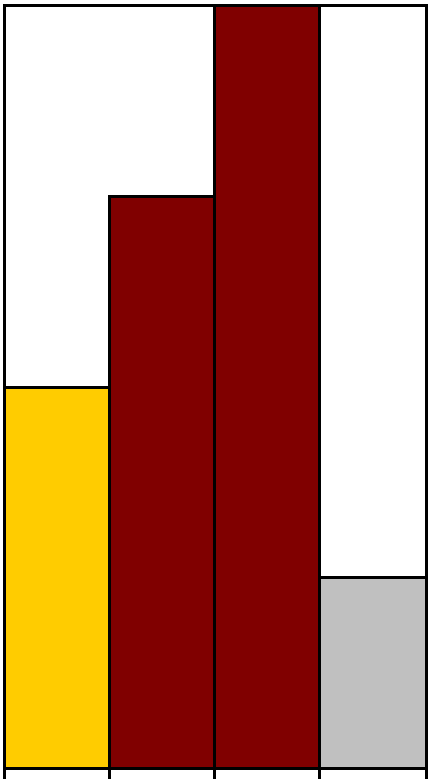
- Developmental Strength 4-week Cycles – Traditional 3 set – Total

3 Set Traditional - 2.5%



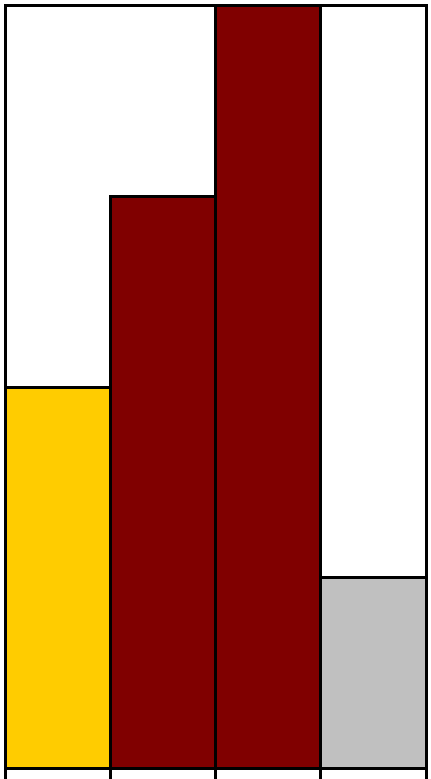
	Base		Load		Load		UnLoad	
Weekly %	75.0%		77.5%		80.0%		75.0%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	22.5%	**1t5**	25.0%	**1t5**	27.5%	**1t5**	22.5%	**1t5**
wu-b	35.0%	**1t5**	37.5%	**1t5**	40.0%	**1t5**	35.0%	**1t5**
wu-c	45.0%	**1t5**	47.5%	**1t5**	50.0%	**1t5**	45.0%	**1t5**
wu-d	52.5%	**1t5**	55.0%	**1t5**	57.5%	**1t5**	52.5%	**1t5**
wA								
wB								
wC	60.0%	**x2**	62.5%	**x2**	65.0%	**x2**	60.0%	**x2**
wD	65.0%	**x2**	67.5%	**x2**	70.0%	**x2**	65.0%	**x2**
wE	70.0%	**x2**	72.5%	**x2**	75.0%	**x2**	70.0%	**x2**
wF	75.0%	**x4**	77.5%	**x4**	80.0%	**x4**	75.0%	**x2**
wG	75.0%	**x4**	77.5%	**x4**	80.0%	**x4**		
wH			77.5%	**x4**	80.0%	**x4**		

3 Set Traditional - 5%



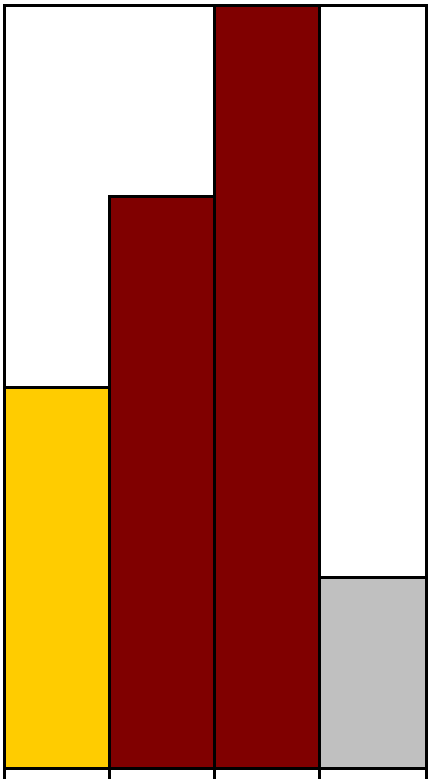
	Base		Load		Load		UnLoad	
Weekly %	70.0%		75.0%		80.0%		72.5%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a			22.5%	**1t5**	27.5%	**1t5**	20.0%	**1t5**
wu-b	30.0%	**1t5**	35.0%	**1t5**	40.0%	**1t5**	32.5%	**1t5**
wu-c	40.0%	**1t5**	45.0%	**1t5**	50.0%	**1t5**	42.5%	**1t5**
wu-d	47.5%	**1t5**	52.5%	**1t5**	57.5%	**1t5**	50.0%	**1t5**
wA								
wB								
wC	55.0%	**x3**	60.0%	**x2**	65.0%	**x2**	57.5%	**x3**
wD	60.0%	**x3**	65.0%	**x2**	70.0%	**x2**	62.5%	**x3**
wE	65.0%	**x3**	70.0%	**x2**	75.0%	**x2**	67.5%	**x3**
wF	70.0%	**x5**	75.0%	**x4**	80.0%	**x4**	72.5%	**x3**
wG	70.0%	**x5**	75.0%	**x4**	80.0%	**x4**		
wH			75.0%	**x4**	80.0%	**x4**		

3 Set Traditional - 2.5%



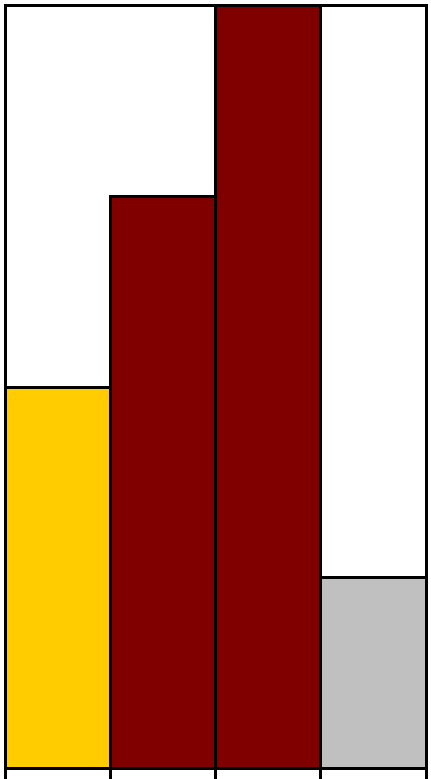
	Base		Load		Load		UnLoad	
Weekly %	77.5%		80.0%		82.5%		77.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	25.0%	**1t5**	27.5%	**1t5**	30.0%	**1t5**	25.0%	**1t5**
wu-b	37.5%	**1t5**	40.0%	**1t5**	42.5%	**1t5**	37.5%	**1t5**
wu-c	47.5%	**1t5**	50.0%	**1t5**	52.5%	**1t5**	47.5%	**1t5**
wu-d	55.0%	**1t5**	57.5%	**1t5**	60.0%	**1t5**	55.0%	**1t5**
wA								
wB								
wC	62.5%	**x2**	65.0%	**x2**	67.5%	**x1**	62.5%	**x2**
wD	67.5%	**x2**	70.0%	**x2**	72.5%	**x1**	67.5%	**x2**
wE	72.5%	**x2**	75.0%	**x2**	77.5%	**x1**	72.5%	**x2**
wF	77.5%	**x4**	80.0%	**x4**	82.5%	**x3**	77.5%	**x2**
wG	77.5%	**x4**	80.0%	**x4**	82.5%	**x3**		
wH			80.0%	**x4**	82.5%	**x3**		

3 Set Traditional - 5%



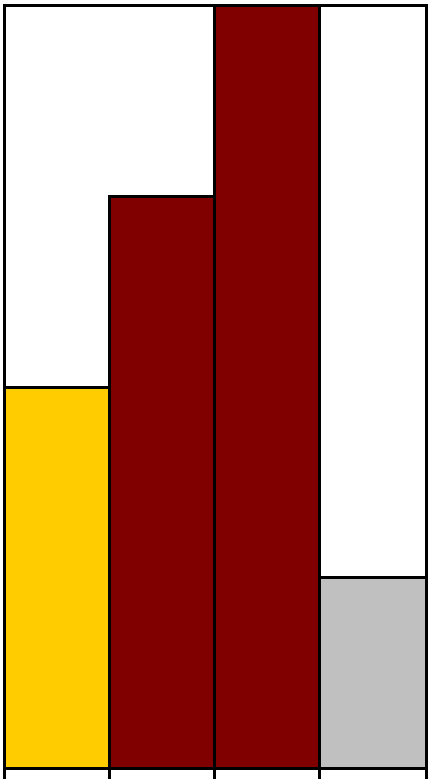
	Base		Load		Load		UnLoad	
Weekly %	72.5%		77.5%		82.5%		75.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	20.0%	**1t5**	25.0%	**1t5**	30.0%	**1t5**	22.5%	**1t5**
wu-b	32.5%	**1t5**	37.5%	**1t5**	42.5%	**1t5**	35.0%	**1t5**
wu-c	42.5%	**1t5**	47.5%	**1t5**	52.5%	**1t5**	45.0%	**1t5**
wu-d	50.0%	**1t5**	55.0%	**1t5**	60.0%	**1t5**	52.5%	**1t5**
wA								
wB								
wC	57.5%	**x3**	62.5%	**x2**	67.5%	**x1**	60.0%	**x2**
wD	62.5%	**x3**	67.5%	**x2**	72.5%	**x1**	65.0%	**x2**
wE	67.5%	**x3**	72.5%	**x2**	77.5%	**x1**	70.0%	**x2**
wF	72.5%	**x5**	77.5%	**x4**	82.5%	**x3**	75.0%	**x2**
wG	72.5%	**x5**	77.5%	**x4**	82.5%	**x3**		
wH			77.5%	**x4**	82.5%	**x3**		

3 Set Traditional - 2.5%



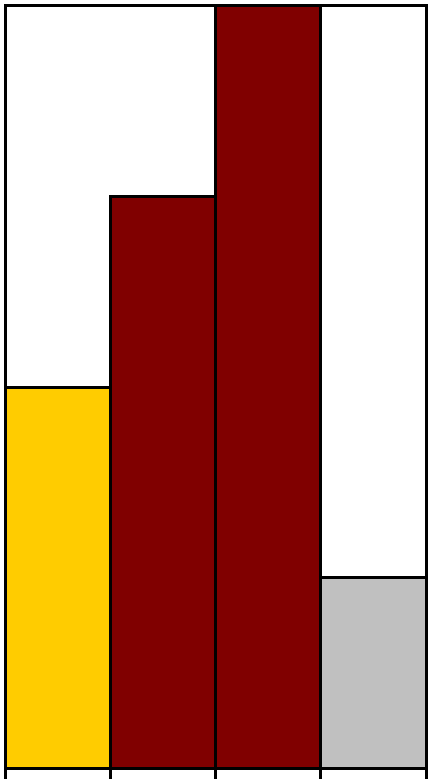
	Base		Load		Load		UnLoad	
Weekly %	80.0%		82.5%		85.0%		80.0%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	27.5%	**1t5**	30.0%	**1t5**	32.5%	**1t5**	27.5%	**1t5**
wu-b	40.0%	**1t5**	42.5%	**1t5**	45.0%	**1t5**	40.0%	**1t5**
wu-c	50.0%	**1t5**	52.5%	**1t5**	55.0%	**1t5**	50.0%	**1t5**
wu-d	57.5%	**1t5**	60.0%	**1t5**	62.5%	**1t5**	57.5%	**1t5**
wA								
wB								
wC	65.0%	**x2**	67.5%	**x1**	70.0%	**x1**	65.0%	**x2**
wD	70.0%	**x2**	72.5%	**x1**	75.0%	**x1**	70.0%	**x2**
wE	75.0%	**x2**	77.5%	**x1**	80.0%	**x1**	75.0%	**x2**
wF	80.0%	**x4**	82.5%	**x3**	85.0%	**x2**	80.0%	**x2**
wG	80.0%	**x4**	82.5%	**x3**	85.0%	**x2**		
wH			82.5%	**x3**	85.0%	**x2**		

3 Set Traditional - 5%



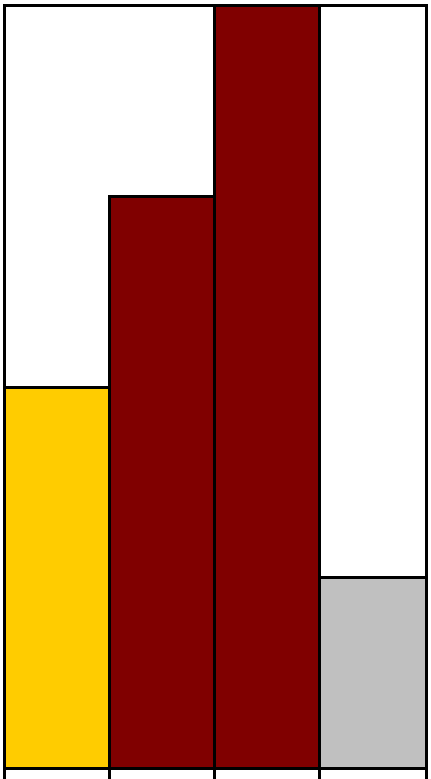
	Base		Load		Load		UnLoad	
Weekly %	75.0%		80.0%		85.0%		77.5%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	22.5%	**1t5**	27.5%	**1t5**	32.5%	**1t5**	25.0%	**1t5**
wu-b	35.0%	**1t5**	40.0%	**1t5**	45.0%	**1t5**	37.5%	**1t5**
wu-c	45.0%	**1t5**	50.0%	**1t5**	55.0%	**1t5**	47.5%	**1t5**
wu-d	52.5%	**1t5**	57.5%	**1t5**	62.5%	**1t5**	55.0%	**1t5**
wA								
wB								
wC	60.0%	**x2**	65.0%	**x2**	70.0%	**x1**	62.5%	**x2**
wD	65.0%	**x2**	70.0%	**x2**	75.0%	**x1**	67.5%	**x2**
wE	70.0%	**x2**	75.0%	**x2**	80.0%	**x1**	72.5%	**x2**
wF	75.0%	**x4**	80.0%	**x4**	85.0%	**x2**	77.5%	**x2**
wG	75.0%	**x4**	80.0%	**x4**	85.0%	**x2**		
wH			80.0%	**x4**	85.0%	**x2**		

3 Set Traditional - 2.5%



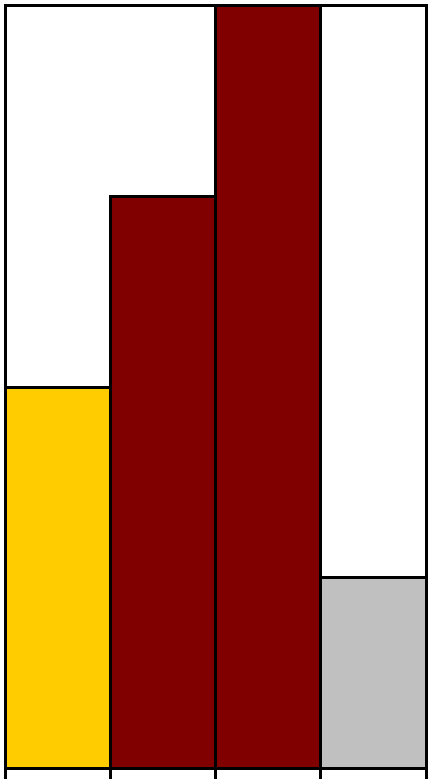
	Base		Load		Load		UnLoad	
Weekly %	82.5%		85.0%		87.5%		82.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	30.0%	**1t5**	32.5%	**1t5**	35.0%	**1t5**	30.0%	**1t5**
wu-b	42.5%	**1t5**	45.0%	**1t5**	47.5%	**1t5**	42.5%	**1t5**
wu-c	52.5%	**1t5**	55.0%	**1t5**	57.5%	**1t5**	52.5%	**1t5**
wu-d	60.0%	**1t5**	62.5%	**1t5**	65.0%	**1t5**	60.0%	**1t5**
wA								
wB								
wC	67.5%	**x1**	70.0%	**x1**	72.5%	**x1**	67.5%	**x2**
wD	72.5%	**x1**	75.0%	**x1**	77.5%	**x1**	72.5%	**x2**
wE	77.5%	**x1**	80.0%	**x1**	82.5%	**x1**	77.5%	**x2**
wF	82.5%	**x3**	85.0%	**x2**	87.5%	**x2**	82.5%	**x2**
wG	82.5%	**x3**	85.0%	**x2**	87.5%	**x2**		
wH			85.0%	**x2**	87.5%	**x2**		

3 Set Traditional - 5%



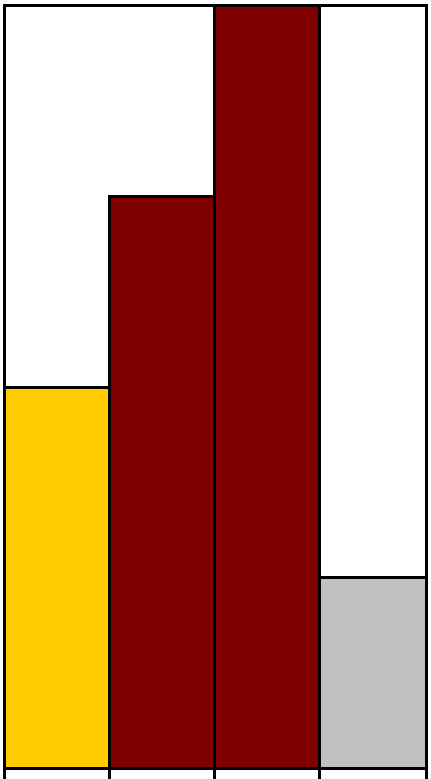
	Base		Load		Load		UnLoad	
Weekly %	77.5%		82.5%		87.5%		80.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	25.0%	**1t5**	30.0%	**1t5**	35.0%	**1t5**	27.5%	**1t5**
wu-b	37.5%	**1t5**	42.5%	**1t5**	47.5%	**1t5**	40.0%	**1t5**
wu-c	47.5%	**1t5**	52.5%	**1t5**	57.5%	**1t5**	50.0%	**1t5**
wu-d	55.0%	**1t5**	60.0%	**1t5**	65.0%	**1t5**	57.5%	**1t5**
wA								
wB								
wC	62.5%	**x2**	67.5%	**x1**	72.5%	**x1**	65.0%	**x2**
wD	67.5%	**x2**	72.5%	**x1**	77.5%	**x1**	70.0%	**x2**
wE	72.5%	**x2**	77.5%	**x1**	82.5%	**x1**	75.0%	**x2**
wF	77.5%	**x4**	82.5%	**x3**	87.5%	**x2**	80.0%	**x2**
wG	77.5%	**x4**	82.5%	**x3**	87.5%	**x2**		
wH			82.5%	**x3**	87.5%	**x2**		

3 Set Traditional - 2.5%



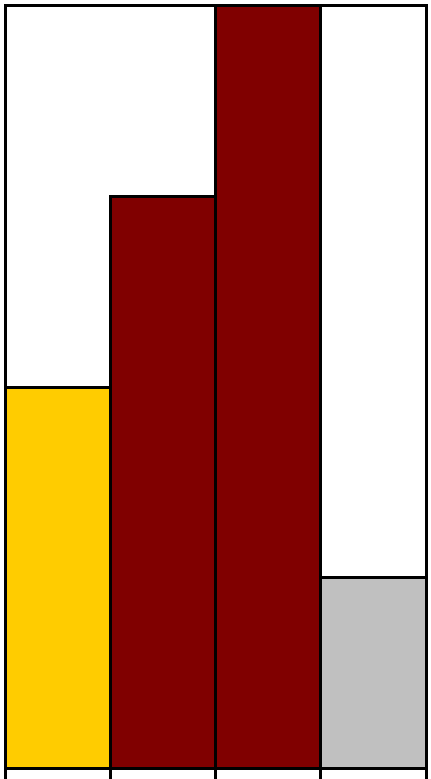
	Base		Load		Load		UnLoad	
Weekly %	85.0%		87.5%		90.0%		85.0%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	32.5%	**1t5**	35.0%	**1t5**	37.5%	**1t5**	32.5%	**1t5**
wu-b	45.0%	**1t5**	47.5%	**1t5**	50.0%	**1t5**	45.0%	**1t5**
wu-c	55.0%	**1t5**	57.5%	**1t5**	60.0%	**1t5**	55.0%	**1t5**
wu-d	62.5%	**1t5**	65.0%	**1t5**	67.5%	**1t5**	62.5%	**1t5**
wA								
wB								
wC	70.0%	**x1**	72.5%	**x1**	75.0%	**x1**	70.0%	**x1**
wD	75.0%	**x1**	77.5%	**x1**	80.0%	**x1**	75.0%	**x1**
wE	80.0%	**x1**	82.5%	**x1**	85.0%	**x1**	80.0%	**x1**
wF	85.0%	**x2**	87.5%	**x2**	90.0%	**x1**	85.0%	**x1**
wG	85.0%	**x2**	87.5%	**x2**	90.0%	**x1**		
wH			87.5%	**x2**	90.0%	**x1**		

3 Set Traditional - 5%



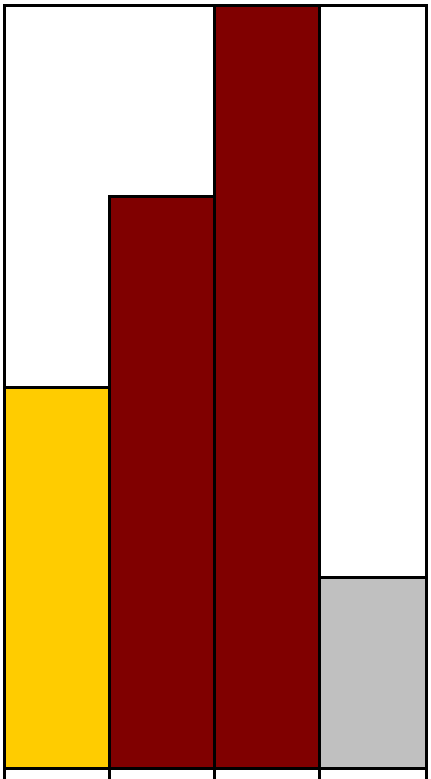
	Base		Load		Load		UnLoad	
Weekly %	80.0%		85.0%		90.0%		82.5%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	27.5%	**1t5**	32.5%	**1t5**	37.5%	**1t5**	30.0%	**1t5**
wu-b	40.0%	**1t5**	45.0%	**1t5**	50.0%	**1t5**	42.5%	**1t5**
wu-c	50.0%	**1t5**	55.0%	**1t5**	60.0%	**1t5**	52.5%	**1t5**
wu-d	57.5%	**1t5**	62.5%	**1t5**	67.5%	**1t5**	60.0%	**1t5**
wA								
wB								
wC	65.0%	**x2**	70.0%	**x1**	75.0%	**x1**	67.5%	**x2**
wD	70.0%	**x2**	75.0%	**x1**	80.0%	**x1**	72.5%	**x2**
wE	75.0%	**x2**	80.0%	**x1**	85.0%	**x1**	77.5%	**x2**
wF	80.0%	**x4**	85.0%	**x2**	90.0%	**x1**	82.5%	**x2**
wG	80.0%	**x4**	85.0%	**x2**	90.0%	**x1**		
wH			85.0%	**x2**	90.0%	**x1**		

3 Set Traditional - 2.5%



	Base		Load		Load		UnLoad	
Weekly %	87.5%		90.0%		92.5%		87.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	35.0%	**1t5**	37.5%	**1t5**	40.0%	**1t5**	35.0%	**1t5**
wu-b	47.5%	**1t5**	50.0%	**1t5**	52.5%	**1t5**	47.5%	**1t5**
wu-c	57.5%	**1t5**	60.0%	**1t5**	62.5%	**1t5**	57.5%	**1t5**
wu-d	65.0%	**1t5**	67.5%	**1t5**	70.0%	**1t5**	65.0%	**1t5**
wA								
wB								
wC	72.5%	**x1**	75.0%	**x1**	77.5%	**x1**	72.5%	**x1**
wD	77.5%	**x1**	80.0%	**x1**	82.5%	**x1**	77.5%	**x1**
wE	82.5%	**x1**	85.0%	**x1**	87.5%	**x1**	82.5%	**x1**
wF	87.5%	**x2**	90.0%	**x1**	92.5%	**x1**	87.5%	**x1**
wG	87.5%	**x2**	90.0%	**x1**	92.5%	**x1**		
wH			90.0%	**x1**	92.5%	**x1**		

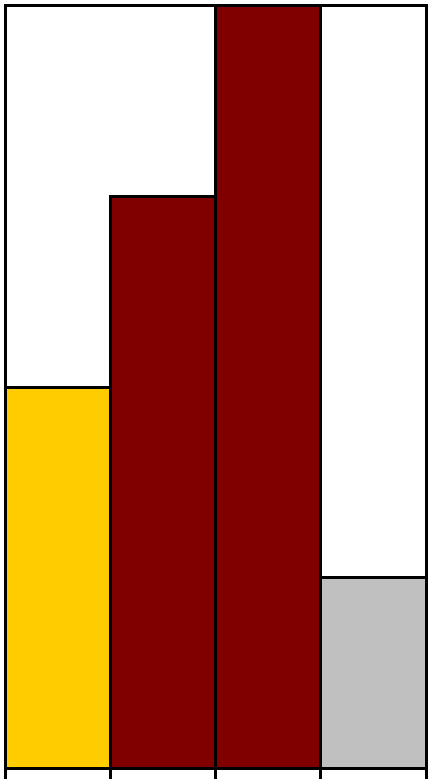
3 Set Traditional - 5%



	Base		Load		Load		UnLoad	
Weekly %	80.0%		87.5%		92.5%		85.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	27.5%	**1t5**	35.0%	**1t5**	40.0%	**1t5**	32.5%	**1t5**
wu-b	40.0%	**1t5**	47.5%	**1t5**	52.5%	**1t5**	45.0%	**1t5**
wu-c	50.0%	**1t5**	57.5%	**1t5**	62.5%	**1t5**	55.0%	**1t5**
wu-d	57.5%	**1t5**	65.0%	**1t5**	70.0%	**1t5**	62.5%	**1t5**
wA								
wB								
wC	65.0%	**x2**	72.5%	**x1**	77.5%	**x1**	70.0%	**x1**
wD	70.0%	**x2**	77.5%	**x1**	82.5%	**x1**	75.0%	**x1**
wE	75.0%	**x2**	82.5%	**x1**	87.5%	**x1**	80.0%	**x1**
wF	80.0%	**x4**	87.5%	**x2**	92.5%	**x1**	85.0%	**x1**
wG	80.0%	**x4**	87.5%	**x2**	92.5%	**x1**		
wH			87.5%	**x2**	92.5%	**x1**		

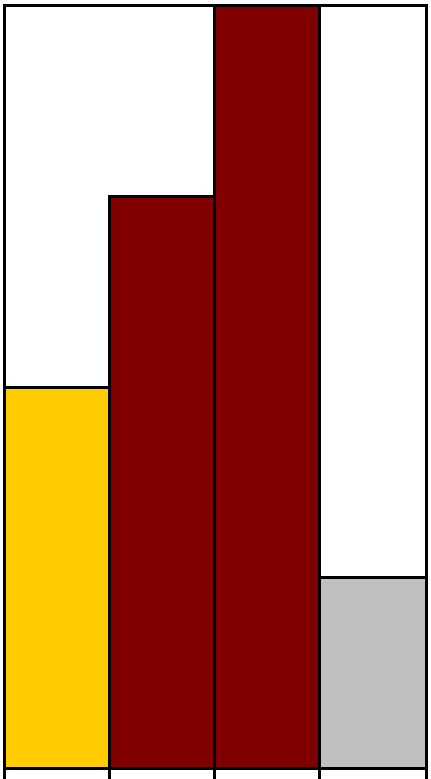
- Developmental Strength 4-week Cycles – Traditional 3 set – Lower, Upper

3 Set Traditional - 2.5%



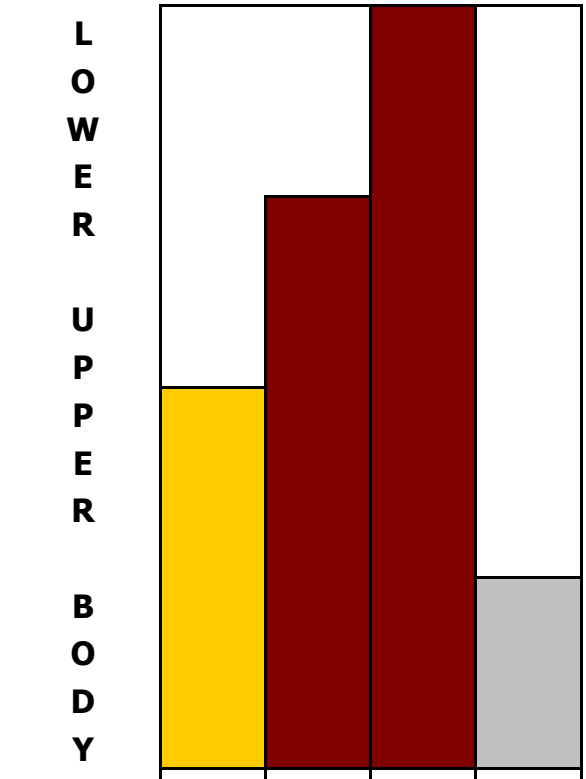
	Base	Load	Load	UnLoad
Weekly %	75.0%	77.5%	80.0%	75.0%
differential	[-] 5%	[-] 2.5%	Top %	[-] 5%
WORK SETS	5 sets	6 sets	6 sets	4 sets
TOP SETS	2 sets	3 sets	3 sets	1 set
Weeks #	WK 1	WK 2	WK 3	WK 4
wu-a	22.5% 1t5	25.0% 1t5	27.5% 1t5	22.5% 1t5
wu-b	35.0% 1t5	37.5% 1t5	40.0% 1t5	35.0% 1t5
wu-c	45.0% 1t5	47.5% 1t5	50.0% 1t5	45.0% 1t5
wu-d	52.5% 1t5	55.0% 1t5	57.5% 1t5	52.5% 1t5
wA				
wB				
wC	60.0% x4	62.5% x4	65.0% x3	60.0% x4
wD	65.0% x4	67.5% x4	70.0% x3	65.0% x4
wE	70.0% x4	72.5% x4	75.0% x3	70.0% x4
wF	75.0% x7	77.5% x7	80.0% x6	75.0% x4
wG	75.0% x7	77.5% x7	80.0% x6	
wH		77.5% x7	80.0% x6	

3 Set Traditional - 5%



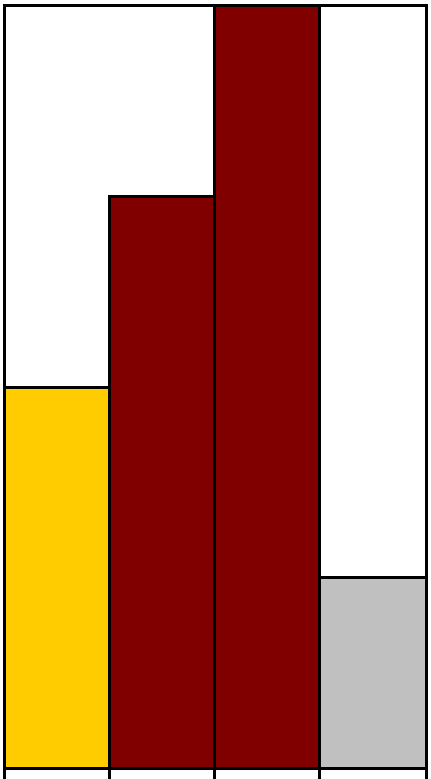
	Base	Load	Load	UnLoad
Weekly %	70.0%	75.0%	80.0%	72.5%
differential	[-] 10%	[-] 5%	Top %	[-] 7.5%
WORK SETS	5 sets	6 sets	6 sets	4 sets
TOP SETS	2 sets	3 sets	3 sets	1 set
Weeks #	WK 1	WK 2	WK 3	WK 4
wu-a		22.5% 1t5	27.5% 1t5	20.0% 1t5
wu-b	30.0% 1t5	35.0% 1t5	40.0% 1t5	32.5% 1t5
wu-c	40.0% 1t5	45.0% 1t5	50.0% 1t5	42.5% 1t5
wu-d	47.5% 1t5	52.5% 1t5	57.5% 1t5	50.0% 1t5
wA				
wB				
wC	55.0% x5	60.0% x4	65.0% x3	57.5% x5
wD	60.0% x5	65.0% x4	70.0% x3	62.5% x5
wE	65.0% x5	70.0% x4	75.0% x3	67.5% x5
wF	70.0% x10	75.0% x7	80.0% x6	72.5% x5
wG	70.0% x10	75.0% x7	80.0% x6	
wH		75.0% x7	80.0% x6	

3 Set Traditional - 2.5%



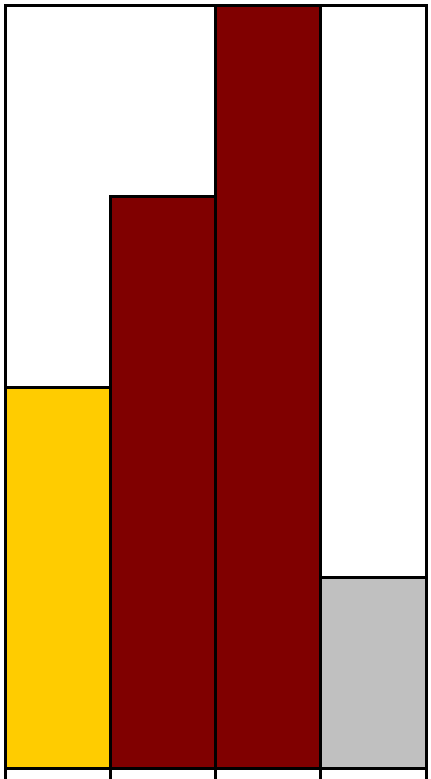
	Base		Load		Load		UnLoad	
Weekly %	77.5%		80.0%		82.5%		77.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	25.0%	**1t5**	27.5%	**1t5**	30.0%	**1t5**	25.0%	**1t5**
wu-b	37.5%	**1t5**	40.0%	**1t5**	42.5%	**1t5**	37.5%	**1t5**
wu-c	47.5%	**1t5**	50.0%	**1t5**	52.5%	**1t5**	47.5%	**1t5**
wu-d	55.0%	**1t5**	57.5%	**1t5**	60.0%	**1t5**	55.0%	**1t5**
wA								
wB								
wC	62.5%	**x4**	65.0%	**x3**	67.5%	**x3**	62.5%	**x4**
wD	67.5%	**x4**	70.0%	**x3**	72.5%	**x3**	67.5%	**x4**
wE	72.5%	**x4**	75.0%	**x3**	77.5%	**x3**	72.5%	**x4**
wF	77.5%	**x7**	80.0%	**x6**	82.5%	**x5**	77.5%	**x4**
wG	77.5%	**x7**	80.0%	**x6**	82.5%	**x5**		
wH			80.0%	**x6**	82.5%	**x5**		

3 Set Traditional - 5%



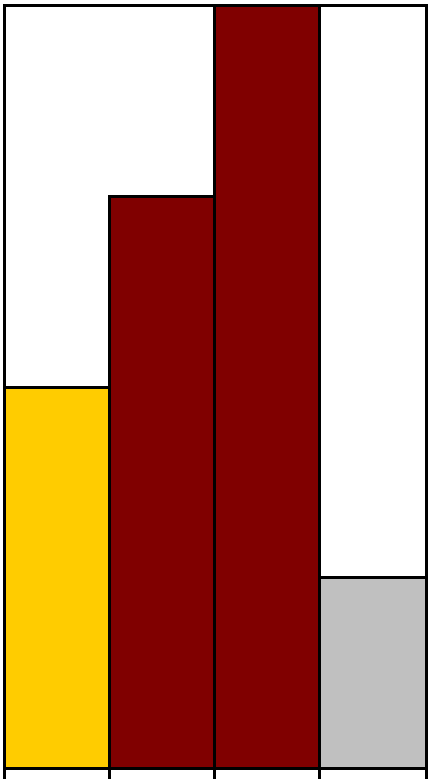
	Base		Load		Load		UnLoad	
Weekly %	72.5%		77.5%		82.5%		75.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	20.0%	**1t5**	25.0%	**1t5**	30.0%	**1t5**	22.5%	**1t5**
wu-b	32.5%	**1t5**	37.5%	**1t5**	42.5%	**1t5**	35.0%	**1t5**
wu-c	42.5%	**1t5**	47.5%	**1t5**	52.5%	**1t5**	45.0%	**1t5**
wu-d	50.0%	**1t5**	55.0%	**1t5**	60.0%	**1t5**	52.5%	**1t5**
wA								
wB								
wC	57.5%	**x5**	62.5%	**x4**	67.5%	**x3**	60.0%	**x4**
wD	62.5%	**x5**	67.5%	**x4**	72.5%	**x3**	65.0%	**x4**
wE	67.5%	**x5**	72.5%	**x4**	77.5%	**x3**	70.0%	**x4**
wF	72.5%	**x10**	77.5%	**x7**	82.5%	**x5**	75.0%	**x4**
wG	72.5%	**x10**	77.5%	**x7**	82.5%	**x5**		
wH			77.5%	**x7**	82.5%	**x5**		

3 Set Traditional - 2.5%



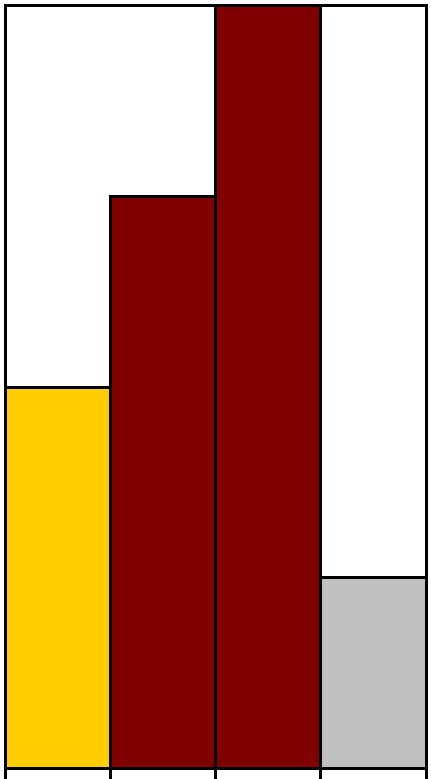
	Base		Load		Load		UnLoad	
Weekly %	80.0%		82.5%		85.0%		80.0%	
differential	[-] 5%		[-] 2.5%		Top %		[-] 5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	27.5%	1t5	30.0%	1t5	32.5%	1t5	27.5%	1t5
wu-b	40.0%	1t5	42.5%	1t5	45.0%	1t5	40.0%	1t5
wu-c	50.0%	1t5	52.5%	1t5	55.0%	1t5	50.0%	1t5
wu-d	57.5%	1t5	60.0%	1t5	62.5%	1t5	57.5%	1t5
wA								
wB								
wC	65.0%	x3	67.5%	x3	70.0%	x2	65.0%	x3
wD	70.0%	x3	72.5%	x3	75.0%	x2	70.0%	x3
wE	75.0%	x3	77.5%	x3	80.0%	x2	75.0%	x3
wF	80.0%	x6	82.5%	x5	85.0%	x4	80.0%	x3
wG	80.0%	x6	82.5%	x5	85.0%	x4		
wH			82.5%	x5	85.0%	x4		

3 Set Traditional - 5%



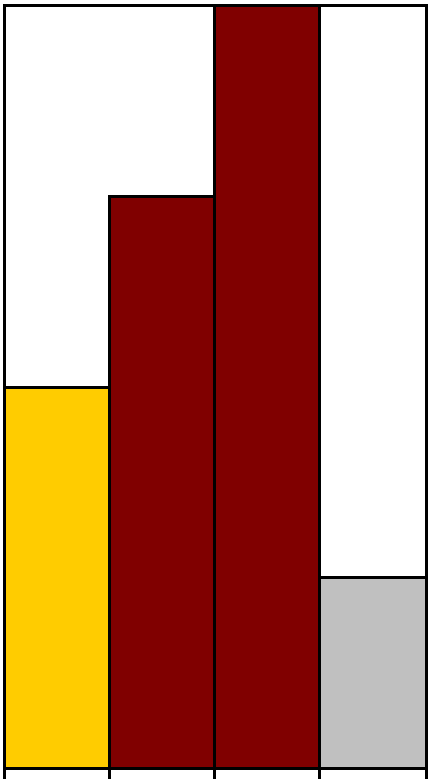
	Base		Load		Load		UnLoad	
Weekly %	75.0%		80.0%		85.0%		77.5%	
differential	[-] 10%		[-] 5%		Top %		[-] 7.5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	22.5%	1t5	27.5%	1t5	32.5%	1t5	25.0%	1t5
wu-b	35.0%	1t5	40.0%	1t5	45.0%	1t5	37.5%	1t5
wu-c	45.0%	1t5	50.0%	1t5	55.0%	1t5	47.5%	1t5
wu-d	52.5%	1t5	57.5%	1t5	62.5%	1t5	55.0%	1t5
wA								
wB								
wC	60.0%	x4	65.0%	x3	70.0%	x2	62.5%	x4
wD	65.0%	x4	70.0%	x3	75.0%	x2	67.5%	x4
wE	70.0%	x4	75.0%	x3	80.0%	x2	72.5%	x4
wF	75.0%	x7	80.0%	x6	85.0%	x4	77.5%	x4
wG	75.0%	x7	80.0%	x6	85.0%	x4		
wH			80.0%	x6	85.0%	x4		

3 Set Traditional - 2.5%



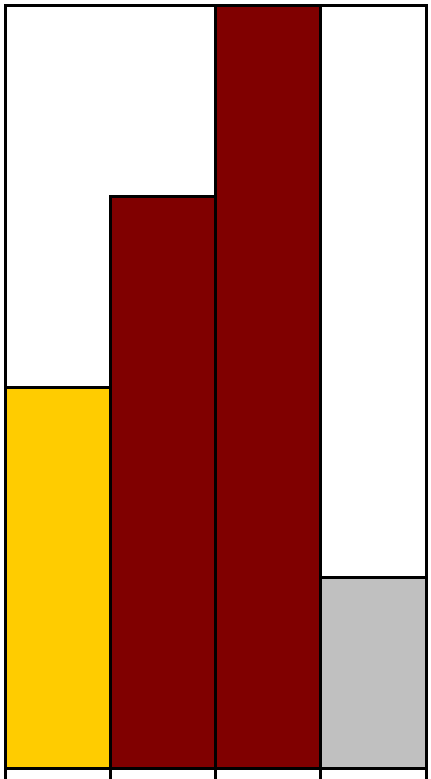
	Base		Load		Load		UnLoad	
Weekly %	82.5%		85.0%		87.5%		82.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	30.0%	**1t5**	32.5%	**1t5**	35.0%	**1t5**	30.0%	**1t5**
wu-b	42.5%	**1t5**	45.0%	**1t5**	47.5%	**1t5**	42.5%	**1t5**
wu-c	52.5%	**1t5**	55.0%	**1t5**	57.5%	**1t5**	52.5%	**1t5**
wu-d	60.0%	**1t5**	62.5%	**1t5**	65.0%	**1t5**	60.0%	**1t5**
wA								
wB								
wC	67.5%	**x3**	70.0%	**x2**	72.5%	**x2**	67.5%	**x3**
wD	72.5%	**x3**	75.0%	**x2**	77.5%	**x2**	72.5%	**x3**
wE	77.5%	**x3**	80.0%	**x2**	82.5%	**x2**	77.5%	**x3**
wF	82.5%	**x5**	85.0%	**x4**	87.5%	**x4**	82.5%	**x3**
wG	82.5%	**x5**	85.0%	**x4**	87.5%	**x4**		
wH			85.0%	**x4**	87.5%	**x4**		

3 Set Traditional - 5%



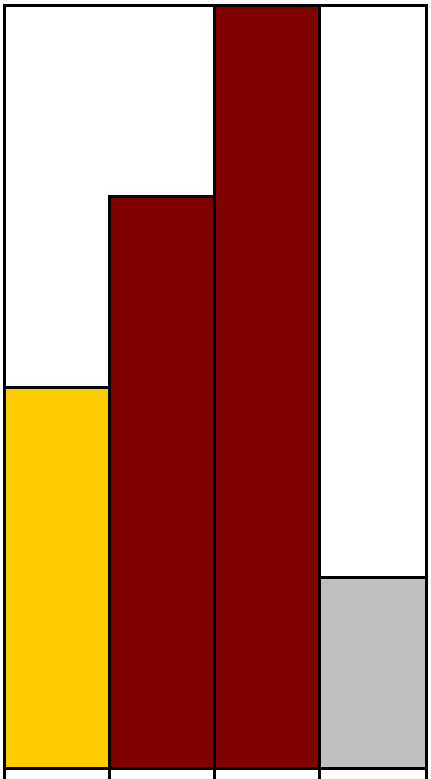
	Base		Load		Load		UnLoad	
Weekly %	77.5%		82.5%		87.5%		80.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	25.0%	**1t5**	30.0%	**1t5**	35.0%	**1t5**	27.5%	**1t5**
wu-b	37.5%	**1t5**	42.5%	**1t5**	47.5%	**1t5**	40.0%	**1t5**
wu-c	47.5%	**1t5**	52.5%	**1t5**	57.5%	**1t5**	50.0%	**1t5**
wu-d	55.0%	**1t5**	60.0%	**1t5**	65.0%	**1t5**	57.5%	**1t5**
wA								
wB								
wC	62.5%	**x4**	67.5%	**x3**	72.5%	**x2**	65.0%	**x3**
wD	67.5%	**x4**	72.5%	**x3**	77.5%	**x2**	70.0%	**x3**
wE	72.5%	**x4**	77.5%	**x3**	82.5%	**x2**	75.0%	**x3**
wF	77.5%	**x7**	82.5%	**x5**	87.5%	**x4**	80.0%	**x3**
wG	77.5%	**x7**	82.5%	**x5**	87.5%	**x4**		
wH			82.5%	**x5**	87.5%	**x4**		

3 Set Traditional - 2.5%



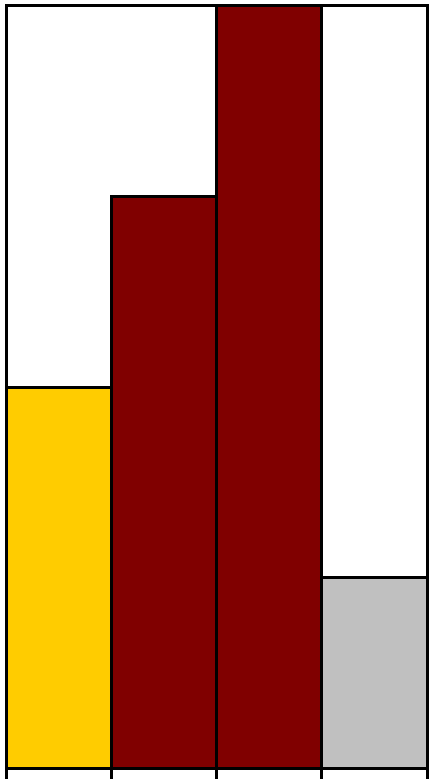
	Base	Load	Load	UnLoad
Weekly %	85.0%	87.5%	90.0%	85.0%
differential	[-] 5%	[-] 2.5%	Top %	[-] 5%
WORK SETS	5 sets	6 sets	6 sets	4 sets
TOP SETS	2 sets	3 sets	3 sets	1 set
Weeks #	WK 1	WK 2	WK 3	WK 4
wu-a	32.5% 1t5	35.0% 1t5	37.5% 1t5	32.5% 1t5
wu-b	45.0% 1t5	47.5% 1t5	50.0% 1t5	45.0% 1t5
wu-c	55.0% 1t5	57.5% 1t5	60.0% 1t5	55.0% 1t5
wu-d	62.5% 1t5	65.0% 1t5	67.5% 1t5	62.5% 1t5
wA				
wB				
wC	70.0% x2	72.5% x2	75.0% x1	70.0% x2
wD	75.0% x2	77.5% x2	80.0% x1	75.0% x2
wE	80.0% x2	82.5% x2	85.0% x1	80.0% x2
wF	85.0% x4	87.5% x4	90.0% x3	85.0% x2
wG	85.0% x4	87.5% x4	90.0% x3	
wH		87.5% x4	90.0% x3	

3 Set Traditional - 5%



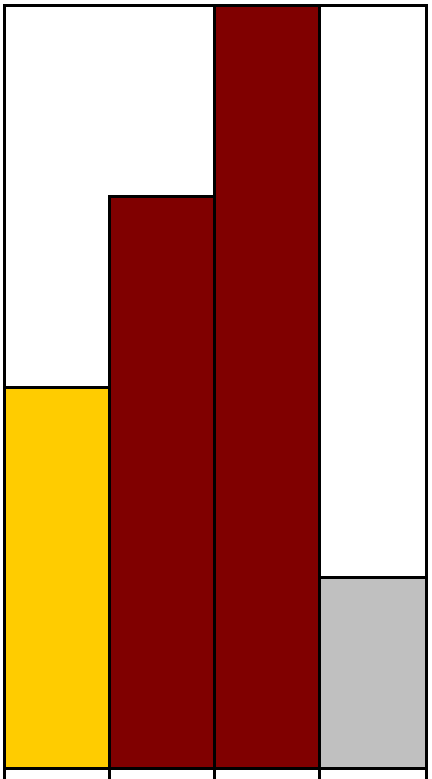
	Base	Load	Load	UnLoad
Weekly %	80.0%	85.0%	90.0%	82.5%
differential	[-] 10%	[-] 5%	Top %	[-] 7.5%
WORK SETS	5 sets	6 sets	6 sets	4 sets
TOP SETS	2 sets	3 sets	3 sets	1 set
Weeks #	WK 1	WK 2	WK 3	WK 4
wu-a	27.5% 1t5	32.5% 1t5	37.5% 1t5	30.0% 1t5
wu-b	40.0% 1t5	45.0% 1t5	50.0% 1t5	42.5% 1t5
wu-c	50.0% 1t5	55.0% 1t5	60.0% 1t5	52.5% 1t5
wu-d	57.5% 1t5	62.5% 1t5	67.5% 1t5	60.0% 1t5
wA				
wB				
wC	65.0% x3	70.0% x2	75.0% x1	67.5% x3
wD	70.0% x3	75.0% x2	80.0% x1	72.5% x3
wE	75.0% x3	80.0% x2	85.0% x1	77.5% x3
wF	80.0% x6	85.0% x4	90.0% x3	82.5% x3
wG	80.0% x6	85.0% x4	90.0% x3	
wH		85.0% x4	90.0% x3	

3 Set Traditional - 2.5%



	Base		Load		Load		UnLoad	
Weekly %	87.5%		90.0%		92.5%		87.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	35.0%	**1t5**	37.5%	**1t5**	40.0%	**1t5**	35.0%	**1t5**
wu-b	47.5%	**1t5**	50.0%	**1t5**	52.5%	**1t5**	47.5%	**1t5**
wu-c	57.5%	**1t5**	60.0%	**1t5**	62.5%	**1t5**	57.5%	**1t5**
wu-d	65.0%	**1t5**	67.5%	**1t5**	70.0%	**1t5**	65.0%	**1t5**
wA								
wB								
wC	72.5%	**x2**	75.0%	**x1**	77.5%	**x1**	72.5%	**x2**
wD	77.5%	**x2**	80.0%	**x1**	82.5%	**x1**	77.5%	**x2**
wE	82.5%	**x2**	85.0%	**x1**	87.5%	**x1**	82.5%	**x2**
wF	87.5%	**x4**	90.0%	**x3**	92.5%	**x3**	87.5%	**x2**
wG	87.5%	**x4**	90.0%	**x3**	92.5%	**x3**		
wH			90.0%	**x3**	92.5%	**x3**		

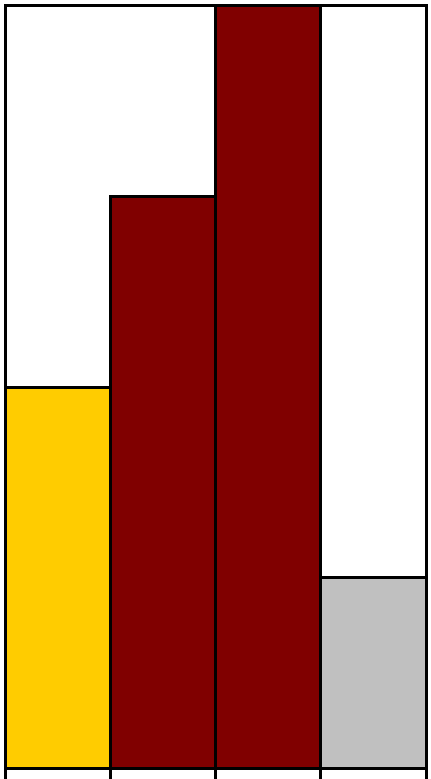
3 Set Traditional - 5%



	Base		Load		Load		UnLoad	
Weekly %	80.0%		87.5%		92.5%		85.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	2 sets		3 sets		3 sets		1 set	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	27.5%	**1t5**	35.0%	**1t5**	40.0%	**1t5**	32.5%	**1t5**
wu-b	40.0%	**1t5**	47.5%	**1t5**	52.5%	**1t5**	45.0%	**1t5**
wu-c	50.0%	**1t5**	57.5%	**1t5**	62.5%	**1t5**	55.0%	**1t5**
wu-d	57.5%	**1t5**	65.0%	**1t5**	70.0%	**1t5**	62.5%	**1t5**
wA								
wB								
wC	65.0%	**x3**	72.5%	**x2**	77.5%	**x1**	70.0%	**x2**
wD	70.0%	**x3**	77.5%	**x2**	82.5%	**x1**	75.0%	**x2**
wE	75.0%	**x3**	82.5%	**x2**	87.5%	**x1**	80.0%	**x2**
wF	80.0%	**x6**	87.5%	**x4**	92.5%	**x3**	85.0%	**x2**
wG	80.0%	**x6**	87.5%	**x4**	92.5%	**x3**		
wH			87.5%	**x4**	92.5%	**x3**		

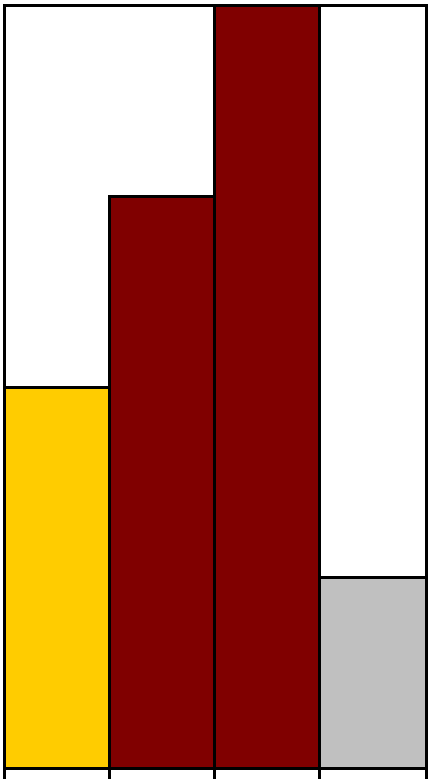
- Developmental Strength 4-week Cycles – Traditional 6 set – Total

6 Set Traditional - 2.5%



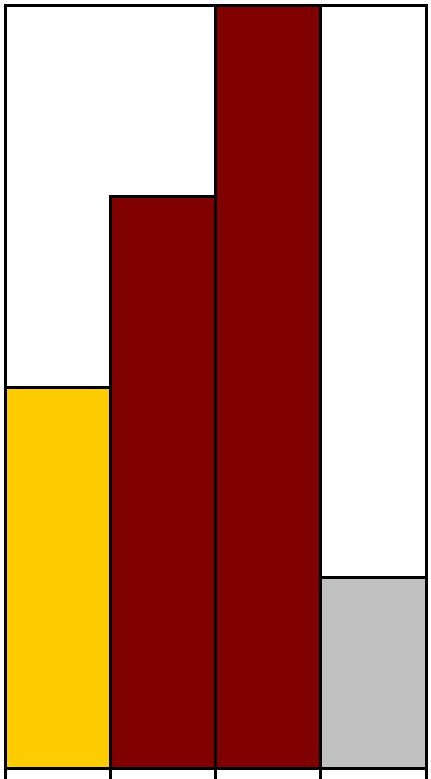
	Base		Load		Load		UnLoad	
Weekly %	75.0%		77.5%		80.0%		75.0%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	37.5%	**1t5**	40.0%	**1t5**	42.5%	**1t5**	37.5%	**1t5**
wu-b	50.0%	**1t5**	52.5%	**1t5**	55.0%	**1t5**	50.0%	**1t5**
wu-c	60.0%	**1t5**	62.5%	**1t5**	65.0%	**1t5**	60.0%	**1t5**
wu-d	67.5%	**1t5**	70.0%	**1t5**	72.5%	**1t5**	67.5%	**1t5**
wA								
wB								
wC	75.0%	**x4**	77.5%	**x4**	80.0%	**x3**	75.0%	**x2**
wD	75.0%	**x4**	77.5%	**x4**	80.0%	**x3**	75.0%	**x2**
wE	75.0%	**x4**	77.5%	**x4**	80.0%	**x3**	75.0%	**x2**
wF	75.0%	**x4**	77.5%	**x4**	80.0%	**x3**	75.0%	**x2**
wG	75.0%	**x4**	77.5%	**x4**	80.0%	**x3**		
wH			77.5%	**x4**	80.0%	**x3**		

6 Set Traditional - 5%



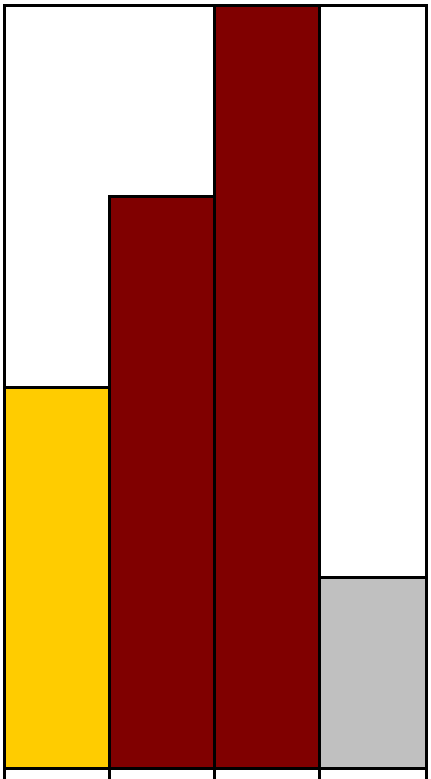
	Base		Load		Load		UnLoad	
Weekly %	70.0%		75.0%		80.0%		72.5%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	32.5%	**1t5**	37.5%	**1t5**	42.5%	**1t5**	35.0%	**1t5**
wu-b	45.0%	**1t5**	50.0%	**1t5**	55.0%	**1t5**	47.5%	**1t5**
wu-c	55.0%	**1t5**	60.0%	**1t5**	65.0%	**1t5**	57.5%	**1t5**
wu-d	62.5%	**1t5**	67.5%	**1t5**	72.5%	**1t5**	65.0%	**1t5**
wA								
wB								
wC	70.0%	**x5**	75.0%	**x4**	80.0%	**x3**	72.5%	**x2**
wD	70.0%	**x5**	75.0%	**x4**	80.0%	**x3**	72.5%	**x2**
wE	70.0%	**x5**	75.0%	**x4**	80.0%	**x3**	72.5%	**x2**
wF	70.0%	**x5**	75.0%	**x4**	80.0%	**x3**	72.5%	**x2**
wG	70.0%	**x5**	75.0%	**x4**	80.0%	**x3**		
wH			75.0%	**x4**	80.0%	**x3**		

6 Set Traditional - 2.5%



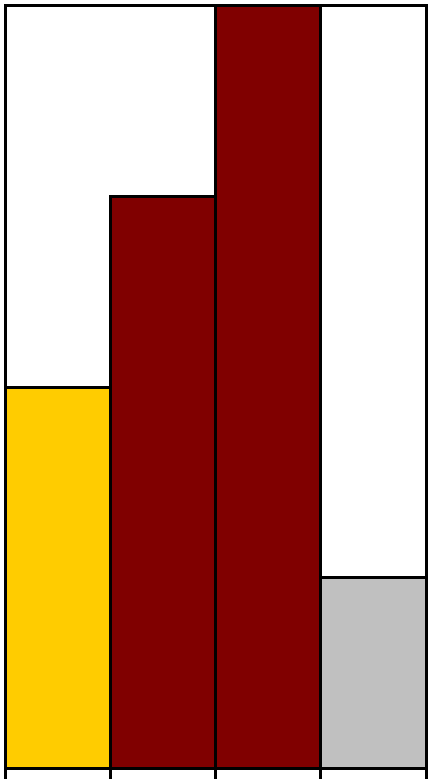
	Base		Load		Load		UnLoad	
Weekly %	77.5%		80.0%		82.5%		77.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	40.0%	**1t5**	42.5%	**1t5**	45.0%	**1t5**	40.0%	**1t5**
wu-b	52.5%	**1t5**	55.0%	**1t5**	57.5%	**1t5**	52.5%	**1t5**
wu-c	62.5%	**1t5**	65.0%	**1t5**	67.5%	**1t5**	62.5%	**1t5**
wu-d	70.0%	**1t5**	72.5%	**1t5**	75.0%	**1t5**	70.0%	**1t5**
wA								
wB								
wC	77.5%	**x4**	80.0%	**x3**	82.5%	**x3**	77.5%	**x2**
wD	77.5%	**x4**	80.0%	**x3**	82.5%	**x3**	77.5%	**x2**
wE	77.5%	**x4**	80.0%	**x3**	82.5%	**x3**	77.5%	**x2**
wF	77.5%	**x4**	80.0%	**x3**	82.5%	**x3**	77.5%	**x2**
wG	77.5%	**x4**	80.0%	**x3**	82.5%	**x3**		
wH			80.0%	**x3**	82.5%	**x3**		

6 Set Traditional - 5%



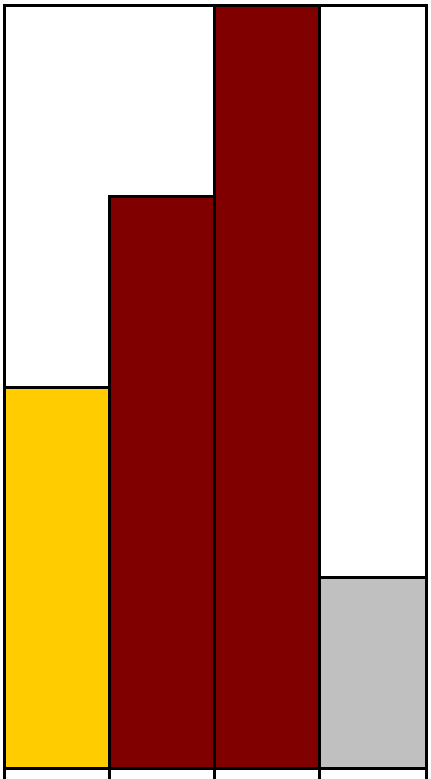
	Base		Load		Load		UnLoad	
Weekly %	72.5%		77.5%		82.5%		75.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	35.0%	**1t5**	40.0%	**1t5**	45.0%	**1t5**	37.5%	**1t5**
wu-b	47.5%	**1t5**	52.5%	**1t5**	57.5%	**1t5**	50.0%	**1t5**
wu-c	57.5%	**1t5**	62.5%	**1t5**	67.5%	**1t5**	60.0%	**1t5**
wu-d	65.0%	**1t5**	70.0%	**1t5**	75.0%	**1t5**	67.5%	**1t5**
wA								
wB								
wC	72.5%	**x5**	77.5%	**x4**	82.5%	**x3**	75.0%	**x2**
wD	72.5%	**x5**	77.5%	**x4**	82.5%	**x3**	75.0%	**x2**
wE	72.5%	**x5**	77.5%	**x4**	82.5%	**x3**	75.0%	**x2**
wF	72.5%	**x5**	77.5%	**x4**	82.5%	**x3**	75.0%	**x2**
wG	72.5%	**x5**	77.5%	**x4**	82.5%	**x3**		
wH			77.5%	**x4**	82.5%	**x3**		

6 Set Traditional - 2.5%



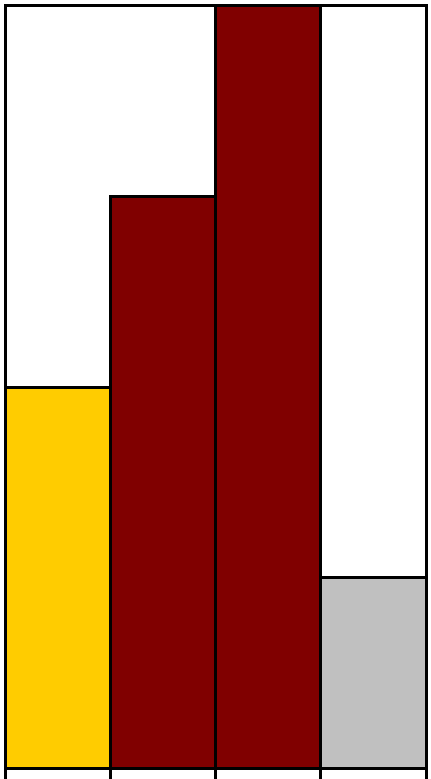
	Base		Load		Load		UnLoad	
Weekly %	80.0%		82.5%		85.0%		80.0%	
differential	[-] 5%		[-] 2.5%		Top %		[-] 5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	42.5%	1t5	45.0%	1t5	47.5%	1t5	42.5%	1t5
wu-b	55.0%	1t5	57.5%	1t5	60.0%	1t5	55.0%	1t5
wu-c	65.0%	1t5	67.5%	1t5	70.0%	1t5	65.0%	1t5
wu-d	72.5%	1t5	75.0%	1t5	77.5%	1t5	72.5%	1t5
wA								
wB								
wC	80.0%	x3	82.5%	x3	85.0%	x2	80.0%	x2
wD	80.0%	x3	82.5%	3	85.0%	x2	80.0%	x2
wE	80.0%	x3	82.5%	x3	85.0%	x2	80.0%	x2
wF	80.0%	x3	82.5%	x3	85.0%	x2	80.0%	x2
wG	80.0%	x3	82.5%	x3	85.0%	x2		
wH			82.5%	x3	85.0%	x2		

6 Set Traditional - 5%



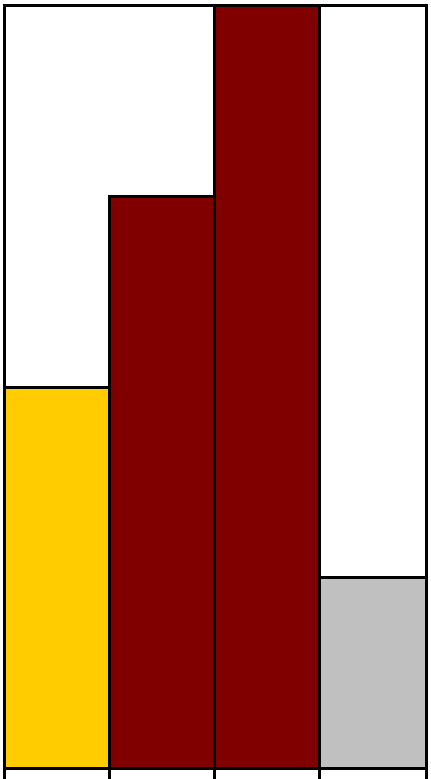
	Base		Load		Load		UnLoad	
Weekly %	75.0%		80.0%		85.0%		77.5%	
differential	[-] 10%		[-] 5%		Top %		[-] 7.5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	37.5%	1t5	42.5%	1t5	47.5%	1t5	40.0%	1t5
wu-b	50.0%	1t5	55.0%	1t5	60.0%	1t5	52.5%	1t5
wu-c	60.0%	1t5	65.0%	1t5	70.0%	1t5	62.5%	1t5
wu-d	67.5%	1t5	72.5%	1t5	77.5%	1t5	70.0%	1t5
wA								
wB								
wC	75.0%	x4	80.0%	x3	85.0%	x2	77.5%	x2
wD	75.0%	x4	80.0%	x3	85.0%	x2	77.5%	x2
wE	75.0%	x4	80.0%	x3	85.0%	x2	77.5%	x2
wF	75.0%	x4	80.0%	x3	85.0%	x2	77.5%	x2
wG	75.0%	x4	80.0%	x3	85.0%	x2		
wH			80.0%	x3	85.0%	x2		

6 Set Traditional - 2.5%



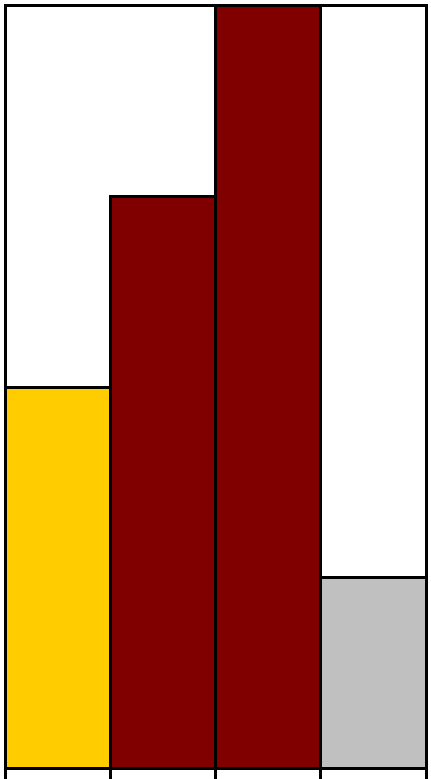
	Base		Load		Load		UnLoad	
Weekly %	82.5%		85.0%		87.5%		82.5%	
differential	[-] 5%		[-] 2.5%		Top %		[-] 5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	45.0%	1t5	47.5%	1t5	50.0%	1t5	45.0%	1t5
wu-b	57.5%	1t5	60.0%	1t5	62.5%	1t5	57.5%	1t5
wu-c	67.5%	1t5	70.0%	1t5	72.5%	1t5	67.5%	1t5
wu-d	75.0%	1t5	77.5%	1t5	80.0%	1t5	75.0%	1t5
wA								
wB								
wC	82.5%	x2	85.0%	x2	87.5%	x2	82.5%	x1
wD	82.5%	x2	85.0%	x2	87.5%	x2	82.5%	x1
wE	82.5%	x2	85.0%	x2	87.5%	x2	82.5%	x1
wF	82.5%	x2	85.0%	x2	87.5%	x2	82.5%	x1
wG	82.5%	x2	85.0%	x2	87.5%	x2		
wH			85.0%	x2	87.5%	x2		

6 Set Traditional - 5%



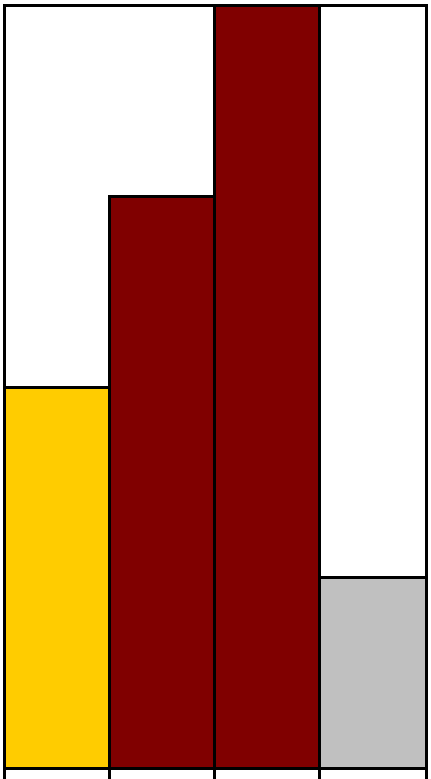
	Base		Load		Load		UnLoad	
Weekly %	77.5%		82.5%		87.5%		80.0%	
differential	[-] 10%		[-] 5%		Top %		[-] 7.5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	40.0%	1t5	45.0%	1t5	50.0%	1t5	42.5%	1t5
wu-b	52.5%	1t5	57.5%	1t5	62.5%	1t5	55.0%	1t5
wu-c	62.5%	1t5	67.5%	1t5	72.5%	1t5	65.0%	1t5
wu-d	70.0%	1t5	75.0%	1t5	80.0%	1t5	72.5%	1t5
wA								
wB								
wC	77.5%	x4	82.5%	x3	87.5%	x2	80.0%	x2
wD	77.5%	x4	82.5%	x3	87.5%	x2	80.0%	x2
wE	77.5%	x4	82.5%	x3	87.5%	x2	80.0%	x2
wF	77.5%	x4	82.5%	x3	87.5%	x2	80.0%	x2
wG	77.5%	x4	82.5%	x3	87.5%	x2		
wH			82.5%	x3	87.5%	x2		

6 Set Traditional - 2.5%



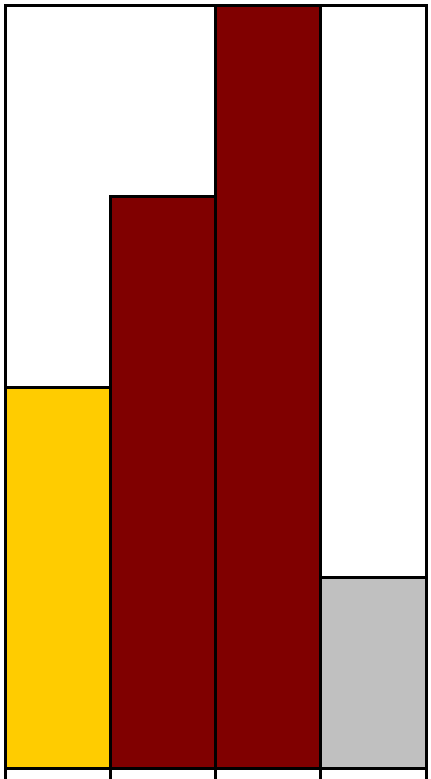
	Base		Load		Load		UnLoad	
Weekly %	85.0%		87.5%		90.0%		85.0%	
differential	[-] 5%		[-] 2.5%		Top %		[-] 5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	47.5%	1t5	50.0%	1t5	52.5%	1t5	47.5%	1t5
wu-b	60.0%	1t5	62.5%	1t5	65.0%	1t5	60.0%	1t5
wu-c	70.0%	1t5	72.5%	1t5	75.0%	1t5	70.0%	1t5
wu-d	77.5%	1t5	80.0%	1t5	82.5%	1t5	77.5%	1t5
wA								
wB								
wC	85.0%	x2	87.5%	x2	90.0%	x1	85.0%	x1
wD	85.0%	x2	87.5%	x2	90.0%	x1	85.0%	x1
wE	85.0%	x2	87.5%	x2	90.0%	x1	85.0%	x1
wF	85.0%	x2	87.5%	x2	90.0%	x1	85.0%	x1
wG	85.0%	x2	87.5%	x2	90.0%	x1		
wH			87.5%	x2	90.0%	x1		

6 Set Traditional - 5%



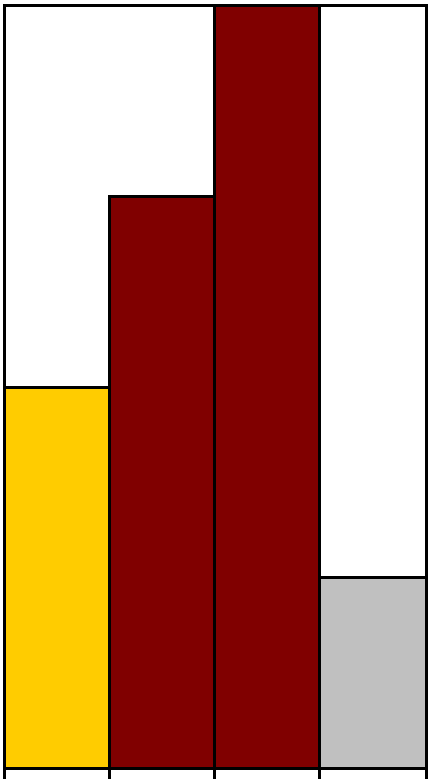
	Base		Load		Load		UnLoad	
Weekly %	80.0%		85.0%		90.0%		82.5%	
differential	[-] 10%		[-] 5%		Top %		[-] 7.5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	42.5%	1t5	47.5%	1t5	52.5%	1t5	45.0%	1t5
wu-b	55.0%	1t5	60.0%	1t5	65.0%	1t5	57.5%	1t5
wu-c	65.0%	1t5	70.0%	1t5	75.0%	1t5	67.5%	1t5
wu-d	72.5%	1t5	77.5%	1t5	82.5%	1t5	75.0%	1t5
wA								
wB								
wC	80.0%	x3	85.0%	x2	90.0%	x1	82.5%	x1
wD	80.0%	x3	85.0%	x2	90.0%	x1	82.5%	x1
wE	80.0%	x3	85.0%	x2	90.0%	x1	82.5%	x1
wF	80.0%	x3	85.0%	x2	90.0%	x1	82.5%	x1
wG	80.0%	x3	85.0%	x2	90.0%	x1		
wH			85.0%	x2	90.0%	x1		

6 Set Traditional - 2.5%



	Base		Load		Load		UnLoad	
Weekly %	87.5%		90.0%		92.5%		87.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	50.0%	**1t5**	52.5%	**1t5**	55.0%	**1t5**	50.0%	**1t5**
wu-b	62.5%	**1t5**	65.0%	**1t5**	67.5%	**1t5**	62.5%	**1t5**
wu-c	72.5%	**1t5**	75.0%	**1t5**	77.5%	**1t5**	72.5%	**1t5**
wu-d	80.0%	**1t5**	82.5%	**1t5**	85.0%	**1t5**	80.0%	**1t5**
wA								
wB								
wC	87.5%	**x2**	90.0%	**x1**	92.5%	**x1**	87.5%	**x1**
wD	87.5%	**x2**	90.0%	**x1**	92.5%	**x1**	87.5%	**x1**
wE	87.5%	**x2**	90.0%	**x1**	92.5%	**x1**	87.5%	**x1**
wF	87.5%	**x2**	90.0%	**x1**	92.5%	**x1**	87.5%	**x1**
wG	87.5%	**x2**	90.0%	**x1**	92.5%	**x1**		
wH			90.0%	**x1**	92.5%	**x1**		

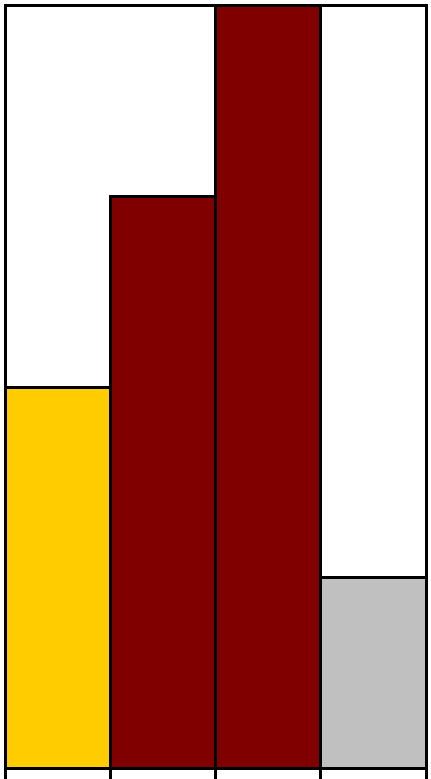
6 Set Traditional - 5%



	Base		Load		Load		UnLoad	
Weekly %	82.5%		87.5%		92.5%		85.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	45.0%	**1t5**	50.0%	**1t5**	55.0%	**1t5**	47.5%	**1t5**
wu-b	57.5%	**1t5**	62.5%	**1t5**	67.5%	**1t5**	60.0%	**1t5**
wu-c	67.5%	**1t5**	72.5%	**1t5**	77.5%	**1t5**	70.0%	**1t5**
wu-d	75.0%	**1t5**	80.0%	**1t5**	85.0%	**1t5**	77.5%	**1t5**
wA								
wB								
wC	82.5%	**x2**	87.5%	**x2**	92.5%	**x1**	85.0%	**x1**
wD	82.5%	**x2**	87.5%	**x2**	92.5%	**x1**	85.0%	**x1**
wE	82.5%	**x2**	87.5%	**x2**	92.5%	**x1**	85.0%	**x1**
wF	82.5%	**x2**	87.5%	**x2**	92.5%	**x1**	85.0%	**x1**
wG	82.5%	**x2**	87.5%	**x2**	92.5%	**x1**		
wH			87.5%	**x2**	92.5%	**x1**		

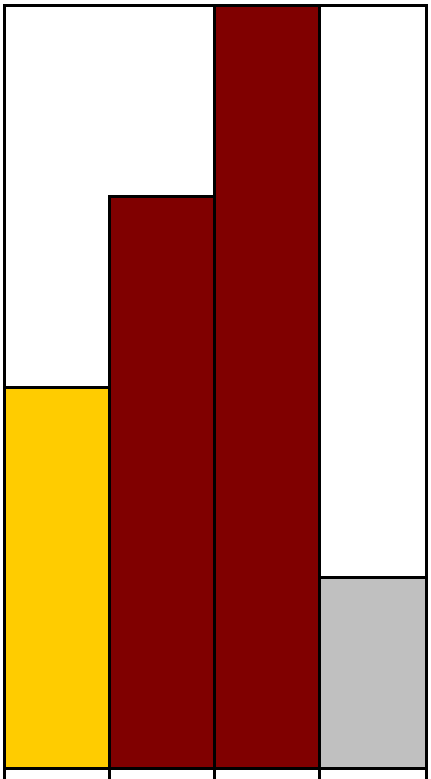
- Developmental Strength 4-week Cycles – Traditional 6 set – Lower, Upper

6 Set Traditional - 2.5%



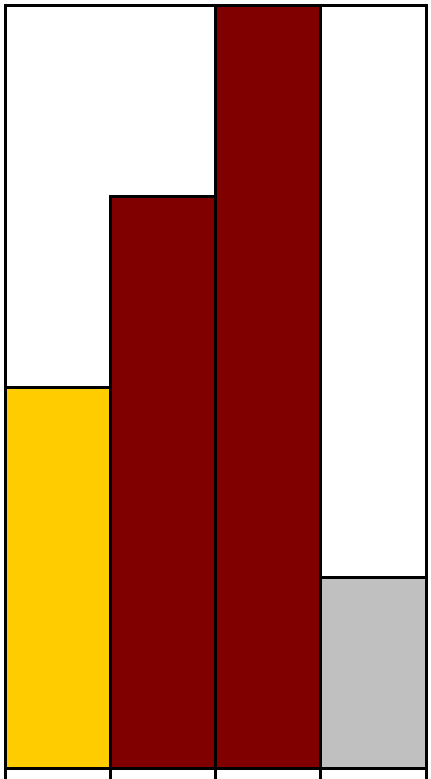
	Base		Load		Load		UnLoad	
Weekly %	75.0%		77.5%		80.0%		75.0%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	37.5%	**1t5**	40.0%	**1t5**	42.5%	**1t5**	37.5%	**1t5**
wu-b	50.0%	**1t5**	52.5%	**1t5**	55.0%	**1t5**	50.0%	**1t5**
wu-c	60.0%	**1t5**	62.5%	**1t5**	65.0%	**1t5**	60.0%	**1t5**
wu-d	67.5%	**1t5**	70.0%	**1t5**	72.5%	**1t5**	67.5%	**1t5**
wA								
wB								
wC	75.0%	**x6**	77.5%	**x6**	80.0%	**x5**	75.0%	**x3**
wD	75.0%	**x6**	77.5%	**x6**	80.0%	**x5**	75.0%	**x3**
wE	75.0%	**x6**	77.5%	**x6**	80.0%	**x5**	75.0%	**x3**
wF	75.0%	**x6**	77.5%	**x6**	80.0%	**x5**	75.0%	**x3**
wG	75.0%	**x6**	77.5%	**x6**	80.0%	**x5**		
wH			77.5%	**x6**	80.0%	**x5**		

6 Set Traditional - 5%



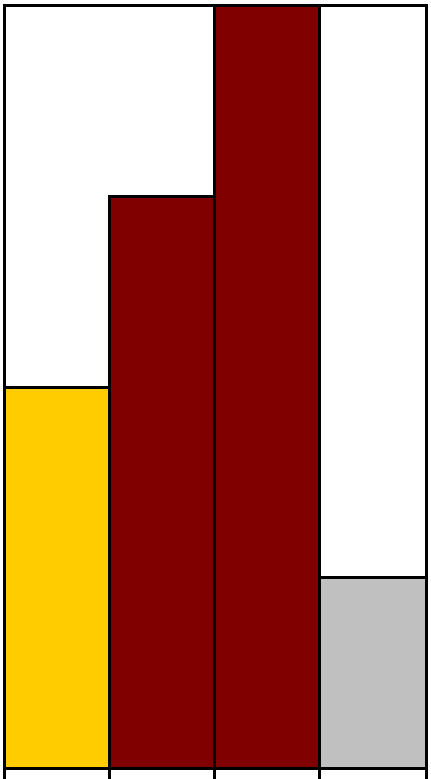
	Base		Load		Load		UnLoad	
Weekly %	70.0%		75.0%		80.0%		72.5%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	32.5%	**1t5**	37.5%	**1t5**	42.5%	**1t5**	35.0%	**1t5**
wu-b	45.0%	**1t5**	50.0%	**1t5**	55.0%	**1t5**	47.5%	**1t5**
wu-c	55.0%	**1t5**	60.0%	**1t5**	65.0%	**1t5**	57.5%	**1t5**
wu-d	62.5%	**1t5**	67.5%	**1t5**	72.5%	**1t5**	65.0%	**1t5**
wA								
wB								
wC	70.0%	**x8**	75.0%	**x6**	80.0%	**x5**	72.5%	**x4**
wD	70.0%	**x8**	75.0%	**x6**	80.0%	**x5**	72.5%	**x4**
wE	70.0%	**x8**	75.0%	**x6**	80.0%	**x5**	72.5%	**x4**
wF	70.0%	**x8**	75.0%	**x6**	80.0%	**x5**	72.5%	**x4**
wG	70.0%	**x8**	75.0%	**x6**	80.0%	**x5**		
wH			75.0%	**x6**	80.0%	**x5**		

6 Set Traditional - 2.5%



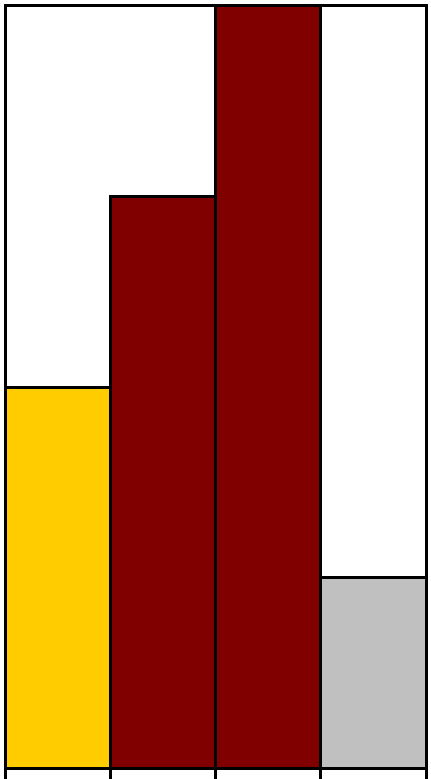
	Base		Load		Load		UnLoad	
Weekly %	77.5%		80.0%		82.5%		77.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	40.0%	**1t5**	42.5%	**1t5**	45.0%	**1t5**	40.0%	**1t5**
wu-b	52.5%	**1t5**	55.0%	**1t5**	57.5%	**1t5**	52.5%	**1t5**
wu-c	62.5%	**1t5**	65.0%	**1t5**	67.5%	**1t5**	62.5%	**1t5**
wu-d	70.0%	**1t5**	72.5%	**1t5**	75.0%	**1t5**	70.0%	**1t5**
wA								
wB								
wC	77.5%	**x6**	80.0%	**x5**	82.5%	**x4**	77.5%	**x3**
wD	77.5%	**x6**	80.0%	**x5**	82.5%	**x4**	77.5%	**x3**
wE	77.5%	**x6**	80.0%	**x5**	82.5%	**x4**	77.5%	**x3**
wF	77.5%	**x6**	80.0%	**x5**	82.5%	**x4**	77.5%	**x3**
wG	77.5%	**x6**	80.0%	**x5**	82.5%	**x4**		
wH			80.0%	**x5**	82.5%	**x4**		

6 Set Traditional - 5%



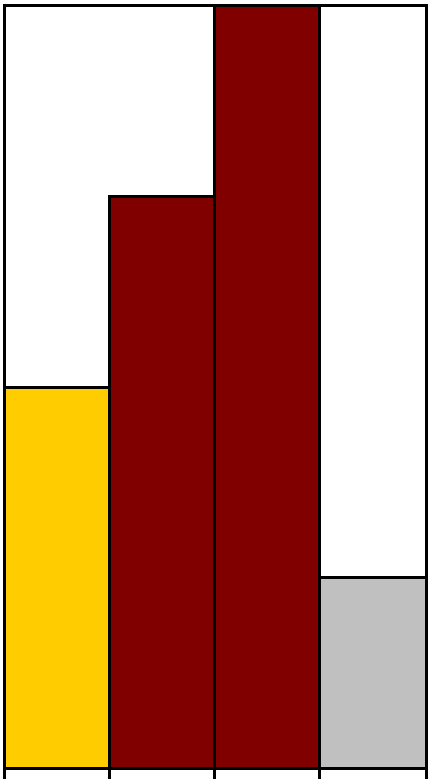
	Base		Load		Load		UnLoad	
Weekly %	72.5%		77.5%		82.5%		75.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	35.0%	**1t5**	40.0%	**1t5**	45.0%	**1t5**	37.5%	**1t5**
wu-b	47.5%	**1t5**	52.5%	**1t5**	57.5%	**1t5**	50.0%	**1t5**
wu-c	57.5%	**1t5**	62.5%	**1t5**	67.5%	**1t5**	60.0%	**1t5**
wu-d	65.0%	**1t5**	70.0%	**1t5**	75.0%	**1t5**	67.5%	**1t5**
wA								
wB								
wC	72.5%	**x8**	77.5%	**x6**	82.5%	**x4**	75.0%	**x3**
wD	72.5%	**x8**	77.5%	**x6**	82.5%	**x4**	75.0%	**x3**
wE	72.5%	**x8**	77.5%	**x6**	82.5%	**x4**	75.0%	**x3**
wF	72.5%	**x8**	77.5%	**x6**	82.5%	**x4**	75.0%	**x3**
wG	72.5%	**x8**	77.5%	**x6**	82.5%	**x4**		
wH			77.5%	**x6**	82.5%	**x4**		

6 Set Traditional - 2.5%

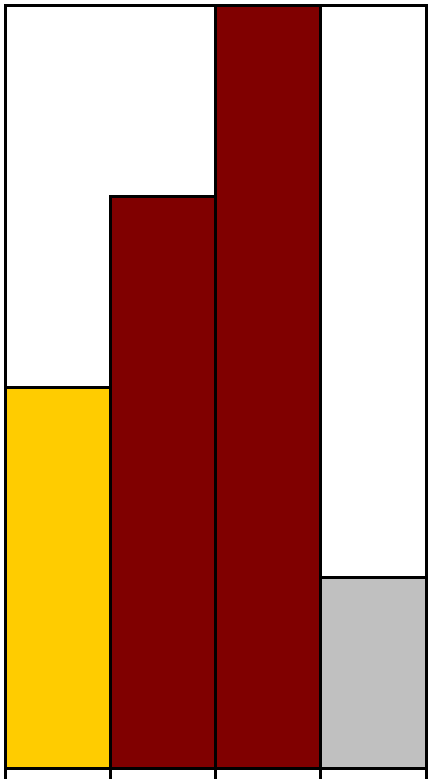


	Base		Load		Load		UnLoad			Base		Load		Load		UnLoad	
Weekly %	80.0%		82.5%		85.0%		80.0%		**Weekly %**	75.0%		80.0%		85.0%		77.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**		**differential**	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets		**WORK SETS**	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets		**TOP SETS**	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**		**Weeks #**	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	42.5%	**1t5**	45.0%	**1t5**	47.5%	**1t5**	42.5%	**1t5**	wu-a	37.5%	**1t5**	42.5%	**1t5**	47.5%	**1t5**	40.0%	**1t5**
wu-b	55.0%	**1t5**	57.5%	**1t5**	60.0%	**1t5**	55.0%	**1t5**	wu-b	50.0%	**1t5**	55.0%	**1t5**	60.0%	**1t5**	52.5%	**1t5**
wu-c	65.0%	**1t5**	67.5%	**1t5**	70.0%	**1t5**	65.0%	**1t5**	wu-c	60.0%	**1t5**	65.0%	**1t5**	70.0%	**1t5**	62.5%	**1t5**
wu-d	72.5%	**1t5**	75.0%	**1t5**	77.5%	**1t5**	72.5%	**1t5**	wu-d	67.5%	**1t5**	72.5%	**1t5**	77.5%	**1t5**	70.0%	**1t5**
wA									**wA**								
wB									**wB**								
wC	80.0%	**x5**	82.5%	**x4**	85.0%	**x3**	80.0%	**x3**	**wC**	75.0%	**x6**	80.0%	**x5**	85.0%	**x3**	77.5%	**x3**
wD	80.0%	**x5**	82.5%	**x4**	85.0%	**x3**	80.0%	**x3**	**wD**	75.0%	**x6**	80.0%	**x5**	85.0%	**x3**	77.5%	**x3**
wE	80.0%	**x5**	82.5%	**x4**	85.0%	**x3**	80.0%	**x3**	**wE**	75.0%	**x6**	80.0%	**x5**	85.0%	**x3**	77.5%	**x3**
wF	80.0%	**x5**	82.5%	**x4**	85.0%	**x3**	80.0%	**x3**	**wF**	75.0%	**x6**	80.0%	**x5**	85.0%	**x3**	77.5%	**x3**
wG	80.0%	**x5**	82.5%	**x4**	85.0%	**x3**			**wG**	75.0%	**x6**	80.0%	**x5**	85.0%	**x3**		
wH			82.5%	**x4**	85.0%	**x3**			**wH**			80.0%	**x5**	85.0%	**x3**		

6 Set Traditional - 5%

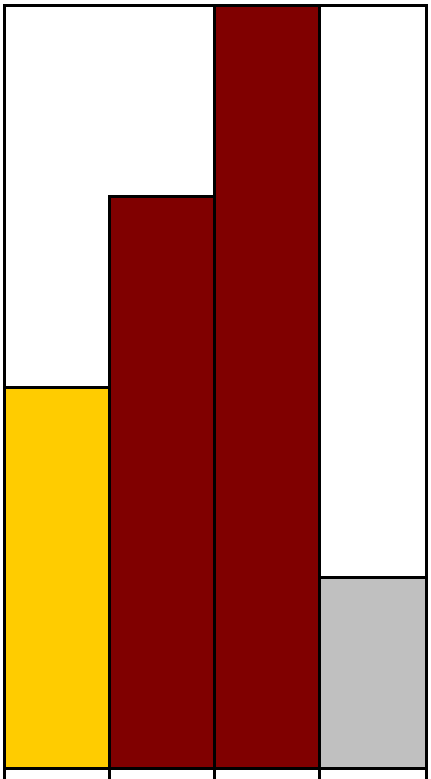


6 Set Traditional - 2.5%



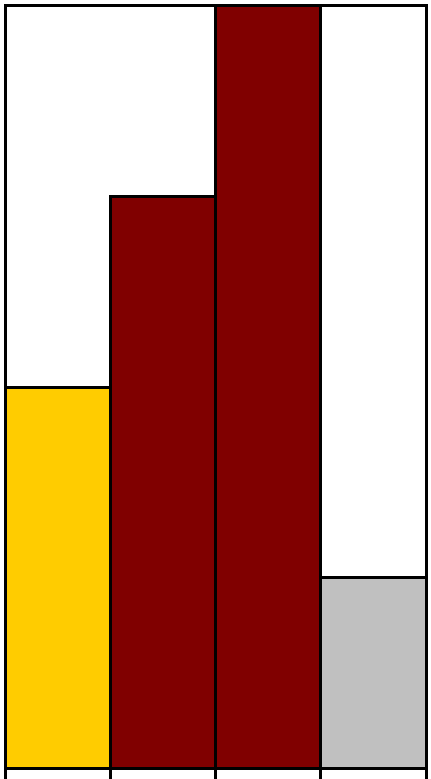
	Base		Load		Load		UnLoad	
Weekly %	82.5%		85.0%		87.5%		82.5%	
differential	[-] 5%		[-] 2.5%		Top %		[-] 5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	45.0%	1t5	47.5%	1t5	50.0%	1t5	45.0%	1t5
wu-b	57.5%	1t5	60.0%	1t5	62.5%	1t5	57.5%	1t5
wu-c	67.5%	1t5	70.0%	1t5	72.5%	1t5	67.5%	1t5
wu-d	75.0%	1t5	77.5%	1t5	80.0%	1t5	75.0%	1t5
wA								
wB								
wC	82.5%	x4	85.0%	x3	87.5%	x3	82.5%	x2
wD	82.5%	x4	85.0%	x3	87.5%	x3	82.5%	x2
wE	82.5%	x4	85.0%	x3	87.5%	x3	82.5%	x2
wF	82.5%	x4	85.0%	x3	87.5%	x3	82.5%	x2
wG	82.5%	x4	85.0%	x3	87.5%	x3		
wH			85.0%	x3	87.5%	x3		

6 Set Traditional - 5%



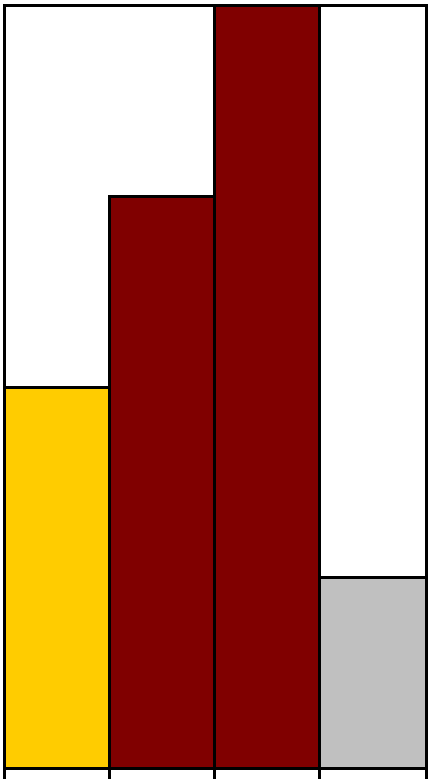
	Base		Load		Load		UnLoad	
Weekly %	77.5%		82.5%		87.5%		80.0%	
differential	[-] 10%		[-] 5%		Top %		[-] 7.5%	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	40.0%	1t5	45.0%	1t5	50.0%	1t5	42.5%	1t5
wu-b	52.5%	1t5	57.5%	1t5	62.5%	1t5	55.0%	1t5
wu-c	62.5%	1t5	67.5%	1t5	72.5%	1t5	65.0%	1t5
wu-d	70.0%	1t5	75.0%	1t5	80.0%	1t5	72.5%	1t5
wA								
wB								
wC	77.5%	x6	82.5%	x4	87.5%	x3	80.0%	x3
wD	77.5%	x6	82.5%	x4	87.5%	x3	80.0%	x3
wE	77.5%	x6	82.5%	x4	87.5%	x3	80.0%	x3
wF	77.5%	x6	82.5%	x4	87.5%	x3	80.0%	x3
wG	77.5%	x6	82.5%	x4	87.5%	x3		
wH			82.5%	x4	87.5%	x3		

6 Set Traditional - 2.5%

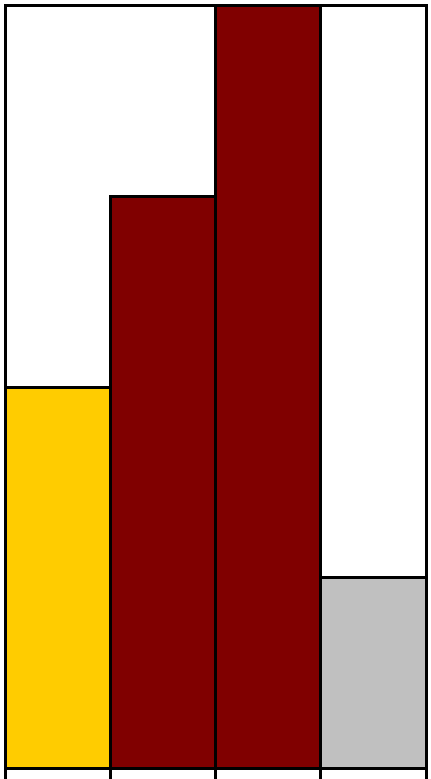


	Base		Load		Load		UnLoad			Base		Load		Load		UnLoad	
Weekly %	85.0%		87.5%		90.0%		85.0%		**Weekly %**	80.0%		85.0%		90.0%		82.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**		**differential**	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets		**WORK SETS**	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets		**TOP SETS**	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**		**Weeks #**	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	47.5%	**1t5**	50.0%	**1t5**	52.5%	**1t5**	47.5%	**1t5**	wu-a	42.5%	**1t5**	47.5%	**1t5**	52.5%	**1t5**	45.0%	**1t5**
wu-b	60.0%	**1t5**	62.5%	**1t5**	65.0%	**1t5**	60.0%	**1t5**	wu-b	55.0%	**1t5**	60.0%	**1t5**	65.0%	**1t5**	57.5%	**1t5**
wu-c	70.0%	**1t5**	72.5%	**1t5**	75.0%	**1t5**	70.0%	**1t5**	wu-c	65.0%	**1t5**	70.0%	**1t5**	75.0%	**1t5**	67.5%	**1t5**
wu-d	77.5%	**1t5**	80.0%	**1t5**	82.5%	**1t5**	77.5%	**1t5**	wu-d	72.5%	**1t5**	77.5%	**1t5**	82.5%	**1t5**	75.0%	**1t5**
wA									**wA**								
wB									**wB**								
wC	85.0%	**x3**	87.5%	**x3**	90.0%	**x2**	85.0%	**x2**	**wC**	80.0%	**x5**	85.0%	**x3**	90.0%	**x2**	82.5%	**x2**
wD	85.0%	**x3**	87.5%	**x3**	90.0%	**x2**	85.0%	**x2**	**wD**	80.0%	**x5**	85.0%	**x3**	90.0%	**x2**	82.5%	**x2**
wE	85.0%	**x3**	87.5%	**x3**	90.0%	**x2**	85.0%	**x2**	**wE**	80.0%	**x5**	85.0%	**x3**	90.0%	**x2**	82.5%	**x2**
wF	85.0%	**x3**	87.5%	**x3**	90.0%	**x2**	85.0%	**x2**	**wF**	80.0%	**x5**	85.0%	**x3**	90.0%	**x2**	82.5%	**x2**
wG	85.0%	**x3**	87.5%	**x3**	90.0%	**x2**			**wG**	80.0%	**x5**	85.0%	**x3**	90.0%	**x2**		
wH			87.5%	**x3**	90.0%	**x2**			**wH**			85.0%	**x3**	90.0%	**x2**		

6 Set Traditional - 5%

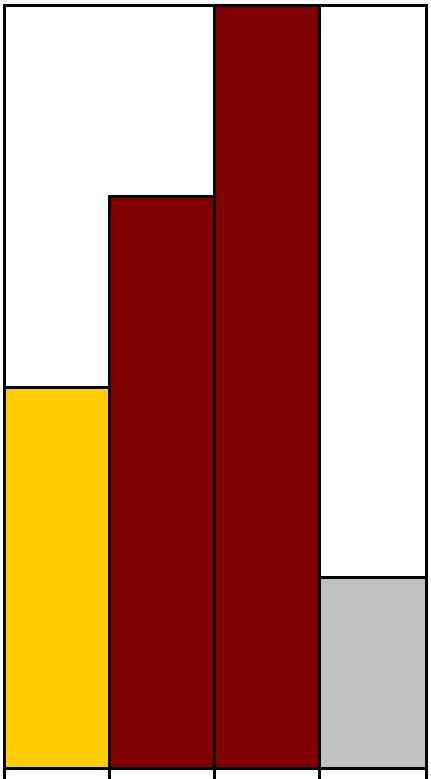


6 Set Traditional - 2.5%



	Base		Load		Load		UnLoad	
Weekly %	87.5%		90.0%		92.5%		87.5%	
differential	**[-] 5%**		**[-] 2.5%**		**Top %**		**[-] 5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	50.0%	**1t5**	52.5%	**1t5**	55.0%	**1t5**	50.0%	**1t5**
wu-b	62.5%	**1t5**	65.0%	**1t5**	67.5%	**1t5**	62.5%	**1t5**
wu-c	72.5%	**1t5**	75.0%	**1t5**	77.5%	**1t5**	72.5%	**1t5**
wu-d	80.0%	**1t5**	82.5%	**1t5**	85.0%	**1t5**	80.0%	**1t5**
wA								
wB								
wC	87.5%	**x3**	90.0%	**x2**	92.5%	**x2**	87.5%	**x2**
wD	87.5%	**x3**	90.0%	**x2**	92.5%	**x2**	87.5%	**x2**
wE	87.5%	**x3**	90.0%	**x2**	92.5%	**x2**	87.5%	**x2**
wF	87.5%	**x3**	90.0%	**x2**	92.5%	**x2**	87.5%	**x2**
wG	87.5%	**x3**	90.0%	**x2**	92.5%	**x2**		
wH			90.0%	**x2**	92.5%	**x2**		

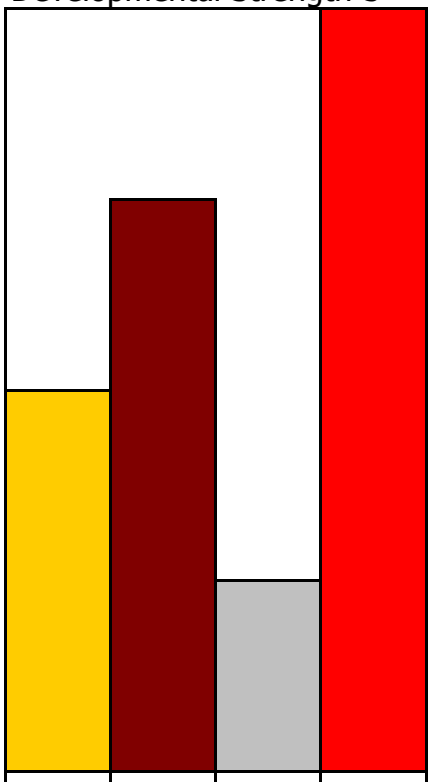
6 Set Traditional - 5%



	Base		Load		Load		UnLoad	
Weekly %	82.5%		87.5%		92.5%		85.0%	
differential	**[-] 10%**		**[-] 5%**		**Top %**		**[-] 7.5%**	
WORK SETS	5 sets		6 sets		6 sets		4 sets	
TOP SETS	5 sets		6 sets		6 sets		4 sets	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	45.0%	**1t5**	50.0%	**1t5**	55.0%	**1t5**	47.5%	**1t5**
wu-b	57.5%	**1t5**	62.5%	**1t5**	67.5%	**1t5**	60.0%	**1t5**
wu-c	67.5%	**1t5**	72.5%	**1t5**	77.5%	**1t5**	70.0%	**1t5**
wu-d	75.0%	**1t5**	80.0%	**1t5**	85.0%	**1t5**	77.5%	**1t5**
wA								
wB								
wC	82.5%	**x4**	87.5%	**x3**	92.5%	**x2**	85.0%	**x2**
wD	82.5%	**x4**	87.5%	**x3**	92.5%	**x2**	85.0%	**x2**
wE	82.5%	**x4**	87.5%	**x3**	92.5%	**x2**	85.0%	**x2**
wF	82.5%	**x4**	87.5%	**x3**	92.5%	**x2**	85.0%	**x2**
wG	82.5%	**x4**	87.5%	**x3**	92.5%	**x2**		
wH			87.5%	**x3**	92.5%	**x2**		

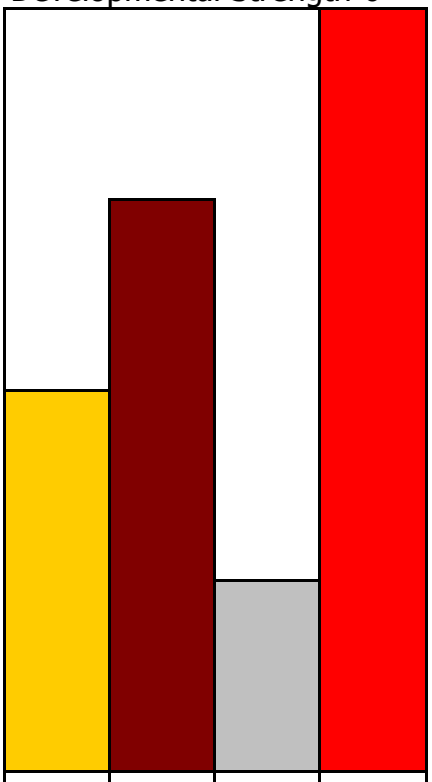
- Developmental Strength 4-week Cycles – Performance – Lower, Upper

Developmental Strength-3



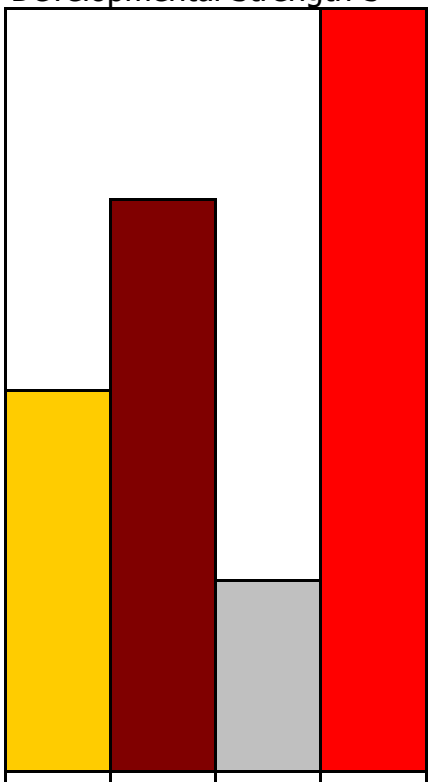
	Base		Load		UnLoad		Performance	
Weekly %	65.0%		72.5%		60.0%		80%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		3 sets		max	
TOP SETS	2 sets		3 sets		1 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a			20.0%	**1t5**			27.5%	**1t5**
wu-b	25.0%	**1t5**	32.5%	**1t5**	25.0%	**1t5**	40.0%	**1t5**
wu-c	35.0%	**1t5**	42.5%	**1t5**	35.0%	**1t5**	50.0%	**1t5**
wu-d	42.5%	**1t5**	50.0%	**1t5**	42.5%	**1t5**	57.5%	**1t5**
wA								
wB								
wC	50.0%	**x6**	57.5%	**x5**			65.0%	**x3**
wD	55.0%	**x6**	62.5%	**x5**	50.0%	**x8**	70.0%	**x3**
wE	60.0%	**x6**	67.5%	**x5**	55.0%	**x8**	75.0%	**x3**
wF	65.0%	**x12**	72.5%	**x10**	60.0%	**x15**	80.0%	**x6**
wG	65.0%	**x12**	72.5%	**x10**			80.0%	**x6**
wH			72.5%	**x10**			80.0%	**x6**

Developmental Strength-6



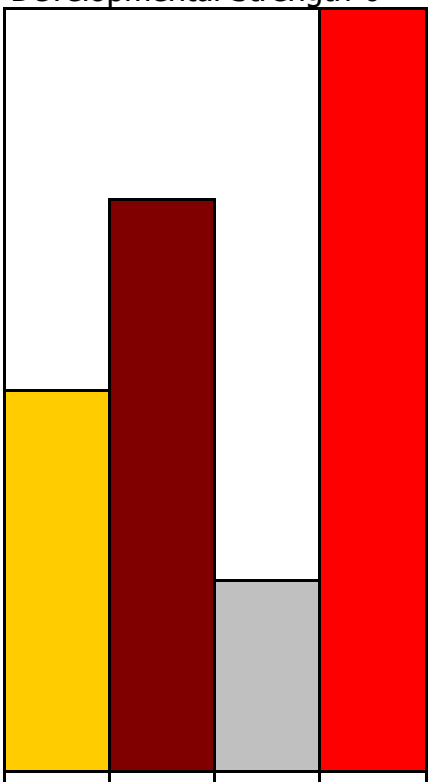
	Base		Load		UnLoad		Performance	
Weekly %	65.0%		72.5%		60.0%		80%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	5 sets		6 sets		4 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	27.5%	**1t5**	35.0%	**1t5**	22.5%	**1t5**	42.5%	**1t5**
wu-b	40.0%	**1t5**	47.5%	**1t5**	35.0%	**1t5**	55.0%	**1t5**
wu-c	50.0%	**1t5**	57.5%	**1t5**	45.0%	**1t5**	65.0%	**1t5**
wu-d	57.5%	**1t5**	65.0%	**1t5**	52.5%	**1t5**	72.5%	**1t5**
wA								
wB								
wC	65.0%	**x10**	72.5%	**x8**	60.0%	**x12**	80.0%	**x5**
wD	65.0%	**x10**	72.5%	**x8**	60.0%	**x12**	80.0%	**x5**
wE	65.0%	**x10**	72.5%	**x8**	60.0%	**x12**	80.0%	**x5**
wF	65.0%	**x10**	72.5%	**x8**	60.0%	**x12**	80.0%	**x5**
wG	65.0%	**x10**	72.5%	**x8**			80.0%	**x5**
wH			72.5%	**x8**			80.0%	**x5**

Developmental Strength-3



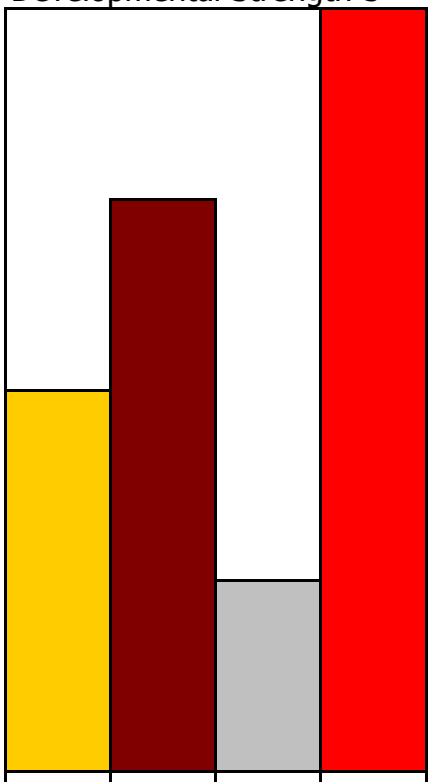
	Base		Load		UnLoad		Performance	
Weekly %	67.5%		75.0%		62.5%		82.5%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		3 sets		max	
TOP SETS	2 sets		3 sets		1 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a			22.5%	**1t5**			30.0%	**1t5**
wu-b	27.5%	**1t5**	35.0%	**1t5**	27.5%	**1t5**	42.5%	**1t5**
wu-c	37.5%	**1t5**	45.0%	**1t5**	37.5%	**1t5**	52.5%	**1t5**
wu-d	45.0%	**1t5**	52.5%	**1t5**	45.0%	**1t5**	60.0%	**1t5**
wA								
wB								
wC	52.5%	**x6**	60.0%	**x4**			67.5%	**x3**
wD	57.5%	**x6**	65.0%	**x4**	52.5%	**x8**	72.5%	**x3**
wE	62.5%	**x6**	70.0%	**x4**	57.5%	**x8**	77.5%	**x3**
wF	67.5%	**x12**	75.0%	**x7**	62.5%	**x15**	82.5%	**x5**
wG	67.5%	**x12**	75.0%	**x7**			82.5%	**x5**
wH			75.0%	**x7**			82.5%	**x5**

Developmental Strength-6



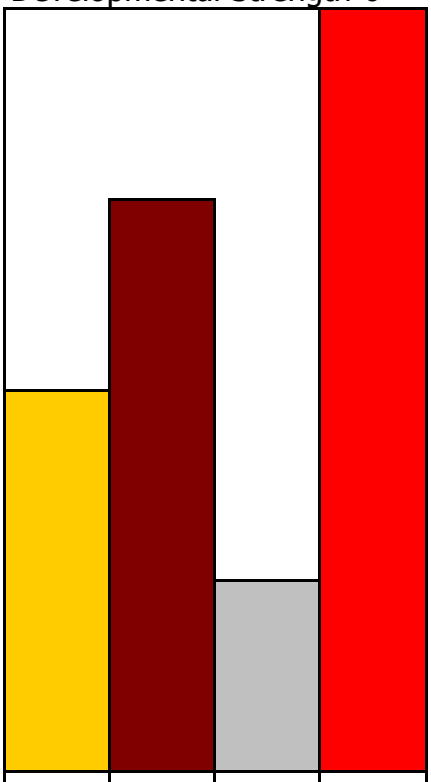
	Base		Load		UnLoad		Performance	
Weekly %	67.5%		75.0%		62.5%		82.5%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	5 sets		6 sets		4 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	30.0%	**1t5**	37.5%	**1t5**	25.0%	**1t5**	45.0%	**1t5**
wu-b	42.5%	**1t5**	50.0%	**1t5**	37.5%	**1t5**	57.5%	**1t5**
wu-c	52.5%	**1t5**	60.0%	**1t5**	47.5%	**1t5**	67.5%	**1t5**
wu-d	60.0%	**1t5**	67.5%	**1t5**	55.0%	**1t5**	75.0%	**1t5**
wA								
wB								
wC	67.5%	**x10**	75.0%	**x6**	62.5%	**x12**	82.5%	**x4**
wD	67.5%	**x10**	75.0%	**x6**	62.5%	**x12**	82.5%	**x4**
wE	67.5%	**x10**	75.0%	**x6**	62.5%	**x12**	82.5%	**x4**
wF	67.5%	**x10**	75.0%	**x6**	62.5%	**x12**	82.5%	**x4**
wG	67.5%	**x10**	75.0%	**x6**			82.5%	**x4**
wH			75.0%	**x6**			82.5%	**x4**

Developmental Strength-3



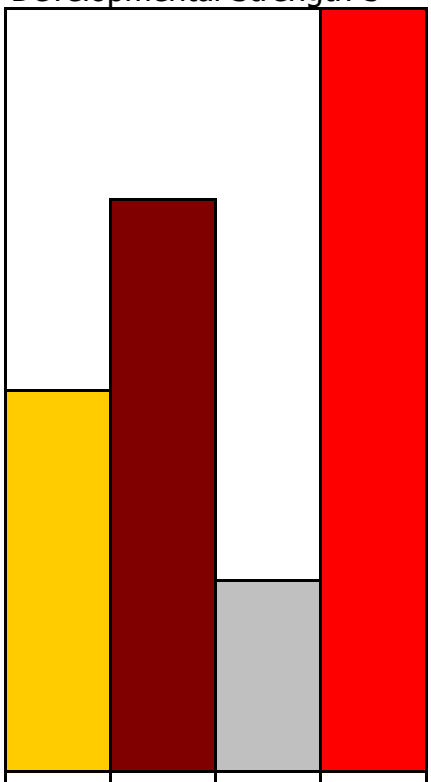
	Base		Load		UnLoad		Performance	
Weekly %	70.0%		77.5%		65.0%		85%	
differential	[-] 15%		[-] 7.5%		[-] 20%		Top %	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	2 sets		3 sets		1 sets		max	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a			25.0%	1t5			32.5%	1t5
wu-b	30.0%	1t5	37.5%	1t5	25.0%	1t5	45.0%	1t5
wu-c	40.0%	1t5	47.5%	1t5	35.0%	1t5	55.0%	1t5
wu-d	47.5%	1t5	55.0%	1t5	42.5%	1t5	62.5%	1t5
wA								
wB								
wC	55.0%	x5	62.5%	x4	50.0%	x6	70.0%	x2
wD	60.0%	x5	67.5%	x4	55.0%	x6	75.0%	x2
wE	65.0%	x5	72.5%	x4	60.0%	x6	80.0%	x2
wF	70.0%	x10	77.5%	x7	65.0%	x12	85.0%	x4
wG	70.0%	x10	77.5%	x7			85.0%	x4
wH			77.5%	x7			85.0%	x4

Developmental Strength-6



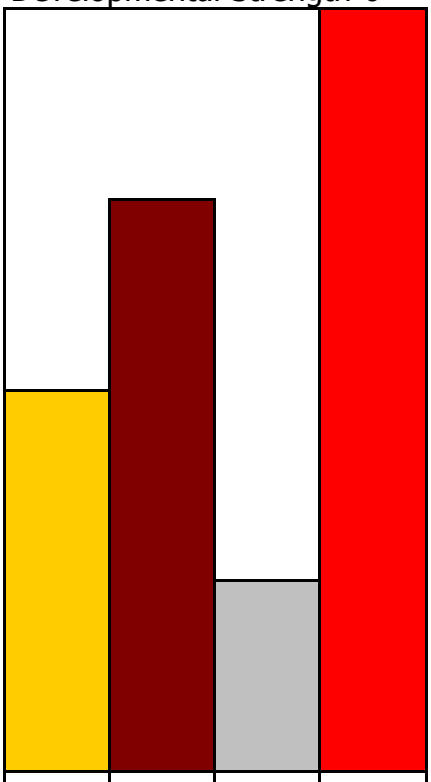
	Base		Load		UnLoad		Performance	
Weekly %	70.0%		77.5%		65.0%		85%	
differential	[-] 15%		[-] 7.5%		[-] 20%		Top %	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	5 sets		6 sets		4 sets		max	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	32.5%	1t5	40.0%	1t5	27.5%	1t5	47.5%	1t5
wu-b	45.0%	1t5	52.5%	1t5	40.0%	1t5	60.0%	1t5
wu-c	55.0%	1t5	62.5%	1t5	50.0%	1t5	70.0%	1t5
wu-d	62.5%	1t5	70.0%	1t5	57.5%	1t5	77.5%	1t5
wA								
wB								
wC	70.0%	x8	77.5%	x6	65.0%	x10	85.0%	x3
wD	70.0%	x8	77.5%	x6	65.0%	x10	85.0%	x3
wE	70.0%	x8	77.5%	x6	65.0%	x10	85.0%	x3
wF	70.0%	x8	77.5%	x6	65.0%	x10	85.0%	x3
wG	70.0%	x8	77.5%	x6			85.0%	x3
wH			77.5%	x6			85.0%	x3

Developmental Strength-3



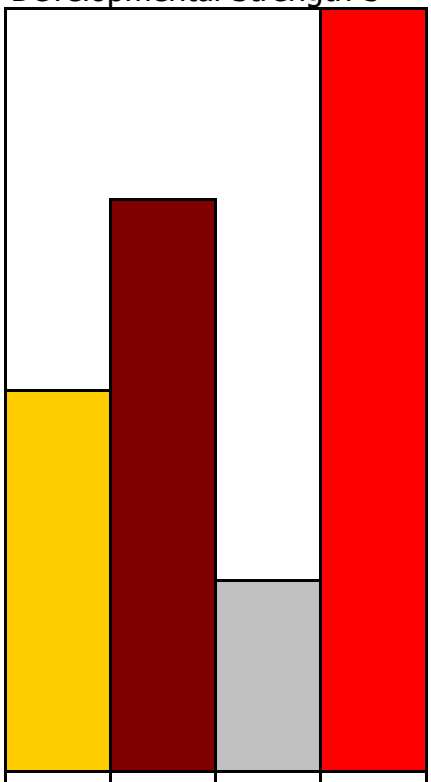
	Base		Load		UnLoad		Performance	
Weekly %	72.5%		80.0%		67.5%		87.5%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	2 sets		3 sets		1 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	20.0%	**1t5**	30.0%	**1t5**			35.0%	**1t5**
wu-b	32.5%	**1t5**	42.5%	**1t5**	27.5%	**1t5**	47.5%	**1t5**
wu-c	42.5%	**1t5**	52.5%	**1t5**	37.5%	**1t5**	57.5%	**1t5**
wu-d	50.0%	**1t5**	60.0%	**1t5**	45.0%	**1t5**	65.0%	**1t5**
wA								
wB								
wC	57.5%	**x5**	67.5%	**x3**	52.5%	**x6**	72.5%	**x2**
wD	62.5%	**x5**	72.5%	**x3**	57.5%	**x6**	77.5%	**x2**
wE	67.5%	**x5**	77.5%	**x3**	62.5%	**x6**	82.5%	**x2**
wF	72.5%	**x10**	82.5%	**x5**	67.5%	**x12**	87.5%	**x4**
wG	72.5%	**x10**	82.5%	**x5**			87.5%	**x4**
wH			82.5%	**x5**			87.5%	**x4**

Developmental Strength-6



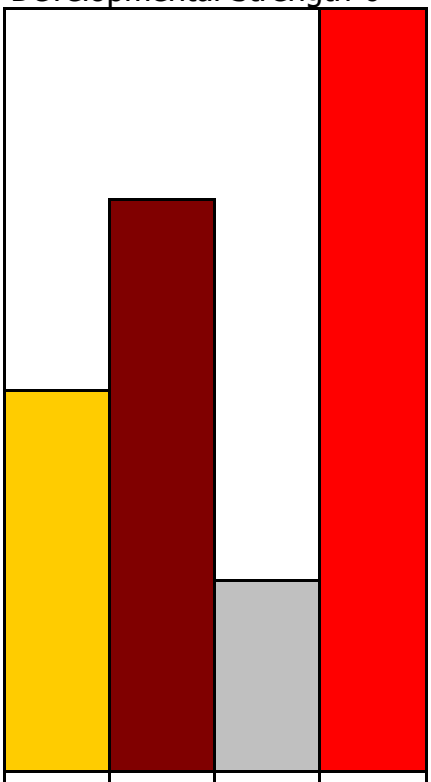
	Base		Load		UnLoad		Performance	
Weekly %	72.5%		80.0%		67.5%		87.5%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	5 sets		6 sets		4 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	35.0%	**1t5**	45.0%	**1t5**	30.0%	**1t5**	50.0%	**1t5**
wu-b	47.5%	**1t5**	57.5%	**1t5**	42.5%	**1t5**	62.5%	**1t5**
wu-c	57.5%	**1t5**	67.5%	**1t5**	52.5%	**1t5**	72.5%	**1t5**
wu-d	65.0%	**1t5**	75.0%	**1t5**	60.0%	**1t5**	80.0%	**1t5**
wA								
wB								
wC	72.5%	**x8**	82.5%	**x4**	67.5%	**x10**	87.5%	**x3**
wD	72.5%	**x8**	82.5%	**x4**	67.5%	**x10**	87.5%	**x3**
wE	72.5%	**x8**	82.5%	**x4**	67.5%	**x10**	87.5%	**x3**
wF	72.5%	**x8**	82.5%	**x4**	67.5%	**x10**	87.5%	**x3**
wG	72.5%	**x8**	82.5%	**x4**			87.5%	**x3**
wH			82.5%	**x4**			87.5%	**x3**

Developmental Strength-3



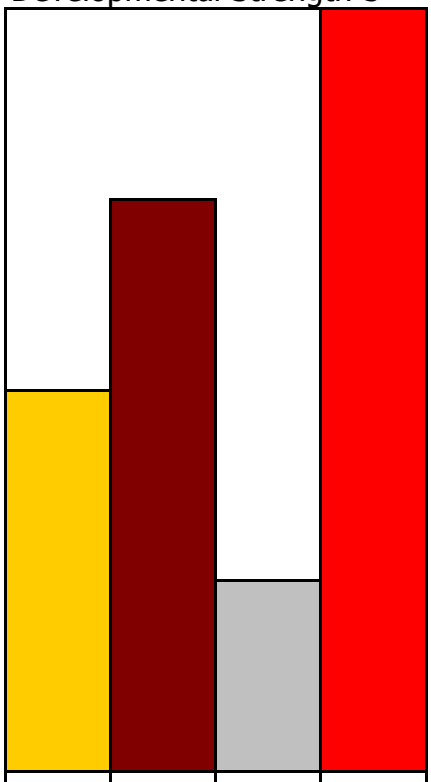
	Base		Load		UnLoad		Performance	
Weekly %	75.0%		82.5%		70.0%		90%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	2 sets		3 sets		1 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	25.0%	**1t5**	30.0%	**1t5**			37.5%	**1t5**
wu-b	37.5%	**1t5**	42.5%	**1t5**	30.0%	**1t5**	50.0%	**1t5**
wu-c	47.5%	**1t5**	52.5%	**1t5**	40.0%	**1t5**	60.0%	**1t5**
wu-d	55.0%	**1t5**	60.0%	**1t5**	47.5%	**1t5**	67.5%	**1t5**
wA								
wB								
wC	62.5%	**x4**	67.5%	**x3**	55.0%	**x5**	75.0%	**x1**
wD	67.5%	**x4**	72.5%	**x3**	60.0%	**x5**	80.0%	**x1**
wE	72.5%	**x4**	77.5%	**x3**	65.0%	**x5**	85.0%	**x1**
wF	77.5%	**x7**	82.5%	**x5**	70.0%	**x10**	90.0%	**x3**
wG	77.5%	**x7**	82.5%	**x5**			90.0%	**x3**
wH			82.5%	**x5**			90.0%	**x3**

Developmental Strength-6



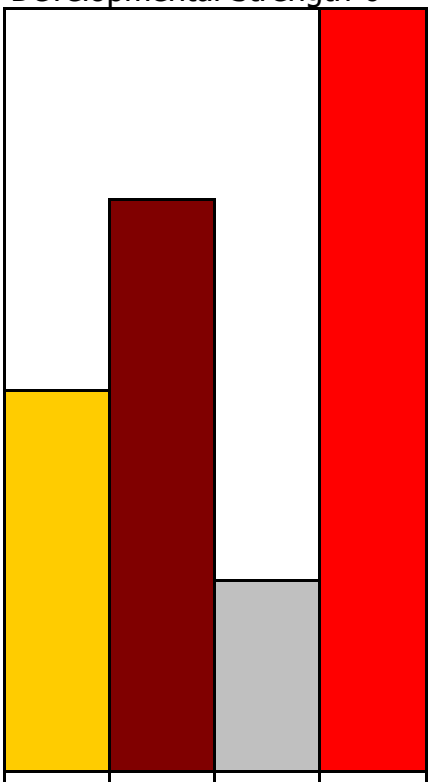
	Base		Load		UnLoad		Performance	
Weekly %	75.0%		82.5%		70.0%		90%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	5 sets		6 sets		4 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	40.0%	**1t5**	45.0%	**1t5**	32.5%	**1t5**	52.5%	**1t5**
wu-b	52.5%	**1t5**	57.5%	**1t5**	45.0%	**1t5**	65.0%	**1t5**
wu-c	62.5%	**1t5**	67.5%	**1t5**	55.0%	**1t5**	75.0%	**1t5**
wu-d	70.0%	**1t5**	75.0%	**1t5**	62.5%	**1t5**	82.5%	**1t5**
wA								
wB								
wC	77.5%	**x6**	82.5%	**x4**	70.0%	**x8**	90.0%	**x2**
wD	77.5%	**x6**	82.5%	**x4**	70.0%	**x8**	90.0%	**x2**
wE	77.5%	**x6**	82.5%	**x4**	70.0%	**x8**	90.0%	**x2**
wF	77.5%	**x6**	82.5%	**x4**	70.0%	**x8**	90.0%	**x2**
wG	77.5%	**x6**	82.5%	**x4**			90.0%	**x2**
wH			82.5%	**x4**			90.0%	**x2**

Developmental Strength-3



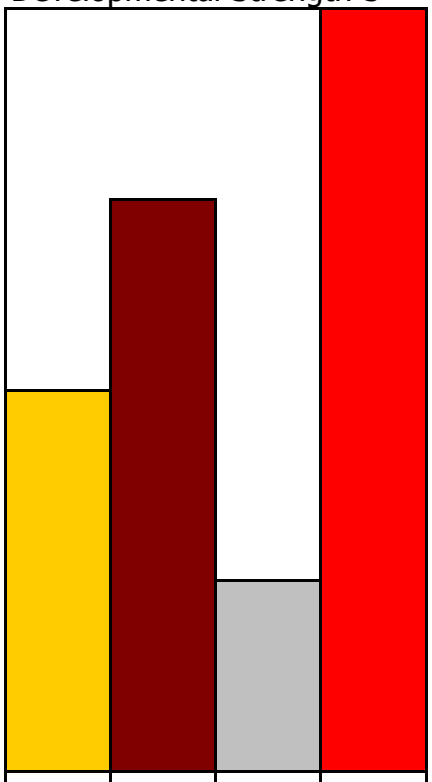
	Base		Load		UnLoad		Performance	
Weekly %	77.5%		85.0%		72.5%		92.5%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	2 sets		3 sets		1 sets		max	
Weeks #	**WK**	**1**	**WK**	**2**	**WK**	**3**	**WK**	**4**
wu-a	25.0%	1t5	32.5%	1t5	20.0%	1t5	40.0%	1t5
wu-b	37.5%	1t5	45.0%	1t5	32.5%	1t5	52.5%	1t5
wu-c	47.5%	1t5	55.0%	1t5	42.5%	1t5	62.5%	1t5
wu-d	55.0%	1t5	62.5%	1t5	50.0%	1t5	70.0%	1t5
wA								
wB								
wC	62.5%	x4	70.0%	x2	57.5%	x5	77.5%	x1
wD	67.5%	x4	75.0%	x2	62.5%	x5	82.5%	x1
wE	72.5%	x4	80.0%	x2	67.5%	x5	87.5%	x1
wF	77.5%	x7	85.0%	x4	72.5%	x10	92.5%	x3
wG	77.5%	x7	85.0%	x4			92.5%	x3
wH			85.0%	x4			92.5%	x3

Developmental Strength-6



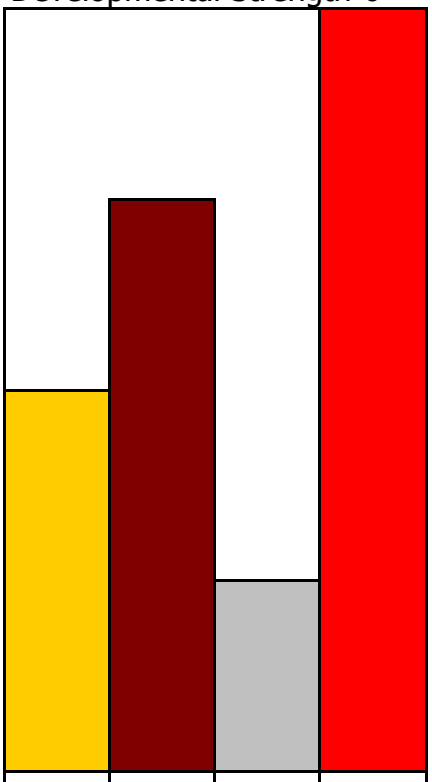
	Base		Load		UnLoad		Performance	
Weekly %	77.5%		85.0%		72.5%		92.5%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	5 sets		6 sets		4 sets		max	
Weeks #	**WK**	**1**	**WK**	**2**	**WK**	**3**	**WK**	**4**
wu-a	40.0%	1t5	47.5%	1t5	35.0%	1t5	55.0%	1t5
wu-b	52.5%	1t5	60.0%	1t5	47.5%	1t5	67.5%	1t5
wu-c	62.5%	1t5	70.0%	1t5	57.5%	1t5	77.5%	1t5
wu-d	70.0%	1t5	77.5%	1t5	65.0%	1t5	85.0%	1t5
wA								
wB								
wC	77.5%	x6	85.0%	x3	72.5%	x8	92.5%	x2
wD	77.5%	x6	85.0%	x3	72.5%	x8	92.5%	x2
wE	77.5%	x6	85.0%	x3	72.5%	x8	92.5%	x2
wF	77.5%	x6	85.0%	x3	72.5%	x8	92.5%	x2
wG	77.5%	x6	85.0%	x3			92.5%	x2
wH			85.0%	x3			92.5%	x2

Developmental Strength-3



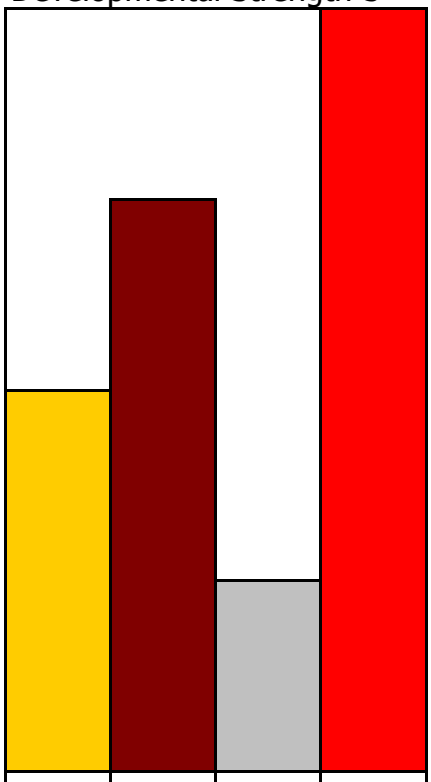
	Base		Load		UnLoad		Performance	
Weekly %	80.0%		87.5%		75.0%		95%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	2 sets		3 sets		1 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	27.5%	**1t5**	35.0%	**1t5**	22.5%	**1t5**		
wu-b	40.0%	**1t5**	47.5%	**1t5**	35.0%	**1t5**	20.0%	**1t5**
wu-c	50.0%	**1t5**	57.5%	**1t5**	45.0%	**1t5**	32.5%	**1t5**
wu-d	57.5%	**1t5**	65.0%	**1t5**	52.5%	**1t5**	45.0%	**1t5**
wA								
wB								
wC	65.0%	**x3**	72.5%	**x2**	60.0%	**x4**	57.5%	**x1**
wD	70.0%	**x3**	77.5%	**x2**	65.0%	**x4**	70.0%	**x1**
wE	75.0%	**x3**	82.5%	**x2**	70.0%	**x4**	87.5%	**x1**
wF	80.0%	**x6**	87.5%	**x4**	75.0%	**x7**	95.0%	**x2**
wG	80.0%	**x6**	87.5%	**x4**			95.0%	**x2**
wH			87.5%	**x4**			95.0%	**x2**

Developmental Strength-6



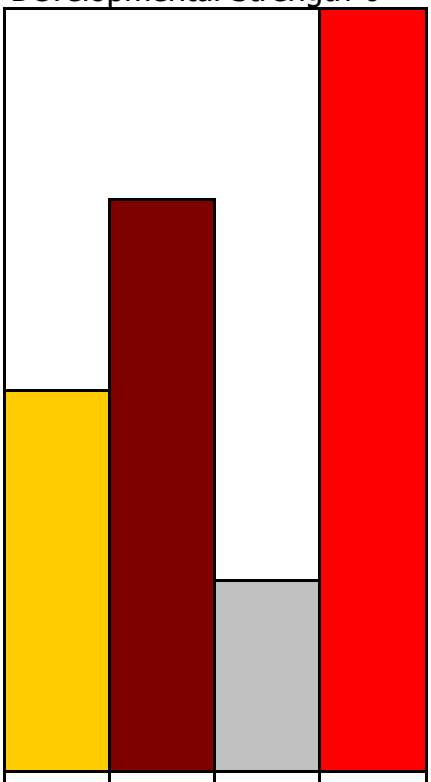
	Base		Load		UnLoad		Performance	
Weekly %	80.0%		87.5%		75.0%		95%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	5 sets		6 sets		4 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	42.5%	**1t5**	50.0%	**1t5**	37.5%	**1t5**		
wu-b	55.0%	**1t5**	62.5%	**1t5**	50.0%	**1t5**	20.0%	**1t5**
wu-c	65.0%	**1t5**	72.5%	**1t5**	60.0%	**1t5**	32.5%	**1t5**
wu-d	72.5%	**1t5**	80.0%	**1t5**	67.5%	**1t5**	45.0%	**1t5**
wA								
wB								
wC	80.0%	**x5**	87.5%	**x3**	75.0%	**x6**	57.5%	**x1**
wD	80.0%	**x5**	87.5%	**x3**	75.0%	**x6**	70.0%	**x1**
wE	80.0%	**x5**	87.5%	**x3**	75.0%	**x6**	87.5%	**x1**
wF	80.0%	**x5**	87.5%	**x3**	75.0%	**x6**	95.0%	**x2**
wG	80.0%	**x5**	87.5%	**x3**			95.0%	**x2**
wH			87.5%	**x3**			95.0%	**x2**

Developmental Strength-3



	Base		Load		UnLoad		Performance	
Weekly %	85.0%		92.5%		80.0%		100%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	2 sets		3 sets		1 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	32.5%	**1t5**	40.0%	**1t5**	27.5%	**1t5**	20.0%	**1t5**
wu-b	45.0%	**1t5**	52.5%	**1t5**	40.0%	**1t5**	35.0%	**1t5**
wu-c	55.0%	**1t5**	62.5%	**1t5**	50.0%	**1t5**	47.5%	**1t5**
wu-d	62.5%	**1t5**	70.0%	**1t5**	57.5%	**1t5**	62.5%	**1t5**
wA								
wB								
wC	70.0%	**x2**	77.5%	**x1**	65.0%	**x3**	75.0%	**x1**
wD	75.0%	**x2**	82.5%	**x1**	70.0%	**x3**	85.0%	**x1**
wE	80.0%	**x2**	87.5%	**x1**	75.0%	**x3**	92.5%	**x1**
wF	85.0%	**x4**	92.5%	**x3**	80.0%	**x6**	100%	**x1+**
wG	85.0%	**x4**	92.5%	**x3**			100%	**x1+**
wH			92.5%	**x3**			100%	**x1+**

Developmental Strength-6

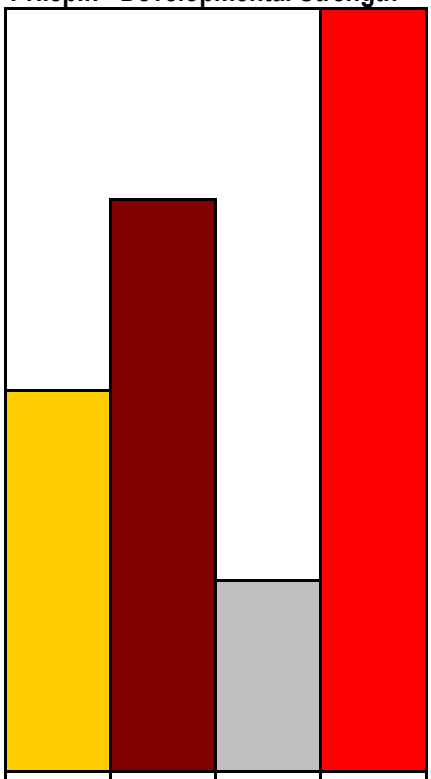


	Base		Load		UnLoad		Performance	
Weekly %	85.0%		92.5%		80.0%		100%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	5 sets		6 sets		4 sets		max	
TOP SETS	5 sets		6 sets		4 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	47.5%	**1t5**	55.0%	**1t5**	42.5%	**1t5**	20.0%	**1t5**
wu-b	60.0%	**1t5**	67.5%	**1t5**	55.0%	**1t5**	35.0%	**1t5**
wu-c	70.0%	**1t5**	77.5%	**1t5**	65.0%	**1t5**	47.5%	**1t5**
wu-d	77.5%	**1t5**	85.0%	**1t5**	72.5%	**1t5**	62.5%	**1t5**
wA								
wB								
wC	85.0%	**x3**	92.5%	**x2**	80.0%	**x5**	75.0%	**x1**
wD	85.0%	**x3**	92.5%	**x2**	80.0%	**x5**	85.0%	**x1**
wE	85.0%	**x3**	92.5%	**x2**	80.0%	**x5**	92.5%	**x1**
wF	85.0%	**x3**	92.5%	**x2**	80.0%	**x5**	100%	**x1+**
wG	85.0%	**x3**	92.5%	**x2**			100%	**x1+**
wH			92.5%	**x2**			100%	**x1+**

Prilepin Developmental 4-week Cycles – Performance

Prilepin - Developmental Strength

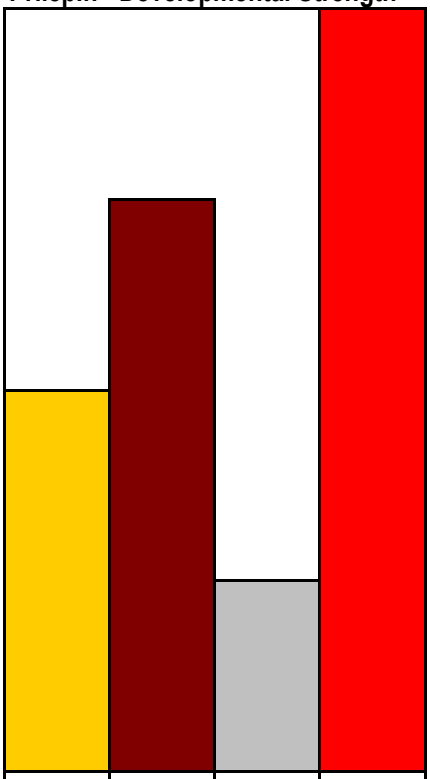
TOTAL LOWER UPPER



	Base		Load		Load		Performance	
Weekly %	65.0%		72.5%		60.0%		80%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	6 sets		8 sets		5 sets		max	
TOP SETS	6 sets		8 sets		5 sets		max	
Weeks #	**WK**	**1**	**WK**	**2**	**WK**	**3**	**WK**	**4**
wu-a	27.5%	**1t5**	35.0%	**1t5**	22.5%	**1t5**	42.5%	**1t5**
wu-b	40.0%	**1t5**	47.5%	**1t5**	35.0%	**1t5**	55.0%	**1t5**
wu-c	50.0%	**1t5**	57.5%	**1t5**	45.0%	**1t5**	65.0%	**1t5**
wu-d	57.5%	**1t5**	65.0%	**1t5**	52.5%	**1t5**	72.5%	**1t5**
wA			72.5%	**x3**			80.0%	**x2**
wB			72.5%	**x3**			80.0%	**x2**
wC	65.0%	**x3**	72.5%	**x3**			80.0%	**x2**
wD	65.0%	**x3**	72.5%	**x3**	60.0%	**x3**	80.0%	**x2**
wE	65.0%	**x3**	72.5%	**x3**	60.0%	**x3**	80.0%	**x2**
wF	65.0%	**x3**	72.5%	**x3**	60.0%	**x3**	80.0%	**x2**
wG	65.0%	**x3**	72.5%	**x3**	60.0%	**x3**	80.0%	**2x2**
wH	65.0%	**x3**	72.5%	**x3**	60.0%	**x3**	80.0%	**2x2**

Prilepin - Developmental Strength

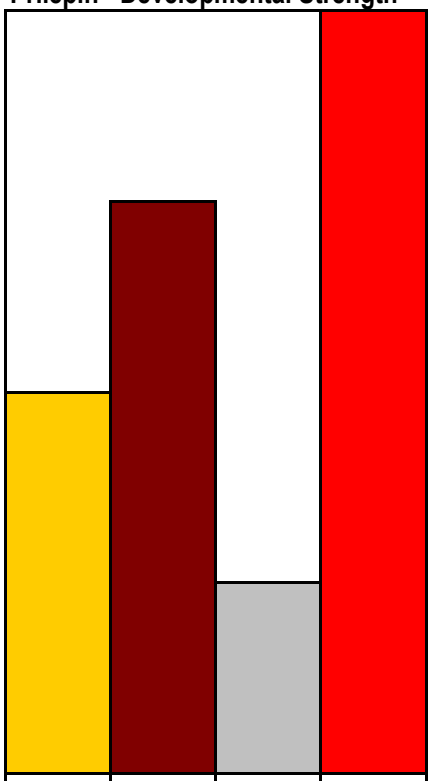
TOTAL LOWER UPPER



	Base		Load		Load		Performance	
Weekly %	67.5%		75.0%		62.5%		82.5%	
differential	[-] 15%		[-] 7.5%		[-] 20%		Top %	
WORK SETS	6 sets		8 sets		5 sets		max	
TOP SETS	6 sets		8 sets		5 sets		max	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	30.0%	1t5	37.5%	1t5	25.0%	1t5	45.0%	1t5
wu-b	42.5%	1t5	50.0%	1t5	37.5%	1t5	57.5%	1t5
wu-c	52.5%	1t5	60.0%	1t5	47.5%	1t5	67.5%	1t5
wu-d	60.0%	1t5	67.5%	1t5	55.0%	1t5	75.0%	1t5
wA			75.0%	x3			82.5%	x2
wB			75.0%	x3			82.5%	x2
wC	67.5%	x3	75.0%	x3			82.5%	x2
wD	67.5%	x3	75.0%	x3	62.5%	x3	82.5%	x2
wE	67.5%	x3	75.0%	x3	62.5%	x3	82.5%	x2
wF	67.5%	x3	75.0%	x3	62.5%	x3	82.5%	x2
wG	67.5%	x3	75.0%	x3	62.5%	x3	82.5%	2x2
wH	67.5%	x3	75.0%	x3	62.5%	x3	82.5%	2x2

Prilepin - Developmental Strength

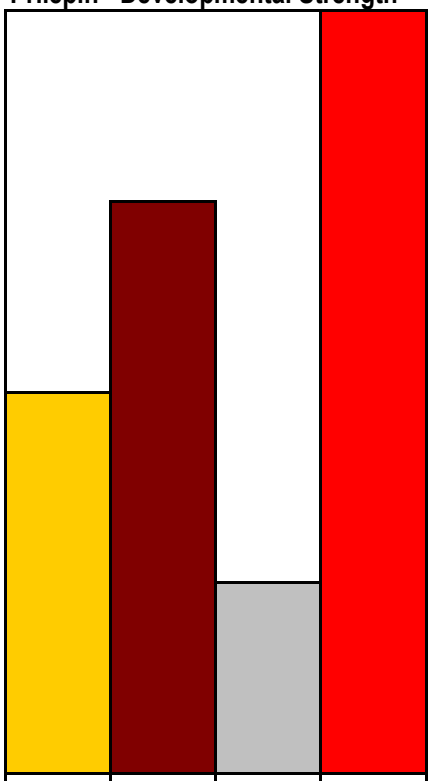
TOTAL LOWER UPPER



	Base		Load		Load		Performance	
Weekly %	70.0%		77.5%		65.0%		85%	
differential	[-] 15%		[-] 7.5%		[-] 20%		Top %	
WORK SETS	6 sets		8 sets		5 sets		max	
TOP SETS	6 sets		8 sets		5 sets		max	
Weeks #	WK	1	WK	2	WK	3	WK	4
wu-a	32.5%	1t5	40.0%	1t5	27.5%	1t5	47.5%	1t5
wu-b	45.0%	1t5	52.5%	1t5	40.0%	1t5	60.0%	1t5
wu-c	55.0%	1t5	62.5%	1t5	50.0%	1t5	70.0%	1t5
wu-d	62.5%	1t5	70.0%	1t5	57.5%	1t5	77.5%	1t5
wA			77.5%	x3			85.0%	x2
wB			77.5%	x3			85.0%	x2
wC	70.0%	x3	77.5%	x3			85.0%	x2
wD	70.0%	x3	77.5%	x3	65.0%	x3	85.0%	x2
wE	70.0%	x3	77.5%	x3	65.0%	x3	85.0%	x2
wF	70.0%	x3	77.5%	x3	65.0%	x3	85.0%	x2
wG	70.0%	x3	77.5%	x3	65.0%	x3	85.0%	2x2
wH	70.0%	x3	77.5%	x3	65.0%	x3	85.0%	2x2

Prilepin - Developmental Strength

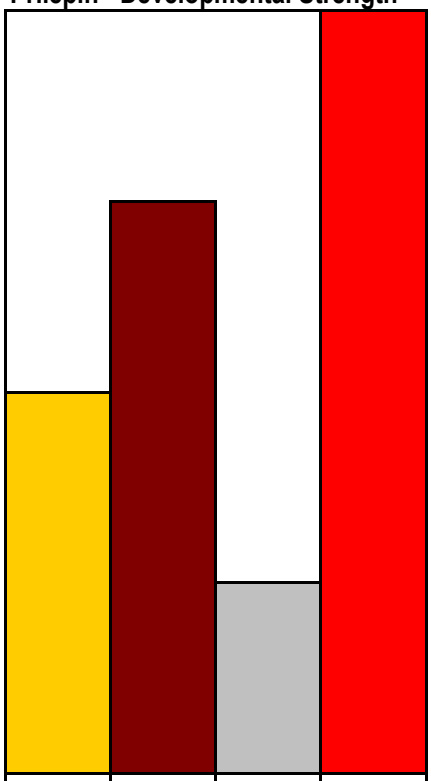
TOTAL LOWER UPPER



	Base		Load		Load		Performance	
Weekly %	72.5%		80.0%		67.5%		87.5%	
differential	[-] 15%		[-] 7.5%		[-] 20%		Top %	
WORK SETS	8 sets		10 sets		6 sets		max	
TOP SETS	8 sets		10 sets		6 sets		max	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	35.0%	1t5	42.5%	1t5	30.0%	1t5	50.0%	1t5
wu-b	47.5%	1t5	55.0%	1t5	42.5%	1t5	62.5%	1t5
wu-c	57.5%	1t5	65.0%	1t5	52.5%	1t5	72.5%	1t5
wu-d	65.0%	1t5	72.5%	1t5	60.0%	1t5	80.0%	1t5
wA	72.5%	x3	80.0%	x2			87.5%	x2
wB	72.5%	x3	80.0%	x2			87.5%	x2
wC	72.5%	x3	80.0%	x2	67.5%	x3	87.5%	x2
wD	72.5%	x3	80.0%	x2	67.5%	x3	87.5%	x2
wE	72.5%	x3	80.0%	x2	67.5%	x3	87.5%	x2
wF	72.5%	x3	80.0%	x2	67.5%	x3	87.5%	x2
wG	72.5%	x3	80.0%	2x2	67.5%	x3	87.5%	2x2
wH	72.5%	x3	80.0%	2x2	67.5%	x3	87.5%	2x2

Prilepin - Developmental Strength

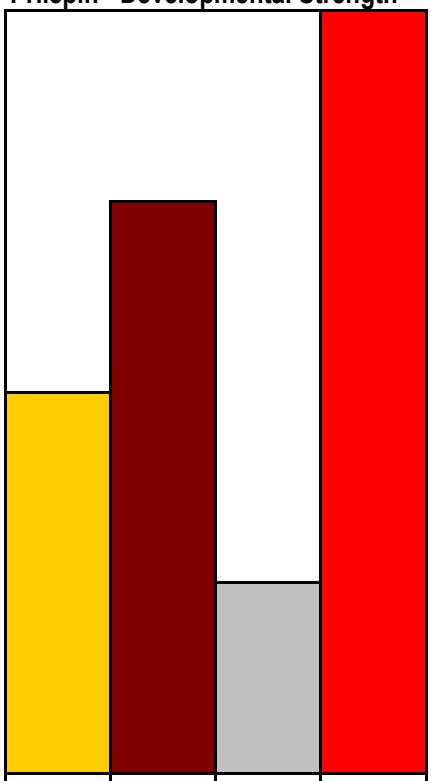
TOTAL LOWER UPPER



	Base	Load	Load	Performance
Weekly %	75.0%	82.5%	70.0%	90%
differential	[-] 15%	[-] 7.5%	[-] 20%	Top %
WORK SETS	8 sets	10 sets	6 sets	max
TOP SETS	8 sets	10 sets	6 sets	max
Weeks #	WK 1	WK 2	WK 3	WK 4
wu-a	37.5% 1t5	45.0% 1t5	32.5% 1t5	52.5% 1t5
wu-b	50.0% 1t5	57.5% 1t5	45.0% 1t5	65.0% 1t5
wu-c	60.0% 1t5	67.5% 1t5	55.0% 1t5	75.0% 1t5
wu-d	67.5% 1t5	75.0% 1t5	62.5% 1t5	82.5% 1t5
wA	75.0% x3	82.5% x2		90.0% x1
wB	75.0% x3	82.5% x2		90.0% x1
wC	75.0% x3	82.5% x2	70.0% x3	90.0% x1
wD	75.0% x3	82.5% x2	70.0% x3	90.0% x1
wE	75.0% x3	82.5% x2	70.0% x3	90.0% x1
wF	75.0% x3	82.5% x2	70.0% x3	90.0% x1
wG	75.0% x3	82.5% 2x2	70.0% x3	90.0% 2x1
wH	75.0% x3	82.5% 2x2	70.0% x3	90.0% 2x1

Prilepin - Developmental Strength

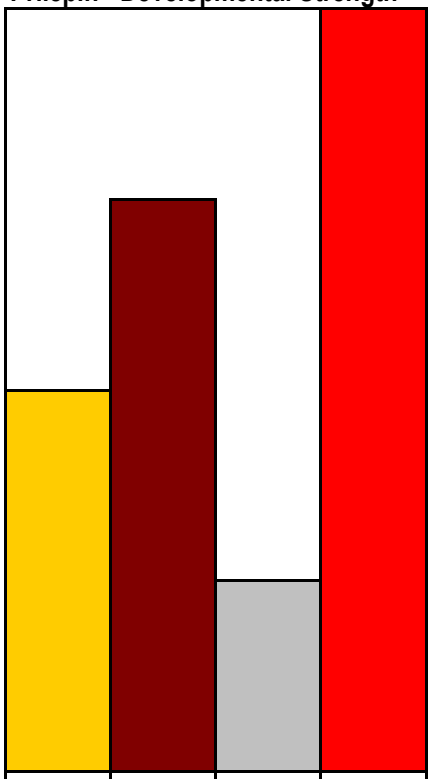
TOTAL LOWER UPPER



	Base		Load		Load		Performance	
Weekly %	77.5%		85.0%		72.5%		92.5%	
differential	**[-] 15%**		**[-] 7.5%**		**[-] 20%**		**Top %**	
WORK SETS	8 sets		10 sets		6 sets		max	
TOP SETS	8 sets		10 sets		6 sets		max	
Weeks #	**WK 1**		**WK 2**		**WK 3**		**WK 4**	
wu-a	40.0%	**1t5**	47.5%	**1t5**	35.0%	**1t5**	55.0%	**1t5**
wu-b	52.5%	**1t5**	60.0%	**1t5**	47.5%	**1t5**	67.5%	**1t5**
wu-c	62.5%	**1t5**	70.0%	**1t5**	57.5%	**1t5**	77.5%	**1t5**
wu-d	70.0%	**1t5**	77.5%	**1t5**	65.0%	**1t5**	85.0%	**1t5**
wA	77.5%	**x3**	85.0%	**x2**			92.5%	**x1**
wB	77.5%	**x3**	85.0%	**x2**			92.5%	**x1**
wC	77.5%	**x3**	85.0%	**x2**	72.5%	**x3**	92.5%	**x1**
wD	77.5%	**x3**	85.0%	**x2**	72.5%	**x3**	92.5%	**x1**
wE	77.5%	**x3**	85.0%	**x2**	72.5%	**x3**	92.5%	**x1**
wF	77.5%	**x3**	85.0%	**x2**	72.5%	**x3**	92.5%	**x1**
wG	77.5%	**x3**	85.0%	**2x2**	72.5%	**x3**	92.5%	**2x1**
wH	77.5%	**x3**	85.0%	**2x2**	72.5%	**x3**	92.5%	**2x1**

Prilepin - Developmental Strength

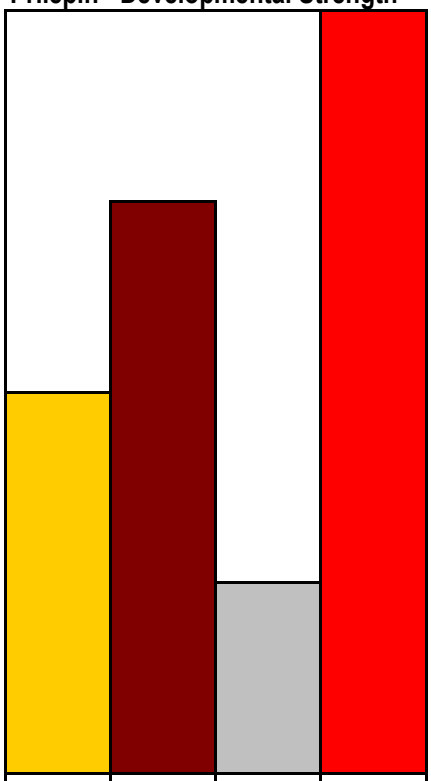
TOTAL LOWER UPPER



	Base		Load		Load		Performance	
Weekly %	80.0%		87.5%		75.0%		95%	
differential	[-] 15%		[-] 7.5%		[-] 20%		Top %	
WORK SETS	8 sets		10 sets		6 sets		max	
TOP SETS	8 sets		10 sets		6 sets		max	
Weeks #	WK 1		WK 2		WK 3		WK 4	
wu-a	42.5%	1t5	50.0%	1t5	37.5%	1t5	27.5%	1t5
wu-b	55.0%	1t5	62.5%	1t5	50.0%	1t5	40.0%	1t5
wu-c	65.0%	1t5	72.5%	1t5	60.0%	1t5	52.5%	1t5
wu-d	72.5%	1t5	80.0%	1t5	67.5%	1t5	62.5%	1t5
wA	80.0%	x2	87.5%	x2				
wB	80.0%	x2	87.5%	x2				
wC	80.0%	x2	87.5%	x2	75.0%	x3	70.0%	x1
wD	80.0%	x2	87.5%	x2	75.0%	x3	75.0%	x1
wE	80.0%	x2	87.5%	x2	75.0%	x3	87.5%	x1
wF	80.0%	x2	87.5%	x2	75.0%	x3	95.0%	x1
wG	80.0%	x2	87.5%	2x2	75.0%	x3	95.0%	x1
wH	80.0%	x2	87.5%	2x2	75.0%	x3	95.0%	x1

Prilepin - Developmental Strength

TOTAL LOWER UPPER



	Base		Load		Load		Performance	
Weekly %	85.0%		92.5%		80.0%		100%	
differential	[-] 15%		[-] 7.5%		[-] 20%		Top %	
WORK SETS	8 sets		10 sets		6 sets		max	
TOP SETS	8 sets		10 sets		6 sets		max	
Weeks #	WK	1	WK	2	WK	3	WK	4
wu-a	47.5%	1t5	55.0%	1t5	42.5%	1t5	32.5%	1t5
wu-b	60.0%	1t5	67.5%	1t5	55.0%	1t5	47.5%	1t5
wu-c	70.0%	1t5	77.5%	1t5	65.0%	1t5	60.0%	1t5
wu-d	77.5%	1t5	85.0%	1t5	72.5%	1t5	70.0%	1t5
wA	85.0%	x2	92.5%	x1				
wB	85.0%	x2	92.5%	x1				
wC	85.0%	x2	92.5%	x1	80.0%	x2	77.5%	x1
wD	85.0%	x2	92.5%	x1	80.0%	x2	85.0%	x1
wE	85.0%	x2	92.5%	x1	80.0%	x2	92.5%	x1
wF	85.0%	x2	92.5%	x1	80.0%	x2	100%	x1+
wG	85.0%	x2	92.5%	2x1	80.0%	x2	100%	x1+
wH	85.0%	x2	92.5%	2x1	80.0%	x2	100%	x1+

APPENDIX B
ANNUAL PLAN DEVELOPMENT

- Step 1 Design a Template
- Step 2 List Calendar Dates Sunday – Saturday
- Step 3 Mark Competitions and Uncontrollable Factors
- Step 4 Breakdown Annual Plan to 3 Main Stages
- Step 5 Reduce Main Stages to Specific Programs
- Step 6 Develop Running Plan for each Specific Program
- Step 7 Develop a Training Intensity Cycle[s] for Each Program

Annual Plan Template

SPORT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Date Sunday-Saturday																																																				
STAGE																																																					
Program																																																					
Competition																																																					
Holidays																																																				
Uncontrollable Factors/ Important Dates																																																				
Running Program Emphasis																																																				
Training Cycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Microcycle ELITE/TRADITIONAL																																																				
Active Rest																																																				
Variation																																																				
Base																																																				
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Date	12	12	12	12	12	1	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11
Sunday-Saturday	1	8	15	22	29	5	12	19	26	2	9	16	23	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
STAGE																																																				
Program																																																				
Competition																																																				
Holidays																																																			
Uncontrollable Factors/ Important Dates																																																			
Running Program Emphasis																																																			
Training Cycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
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Date	12	12	12	12	12	1	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11
Sunday-Saturday	1	8	15	22	29	5	12	19	26	2	9	16	23	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
STAGE																																																				
Program																																																				
Competition				bowl	bowl															SG																																		
Holidays				xx	xx			xx								xx										xx					xx																						xx
Uncontrollable Factors/ Important Dates		Fall ex			SADT			Spr Sem								Spr Br	Spr Prac	Spr Prac	Spr Prac	Spr Prac			Spr Ex	Spr Ex	SADT		Sum 1				Sum 1ex	Sum 2				Sum 2ex			Fall Sem													
Running Program Emphasis																																																			
Training Cycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
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Date	12	12	12	12	12	1	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11
Sunday-Saturday	1	8	15	22	29	5	12	19	26	2	9	16	23	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
STAGE	REJUVENATION							DEVELOPMENTAL																																COMPETITIVE															
Program																																																				
Competition				bowl	bowl															SG																					NAU	tba	Iowa	OSU	USC	UO	UNC	Ucla	CAL	Stan	WS	bye	UA
Holidays				xx	xx			xx								xx										xx					xx									xx										xx		xx
Uncontrollable Factors/ Important Dates		Fall ex			SADT			Spr Sem								Spr Br	Spr Prac	Spr Prac	Spr Prac	Spr Prac				Spr Ex	Spr Ex	SADT	Sum 1					Sum 1ex	Sum 2					Sum 2ex				Fall Sem											
Running Program Emphasis																																																				
Training Cycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
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Date	12	12	12	12	12	1	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5	5
Sunday-Saturday	1	8	15	22	29	5	12	19	26	2	9	16	23	2	9	16	23	30	6	13	20	27	4	11	18	25
STAGE	REJUVENATION							DEVELOPMENTAL																		
Program	Post Season			Off Season				Winter									Spring I						2nd		Spring II/Summer	
Competition				bowl	bowl															SG						
Holidays				xx	xx			xx																		xx
Uncontrollable Factors/		Fall	Fall		SADT			Spr								Spr	Spr	Spr	Spr	Spr			Spr	Spr	SADT	
Important Dates		ex	ex					Sem								Br	Prac	Prac	Prac	Prac			Ex	Ex		
Running Program Emphasis																										
Training Cycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Microcycle ELITE/TRADITIONAL																										
Active Rest																										
Variation																										
Base																										
Load																										
Deload																										
Performance																										
Effort																										
Notes																										

Football	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Date	6	6	6	6	6	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11
Sunday-Saturday	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
STAGE	DEVELOPMENTAL										COMPETITIVE															
Program	Spring II/Summer										Pre		In Season													
Competition														NAU	tba	Iowa	OSU	USC	UO	UNC	Ucla	CAL	Stan	WS	bye	UA
Holidays					xx									xx										xx		xx
Uncontrollable Factors/	Sum				Sum	Sum				Sum			Fall													
Important Dates	1				1ex	2				2ex			Sem													
Running Program Emphasis																										
Training Cycles	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Microcycle ELITE/TRADITIONAL																										
Active Rest																										
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Date	12	12	12	12	12	1	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11
Sunday-Saturday	1	8	15	22	29	5	12	19	26	2	9	16	23	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
STAGE	REJUVENATION							DEVELOPMENTAL																															COMPETITIVE															
Program	Post Season			Off Season				Winter									Spring I						2nd		Spring II/Summer													Pre		In Season														
Competition				bowl	bowl															SG																				NAU	tba	Iowa	OSU	USC	UO	UNC	Ucla	CAL	Stan	WS	bye	UA
Holidays				xx	xx			xx																		xx					xx								xx										xx		xx
Uncontrollable Factors/ Important Dates		Fall ex	Fall ex		SADT			Spr Sem								Spr Br	Spr Prac	Spr Prac	Spr Prac	Spr Prac			Spr Ex	Spr Ex	SADT		Sum 1				Sum 1ex	Sum 2				Sum 2ex			Fall Sem												
Running Program Emphasis	General Conditioning Athletic Conditioning							Category 1 Complex Training Speed Development									Category 2 Metabolic/ Practice				Cat 3 Condo Interv				Cat 3 Condo Interval		Category 2 Category 1				Category 2 Category 1					Cat 2		Category 2 Sunday - Cat 1, Tuesday - Cat 2 - position Wednesday - Cat 2 - special teams														
Training Cycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
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Date	12	12	12	12	12	1	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11
Sunday-Saturday	1	8	15	22	29	5	12	19	26	2	9	16	23	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
STAGE	REJUVENATION							DEVELOPMENTAL																																COMPETITIVE														
Program	Post Season			Off Season				Winter									Spring I							2nd		Spring II/Summer												Pre		In Season													
Competition				bowl	bowl															SG																			NAU	tba	Iowa	OSU	USC	UO	UNC	Ucla	CAL	Stan	WS	bye	UA
Holidays				xx	xx			xx																		xx					xx									xx									xx		xx
Uncontrollable Factors/ Important Dates		Fall ex	Fall ex		1-1 to 1-21 SADT			Spr Sem								Spr Br	Spr Prac	Spr Prac	Spr Prac	Spr Prac			Spr Ex	Spr Ex	SADT		Sum 1					Sum 1ex	Sum 2				Sum 2ex			Fall Sem												
Running Program Emphasis	General Conditioning Athletic Conditioning							Category 1 Complex Training Speed Development									Category 2 Metabolic/ Practice				Cat 3 Condo Interv					Cat 3 Cond Inter		Category 2 Category 1				Category 2 Category 1						Cat 2		Category 2 Sunday - Cat 1, Tuesday - Cat 2 - position Wednesday - Cat 2 - special teams												
Training Cycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Microcycle								E	E	E	E	E	E	E	E		E	E	E	E	T	T	T			T	T	E	E	E	E	E	E	E				E	E	E	E	E	E	E	E	E	E	E	E		E
ELITE/TRADITIONAL								E	E	E	E	E	E	E	E		S	S	S	S	R	R	R			R	R	E	E	E	E	E	E	E				S	S	S	S	S	S	S	S	S	S	S	S		S
Active Rest																A								A	V											A																
Variation	V	V	V																																		V	V														
Base				70				75				85									68					75		70				75																				
Load					73	75			83				93									73	78				80		78				83																		
Deload							70			70				80																65				70																		
Performance											90				100																85				90																90		
Effort																	E1	E1	E2	E2																			E3	E3	E4	E4	E5	E5	E6	E6	E7	E7	E8	E8		E9
Notes	technique circuit recover			2 Day Split Traditional Cycle				Performance Elite									Advanced Elite Cycle				Trad- ional Cycle S-End					Perf Cycle Dev-S		Performance Cycle Met-S				Performance Cycle Met-S						Cir- cuit bands		Advanced Elite Cycle Seniors - Tier 1 Days 1&2, Day 3 Team WO Newcomers - Traditional S-End												

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APPENDIX C
COMPREHENSIVE EXERCISE POOL

- TOTAL BODY EXERCISES
- LOWER BODY EXERCISES
- UPPER BODY EXERCISES

- Total Body Exercises

TOTAL BODY MOVEMENTS

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
Pull and Catch	**BB Clean - Deck - Power**	steel log	reverse bands											3
Pull and Catch	**BB Clean - Deck - Squat**													1
Pull and Catch	**BB Clean - Deck - Split**	dominant leg catch	alternate leg catch											2
Pull and Catch	**BB Clean - Hang - Power**	mid thigh start	above knee start	below knee start	shin start									4
Pull and Catch	**BB Clean - Hang - Squat**	mid thigh start	above knee start	below knee start	shin start									4
Pull and Catch	**BB Clean - Hang - Split**	dominant leg catch	alternate leg catch	mid thigh start	above knee start	below knee start	shin start							6
Pull and Catch	**BB Clean - Rack - Power**	box 4-6"	box 7-10"	box 11-16"	box > 16"									4
Pull and Catch	**BB Clean - Rack - Squat**	box 4-6"	box 7-10"	box 11-16"	box > 16"									4
Pull and Catch	**BB Clean - Rack - Split**	dominant leg catch	alternate leg catch	box 4-6"	box 7-10"	box 11-16"	box >16"							6
Pull and Catch	**DB Clean - Deck - Power**	single arm catch	alternate arm catch	neutral grip	pronated grip									4
Pull and Catch	**DB Clean - Deck - Squat**	single arm catch	alternate arm catch	neutral grip	pronated grip									4
Pull and Catch	**DB Clean - Deck - Split**	single arm catch	alternate arm catch	dominant leg catch	alternate leg catch	opp. arm/leg catch	mid thigh start	above knee start	below knee start	shin start	neutral grip	pronated grip		11
Pull and Catch	**DB Clean - Hang - Power**	single arm catch	alternate arm catch	mid thigh start	above knee start	below knee start	shin start	neutral grip	pronated grip					8
Pull and Catch	**DB Clean - Hang - Squat**	single arm catch	alternate arm catch	mid thigh start	above knee start	below knee start	shin start	neutral grip	pronated grip					8
Pull and Catch	**DB Clean - Hang - Split**	single arm catch	alternate arm catch	dominant leg catch	alternate leg catch	opp. arm/leg catch	mid thigh start	above knee start	below knee start	shin start	neutral grip	pronated grip		11
Pull and Catch	**BB Snatch - Deck - Power**	keg	clean grip											3
Pull and Catch	**BB Snatch - Deck - Squat**	clean grip												2
Pull and Catch	**BB Snatch - Deck - Split**	dominant leg catch	alternate leg catch	clean grip										3
Pull and Catch	**BB Snatch - Hang - Power**	mid thigh start	above knee start	below knee start	shin start	clean grip								5
Pull and Catch	**BB Snatch - Hang - Squat**	mid thigh start	above knee start	below knee start	shin start	clean grip								5
Pull and Catch	**BB Snatch - Hang - Split**	dominant leg catch	alternate leg catch	mid thigh start	above knee start	below knee start	shin start	clean grip						7
Pull and Catch	**BB Snatch - Rack - Power**	box 4-6"	box 7-10"	box 11-16"	box > 16"	clean grip								5
Pull and Catch	**BB Snatch - Rack - Squat**	box 4-6"	box 7-10"	box 11-16"	box > 16"	clean grip								5
Pull and Catch	**BB Snatch - Rack - Split**	dominant leg catch	alternate leg catch	box 4-6"	box 7-10"	box 11-16"	box >16"	clean grip						7
Pull and Catch	**DB SA Snatch - Deck - Power**	single arm	alternate arm	neutral grip	pronated grip									4
Pull and Catch	**DB SA Snatch - Deck - Split**	single arm	alternate arm	dominant leg catch	alternate leg catch	same leg catch	neutral grip	pronated grip						7
Pull and Catch	**DB SA Snatch - Hang - Power**	neutral grip	pronated grip											4
Pull and Catch	**DB SA Snatch - Hang - Split**	alternate leg	same leg	neutral grip	pronated grip									6
Pull and Catch	**BB SA Snatch - Hang - Power**													1
Overhead	**BB Push Press**	front	behind head											2
Overhead	**BB Push Jerk**	front	behind head											2
Overhead	**BB Split Jerk**	front	behind head	dominant leg catch	alternate leg catch									4
Overhead	**DB Push Press**	neutral grip	pronated grip	single arm	alternate arm									4
Overhead	**DB Push Jerk**	neutral grip	pronated grip	single arm	alternate arm									4
Overhead	**DB Split Jerk**	neutral grip	pronated grip	single arm	alternate arm	dominant leg catch	alternate leg catch	opp. arm/leg catch	arm/same leg catch					8

TOTAL BODY MOVEMENTS

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
Extension	**Deadlift - Deck**	conventional	sumo	frog	with bands	with chains	with combo	opposing grip	clean grip	snatch grip	trap bar	hex bar	farmers implement	12
Extension	**Deadlift - Rack**	conventional	sumo	frog	with bands	with chains	with combo	opposing grip	clean grip	snatch grip	above knee start	below knee start	shin start	12
Extension	**Deadlift - Elevated**	conventional	sumo	frog	with bands	with chains	with combo	opposing grip	clean grip	snatch grip	2"	3"	4"	12
Extension	**BB Clean Gr Shrug Pull - Deck**	w/bands	jump shrug											3
Extension	**BB Clean Gr Power Pull - Deck**	w/bands												2
Extension	**BB Clean Gr Shrug Pull - Hang**	mid thigh start	above knee start	below knee start	shin start	jump shrug								5
Extension	**BB Clean Gr Power Pull - Hang**	mid thigh start	above knee start	below knee start	shin start									4
Extension	**BB Clean Gr Shrug Pull - Rack**	box 4-6"	box 7-10"	box 11-16"	box > 16"	jump shrug								5
Extension	**BB Clean Gr Power Pull - Rack**	box 4-6"	box 7-10"	box 11-16"	box > 16"									4
Extension	**BB Snatch Gr Shrug Pull - Deck**	w/bands	jump shrug											3
Extension	**BB Snatch Gr Power Pull - Deck**	w/bands												2
Extension	**BB Snatch Gr Shrug Pull - Hang**	mid thigh start	above knee start	below knee start	shin start	jump shrug								5
Extension	**BB Snatch Gr Power Pull - Hang**	mid thigh start	above knee start	below knee start	shin start									4
Extension	**BB Snatch Gr Shrug Pull - Rack**	box 4-6"	box 7-10"	box 11-16"	box > 16"	jump shrug								5
Extension	**BB Snatch Gr Power Pull - Rack**	box 4-6"	box 7-10"	box 11-16"	box > 16"									4
Extension	**DB Shrug Pull - Deck**	single arm	alternate arm	neutral grip	pronated grip	jump shrug								5
Extension	**DB Power Pull - Deck**	single arm	alternate arm	neutral grip	pronated grip									4
Extension	**DB Shrug Pull - Hang**	single arm	alternate arm	neutral grip	pronated grip	jump shrug								5
Extension	**DB Power Pull - Hang**	single arm	alternate arm	neutral grip	pronated grip									4
Hybrids	**BB Clean to Push Press - Deck**	steel log	fat bar											3
Hybrids	**BB Clean to Push Jerk - Deck**	steel log	fat bar											3
Hybrids	**BB Clean to Split Jerk - Deck**	steel log												2
Hybrids	**BB Clean to Push Press - Hang**	steel log	fat bar											3
Hybrids	**BB Clean to Push Jerk - Hang**	steel log	fat bar											3
Hybrids	**BB Clean to Split Jerk - Hang**	steel log	dominant leg	alternate leg										4
Hybrids	**DB Clean to Push Press - Deck**													1
Hybrids	**DB Clean to Push Jerk - Deck**													1
Hybrids	**DB Clean to Split Jerk - Deck**	dominant leg	alternate leg											2
Hybrids	**DB Clean to Push Press - Hang**													1
Hybrids	**DB Clean to Push Jerk - Hang**													1
Hybrids	**DB Clean to Split Jerk - Hang**	dominant leg	alternate leg											2
Hybrids	**BB Clean to Front Squat**													1
Hybrids	**DB Clean to Front Squat**													1
Hybrids	**BB Clean to Fr Squat to P Press**													1
Hybrids	**BB Clean to Fr Squat to P Jerk**													1

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
Hybrids	**BB Clean to Fr Squat to S Jerk**	dominant leg	alternate leg											**2**
Hybrids	**DB Clean to Fr Squat to P Press**													**1**
Hybrids	**DB Clean to Fr Squat to P Jerk**													**1**
Hybrids	**DB Clean to Fr Squat to S Jerk**	dominant leg	alternate leg											**2**
Technique	**Snatch Balance**													**1**
Technique	**Pressing Snatch Balance**													**1**
Technique	**Heaving Snatch Balance**													**1**
Alternative	**Hammer Shrug Pull**													**1**
Alternative	**Hammer Hi Pull**													**1**
Alternative	**Hammer Deadlift**													**1**
Alternative	**Hammer Jammer**	double leg	single leg	alternate leg	rotation	double leg w/bands	single leg w/bands	alt leg w/bands	rotation w/bands					**8**
														318

- Lower Body Exercises

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
In Place Double	**BB-Squat-Back-Power Stance**	pause	w/bands	w/chains	w/combination	top of thigh parallel	hamstring parallel	olympic depth	powerlifting depth	1/4 depth	buffalo bar	uneven		**11**
In Place Double	**BB-Squat-Back-Olympic Stance**	pause	w/bands	w/chains	w/combination	top of thigh parallel	hamstring parallel	olympic depth	powerlifting depth	1/4 depth	buffalo bar	uneven		**11**
In Place Double	**BB-Squat-Box-Back-Power**	w/bands	w/chains	w/combination	below parallel	parallel	high	low	buffalo bar					**9**
In Place Double	**BB-Squat-Box-Back-Olympic**	w/bands	w/chains	w/combination	below parallel	parallel	high	low	buffalo bar					**9**
In Place Double	**BB-Squat-Front-Power Stance**	pause	top of thigh parallel	hamstring parallel	olympic depth	powerlifting depth	1/4 depth							**6**
In Place Double	**BB-Squat-Front-Olympic Stance**	pause	top of thigh parallel	hamstring parallel	olympic depth	powerlifting depth	1/4 depth							**6**
In Place Double	**BB-Squat-Box-Front-Power**	below parallel	parallel	high	low									**4**
In Place Double	**BB-Squat-Box-Front-Olympic**	below parallel	parallel	high	low									**4**
In Place Double	**BB-Squat-Zercher-Power**	below parallel	parallel	high	low									**4**
In Place Double	**BB-Squat-Box-Zercher-Power**	below parallel	parallel	high	low									**4**
In Place Double	**BB-Squat-Overhead-Natural**	balance board												**2**
In Place Double	**BB-Squat-Box-Overhead-Nat**	below parallel	parallel	high	low									**4**
In Place Double	**BB-Squat-1/4-Jump-Vertical**	w/bands												**2**
In Place Double	**BB-Squat-1/4-Sport-Vertical**	w/bands												**2**
In Place Double	**BB-Squat-Midpoint-Power**	top of thigh start	hamstring start	olympic start	powerlifting start	1/4 start								**5**
In Place Double	**BB-Squat-Midpoint-Olympic**	top of thigh start	hamstring start	olympic start	powerlifting start	1/4 start	aerex pad	safety bar	buffalo bar					**9**
In Place Single	**BB-Squat-Split**	back foot elevated	front foot elevated	jump/recover single	jump/recover alter	discs	aerex pad	safety bar	buffalo bar					**10**
In Place Double	**DB-Squat-Natural**	arms length	shoulder height	overhead	balance board	discs	aerex pad							**6**
In Place Double	**DB-Sumo-Squat**													**1**
In Place Single	**Single Leg Squat**	barbell	dumbbell	plate	counter balance	vertical foot	horizontal foot	free hand	upper support	off stability ball	off bench	safety squat bar		**11**
In Place Double	**Safety Bar-Squat-Power**	pause	w/bands	w/chains	w/combination	top of thigh parallel	hamstring parallel	olympic depth	powerlifting depth	1/4 depth				**9**
In Place Double	**Safety Bar-Squat-Olympic**	pause	w/bands	w/chains	w/combination	top of thigh parallel	hamstring parallel	olympic depth	powerlifting depth	1/4 depth				**9**
In Place Double	**Safety Bar-Box-Squat-Power**	w/bands	w/chains	w/combination	below parallel	parallel	high	low						**8**
In Place Double	**Safety Bar-Box-Squat-Olympic**	w/bands	w/chains	w/combination	below parallel	parallel	high	low						**8**
In Place Double	**Safety Bar-Squat-Midpoint-Pow**	top of thigh start	hamstring start	olympic start	powerlifting start	1/4 start								**5**
In Place Double	**Safety Bar-Squat-Midpoint-Oly**	top of thigh start	hamstring start	olympic start	powerlifting start	1/4 start								**5**
Horizontal	**BB-Lunge-Asterisk**													**1**
Horizontal	**DB-Lunge-Asterisk**	arms length	shoulder height	overhead	plate option									**4**
Horizontal	**BB-Lunge-Standard**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"									**5**
Horizontal	**DB-Lunge-Standard**	arms length	shoulder height	overhead	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	plate option					**8**
Horizontal	**BB-Lunge-Reverse**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"									**5**
Horizontal	**DB-Lunge-Reverse**	arms length	shoulder height	overhead	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	plate option					**8**
Horizontal	**BB-Lunge-45 degree**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"									**5**
Horizontal	**DB-Lunge-45 degree**	arms length	shoulder height	overhead	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	plate option					**8**
Horizontal	**BB-Lunge-Transverse**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"									**5**

LOWER BODY MOVEMENTS

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
Horizontal	**DB-Lunge-Transverse**	arms length	shoulder height	overhead	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	plate option					8
Horizontal	**BB-Lunge-Lateral**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"									5
Horizontal	**DB-Lunge-Lateral**	arms length	shoulder height	overhead	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	plate option					8
Horizontal	**BB-Lunge-Forward Walk**													1
Horizontal	**DB-Lunge-Forward Walk**	arms length	shoulder height	overhead	plate option	plate twist								5
Horizontal	**BB-Lunge-Reverse Walk**													1
Horizontal	**DB-Lunge-Reverse Walk**	arms length	shoulder height	overhead	plate option									4
Horizontal	**BB-Lunge-Shuffle**													1
Horizontal	**DB-Lunge-Shuffle**	arms length	shoulder height	overhead	plate option									4
Horizontal	**DB-Lunge-Tennis**													1
Vertical	**BB-Step Up/Down-Standard**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	hi knee drive								5
Vertical	**DB-Step Up/Down-Standard**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	arms length	shoulder height	overhead	plate option	plate twist	hi knee drive			10
Vertical	**BB-Step Up/Down-Reverse**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	hi knee drive								5
Vertical	**DB-Step Up/Down-Reverse**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	arms length	shoulder height	overhead	plate option	hi knee drive				9
Vertical	**BB-Step Up/Down-45 degree**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	hi knee drive								5
Vertical	**DB-Step Up/Down-45 degree**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	arms length	shoulder height	overhead	plate option	hi knee drive				9
Vertical	**BB-Step Up/Down-Lateral**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	hi knee drive								5
Vertical	**DB-Step Up/Down-Lateral**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	arms length	shoulder height	overhead	plate option	hi knee drive				9
Vertical	**BB-Step Up/Down-Crossover**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	hi knee drive								5
Vertical	**DB-Step Up/Down-Crossover**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	arms length	shoulder height	overhead	plate option	hi knee drive				9
Vertical	**BB-Step Up/Down-Shuffle**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	hi knee drive								5
Vertical	**DB-Step Up/Down-Shuffle**	to box 4-6"	to box 7-10"	to box 11-16"	to box > 16"	arms length	shoulder height	overhead	plate option	hi knee drive				9
Posterior Chain	**Romanian Deadlift**	barbell	dumbbell	double leg	single leg	bands/belt	bands/overhead							6
Posterior Chain	**Stiff Legged Deadlift**	barbell	dumbbell	double leg	single leg									4
Posterior Chain	**Glute Ham Raise**	single leg	elevated back end	bands										4
Posterior Chain	**Back Extension**	single leg	off stability ball	elevated back end	bands									5
Posterior Chain	**Reverse Hyperextensions**	single leg	off stability ball											3
Posterior Chain	**Good Mornings**	barbell	bands	power stance	olympic stance	seated	suspended low	suspended high	suspended parallel	safety bar	buffalo bar	straight legged	bent legged	12
Posterior Chain	**Pull Thru's**	bands	cable	straight legged	bent legged									4
Posterior Chain	**Partner Leg Curl**	bands												2
Posterior Chain	**Stability Ball Hip Lift**	single leg												2
Posterior Chain	**Stability Ball Hip Lift to Curl**	single leg												2
Posterior Chain	**Lying Leg Curl**	single leg												2
Posterior Chain	**Seated Leg Curl**	single leg												2
Posterior Chain	**Standing Leg Curl**	single leg												2

LOWER BODY MOVEMENTS

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
Hybrids	**Back Squat to Standing Press**													1
Hybrids	**Back Squat to Push Press**													1
Hybrids	**Back Squat to Push Jerk**													1
Hybrids	**Back Squat to Split Jerk**													1
Hybrids	**Front Squat to Standing Press**													1
Hybrids	**Front Squat to Push Press**													1
Hybrids	**Front Squat to Push Jerk**													1
Hybrids	**Front Squat to Split Jerk**													1
Hybrids	**Good Morning to Back Squat**													1
Hybrids	**Sumo Squat to Power Pull**													1
Hybrids	**DB Squat to Standing Press**	arms length	shoulder height	overhead										3
Hybrids	**DB Squat to Push Press**	arms length	shoulder height	overhead										3
Hybrids	**DB Squat to Push Jerk**	arms length	shoulder height	overhead										3
Hybrids	**DB Squat to Split Jerk**	arms length	shoulder height	overhead										3
Hybrids	**DB Squat to Lateral Raise**	arms length	shoulder height	overhead										3
Hybrids	**DB Squat to Front Raise**	arms length	shoulder height	overhead										3
Hybrids	**BB Lunge-Forward/Reverse**													1
Hybrids	**BB Lunge-Reverse/Forward**													1
Hybrids	**BB Lunge-Reverse/Lateral**													1
Hybrids	**BB Lunge-Lateral/Reverse**													1
Hybrids	**BB Lunge-For/Rev walk**													1
Hybrids	**BB Lunge-Rev/For walk**													1
Hybrids	**BB Lunge-Shuffle RT/LT**													1
Hybrids	**BB Lunge-Shuffle LT/RT**													1
Hybrids	**DB Lunge-Forward/Reverse**	arms length	shoulder height	overhead	plate option	plate twist								5
Hybrids	**DB Lunge-Reverse/Forward**	arms length	shoulder height	overhead	plate option									4
Hybrids	**DB Lunge-Reverse/Lateral**	arms length	shoulder height	overhead	plate option									4
Hybrids	**DB Lunge-Lateral/Reverse**	arms length	shoulder height	overhead	plate option									4
Hybrids	**DB Lunge-For/Rev walk**	arms length	shoulder height	overhead	plate option									4
Hybrids	**DB Lunge-Rev/For walk**	arms length	shoulder height	overhead	plate option									4
Hybrids	**DB Lunge-Shuffle RT/LT**	arms length	shoulder height	overhead	plate option									4
Hybrids	**DB Lunge-Shuffle LT/RT**	arms length	shoulder height	overhead	plate option									4
Hybrids	**Reverse Lunge to St U/D**	dumbbell												2
Hybrids	**Lateral Lunge to Lat Step U/D**	dumbbell												2
Hybrids	**Lat Lunge to X Over Step U/D**	dumbbell												2

LOWER BODY MOVEMENTS

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
Hybrids	**Crossover Step to Squat**													1
Hybrids	**Step Up/Down to Lateral St U/D**	dumbbell												2
Hybrids	**DB Lunge to Press**													1
Hybrids	**DB Walking Lunge to Press**													1
Hybrids	**DB Lunge to Curl to Press**													1
Hybrids	**DB Walking Lunge to Curl to Pr**													1
Hybrids	**DB Lateral Lunge to Press**													1
Alternative	**Bear Squat**	flat footed	elevated	jump squat	varied ROM									4
Alternative	**Leg Press**	vertical	45 degree	single leg										4
Alternative	**Hammer Squat Lunge**													1
Alternative	**Hammer V Squat**	varied ROM												2
Alternative	**BB Hack Squat**													1
Alternative	**Leg Extension**	single leg												2
Alternative	**Hip Extension**	bands												2
Alternative	**Hip Flexion**	bands												2
Alternative	**Hip Adduction**	bands												2
Alternative	**Hip Abduction**	bands												2
Alternative	**Band Kick Backs**													1
Alternative	**Heel Raises**	toes in	toes out	toes straight										3
Alternative	**Toe Raises**	toes in	toes out	toes straight										3
Alternative	**Band Pull Apart**													1
Alternative	**Band Shuffles**													1
														500

- Upper Body Exercises

UPPER BODY MOVEMENTS

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
Horizontal Pr	**BB-Bench Press**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**DB-Bench Press**	pause	neutral grip	pronated grip	single arm	alternate arm top	alternate arm bot	w/bands	stability ball					8
Horizontal Pr	**BB-Incline Press-Low**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**DB-Incline Press-Low**	pause	neutral grip	pronated grip	single arm	alternate arm top	alternate arm bot	w/bands	stability ball					8
Horizontal Pr	**BB-Incline Press-Low**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**DB-Incline Press-Low**	pause	neutral grip	pronated grip	single arm	alternate arm top	alternate arm bot	w/bands	stability ball					8
Horizontal Pr	**BB-Incline Press-Moderate**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**DB-Incline Press-Moderate**	pause	neutral grip	pronated grip	single arm	alternate arm top	alternate arm bot	w/bands	stability ball					8
Horizontal Pr	**BB-Incline Press-Steep**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**DB-Incline Press-Steep**	pause	neutral grip	pronated grip	single arm	alternate arm top	alternate arm bot	w/bands	stability ball					8
Horizontal Pr	**BB-Decline Press**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**DB-Decline Press**	pause	neutral grip	pronated grip	single arm	alternate arm top	alternate arm bot	w/bands						7
Horizontal Pr	**BB-Reverse Grip Bench Press**	pause	grip 1	grip 3	competition grip									4
Horizontal Pr	**Cambered Bar Bench Press**	pause	grip 1	grip 3	competition grip	inside grip	reverse cambered							6
Horizontal Pr	**Super Bar Bench Press**	pause	neutral grip	H-grip	V-grip									4
Horizontal Pr	**BB-1 Board Bench Press**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**BB-2 Board Bench Press**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**BB-3 Board Bench Press**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**BB-4 Board Bench Press**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**BB-5 Board Bench Press**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**BB-Floor Press**	pause	w/chain	w/band	w/combination	grip 1	grip 2	grip 3	grip 4	grip 5	grip 6	grip 7	competition grip	12
Horizontal Pr	**DB-Floor Press**	pause	neutral grip	pronated grip	w/bands									4
Horizontal Pr	**Push Up**	w/bands	suspended	elevated	incline	decline	stability ball							5
Vertical Pr	**BB-Standing Press-Front**	grip 1	grip 2	grip 3										4
Vertical Pr	**BB-Standing Press-Behind Head**	grip 1	grip 2	competition grip	snatch grip									4
Vertical Pr	**BB-Seated Press-Front**	grip 1	grip 2	grip 3										3
Vertical Pr	**BB-Seated Press-Behind Head**	grip 1	grip 2	competition grip	snatch grip									4
Vertical Pr	**DB-Standing Press**	neutral grip	pronated grip	supinated grip	single arm	alternate arm	sup/pro	balance board	discs	aerex pad				9
Vertical Pr	**DB Seated Press**	neutral grip	pronated grip	supinated grip	single arm	alternate arm	sup/pro	balance board	discs	aerex pad	stability ball			10
Vertical Pr	**BB Bradford Press**													1
Vertical Press	**Parallel Bar Dips**	1/4 depth	parallel depth	full rom										3
Horizontal Pull	**BB Bent Over Row**	grip 1	grip 3	snatch grip	pronated grip	supinated grip	band row	flat row w/bands						7
Horizontal Pull	**DB Bent Over Row**	neutral grip	pronated grip	supinated grip	single arm	alternate arm top	alternate arm bot	pronated/pronated	supported	non supported				9
Horizontal Pull	**Inverted Pull Ups**	single arm												2
Horizontal Pull	**Inverted Chin Ups**	narrow grip	shoulder grip	wide grip	single arm									4

UPPER BODY MOVEMENTS

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
Horizontal Pull	**Chest Supported Row**	Hammer Low	Hammer Mid	Cable	Wide Grip	Close Grip	Standing	band row	single arm	alternate arm top	alternate arm bot			10
Horizontal Pull	**Seated Row**	Hammer Low	Hammer Mid	Cable	Wide Grip	Close Grip	Standing	band row	single arm	alternate arm top	alternate arm bot			10
Vertical Pull	**Pull Ups**	pronated grip	narrow	wide grip	to chest	to back	w/bands	single arm						7
Vertical Pull	**Chin Ups**	w/bands	single arm											3
Vertical Pull	**Pull Downs**	pronated grip	pronated grip	supinated grip	to chest	to back	bar w/bands	standing	single arm	cable	hammer			10
Vertical Pull	**BB-Upright Row**	grip 1	grip 2	snatch grip	hammer hi pull	band								5
Vertical Pull	**DB Upright Row**	single arm	alternate arm top	alternate arm bot	hammer hi pull									4
Flex/Ext	**BB-Extensions**	grip 3	grip 4	grip 5	to floor	to forehead	to nose	to chin	standard	rolling	e-z bar	incline	decline	12
Flex/Ext	**DB-Extensions**	floor	standard	rolling	single arm	incline	decline							5
Flex/Ext	**DB Elbows Out Extension**													1
Flex/Ext	**Pushdowns**	grip 6	grip 3	reverse	overhead									4
Flex/Ext	**BB Curl**	wide grip	shoulder width gr	e-z bar	reverse	preacher								5
Flex/Ext	**DB Curl**	neutral grip	pronated grip	supinated grip	combo grip	incline	stability ball	reverse	preacher					8
Flex Ext	**Resistance Options**	machines												1
Shldr Rotation	**Lateral Raise**	dumbbell	machine	bands										3
Shldr Rotation	**Front Raise**	dumbbell	barbell	bands										3
Shldr Rotation	**Bent Over Raise**	dumbbell	machine											3
Shldr Rotation	**45 Degree Raise**	dumbbell												1
Shldr Rotation	**"L" Raise**	dumbbell												1
Shldr Rotation	**Empty Can**	dumbbell												1
Shldr Rotation	**Internal Rotation**	dumbbell	bands											2
Shldr Rotation	**External Rotation**	dumbbell	bands											2
Shldr Rotation	**Horizontal Internal Rotation**	dumbbell	bands											2
Shldr Rotation	**Horizontal External Rotation**	dumbbell	bands											2
Shldr Rotation	**Marshall Rotation**	dumbbell												1
Shldr Rotation	**Step Over**													1
Shldr Rotation	**Scapula Push Ups**	stability ball												2
Shldr Rotation	**Bear Crawls**													1
Shldr Rotation	**Wheel Barrow Walks**													1
Shldr Rotation	**Seated DB Clean**													1
Shldr Rotation	**Seated DB Snatch**													1
Shldr Rotation	**Pulls to Face**	high	moderate	low	cable	bands								5
Shldr Rotation	**Fly**	dumbbell	machine	bands	stability ball									4
Shldr Rotation	**Incline Fly**	dumbbell	machine	bands	stability ball									4
Shldr Rotation	**Reverse Fly**	dumbbell	machine	bands	stability ball									4

Sub Category	Exercise Name	Variation 1	Variation 2	Variation 3	Variation 4	Variation 5	Variation 6	Variation 7	Variation 8	Variation 9	Variation 10	Variation 11	Variation 12	Total
Shldr Rotation	**Standing Fly**	dumbbell	machine	bands	stability ball									4
Shldr Rotation	**Plate Raise**													1
Shldr Rotation	**Shrugs**	dumbbell	barbell	machine										3
Alternative	**Chest Press**	various												1
Alternative	**Shoulder Press**	various												1
Alternative	**Jammer Press**	chest	shoulder											2
Alternative	**Neider Press**	dumbbell	barbell											2
Alternative	**Steel Log Standing Press**													1
Alternative	**Steel Log Bench Press**													1
Alternative	**Steel Log Row**													1
Alternative	**Trap Bar Standing Press**													1
Alternative	**Wrist Flips**													1
Alternative	**Wrist Curl**	dumbbell	barbell											2
Alternative	**Reverse Wrist Curl**	dumbbell	barbell											2
Alternative	**Forearm Role Ups**													1
Alternative	**Neck**	machines	manual	bands	front back	left right								5
														433

APPENDIX D
AUXILIARY PROGRAMS

Program 1	Neck/Traps/Upper Back	Reps
choose 1	4 Way Partner Assisted Neck	1x6 each
	Dumbbell Seated Shrugs	2x20
	BB Clean Grip/DB Upright Row	2x15
	Dumbbell Bent Over Raise	2x20

PROGRAM 2	Bear Crawl/Wheel Barrow Circuit	Reps
	Forward Walk	5-10 yds
	Backward Walk	5-10 yds
RT Hand Lead followed by LT Hand	Shuffle Walk	5-10 yds
RT Hand Lead followed by LT Hand	Crossover Walk	5-10 yds
RT Hand Lead followed by LT Hand	Carioca Walk	5-10 yds

PROGRAM 3	Upper Back/Post Delt Special [1-3x's]	Reps
elbows above ears - low cable or tubing	Posterior Delt Pulls - High	x20
elbows to an "L" - low cable or tubing	Posterior Delt Pulls - "L"	x20
elbows chest level - low cable or tubing	Posterior Delt Pulls - low	x20
start under hamstrings	DB Seated Power Pull	x20
elbows out squeeze scapulas - high cable or bands	Standing Pulls to Face	x20

PROGRAM 4	Shoulder/Upper Back Base Circuit [1-3x's]	Reps
	DB Fly	x15 each
	DB Straight Arm Pullover	x15
	DB Lateral Raise	x15
	DB Front Raise	x15
	DB Bent Over Raise	x15
	DB Shrug	x15

PROGRAM 5	Rotator Work A	Reps
stability ball option	Scapula Push Up	2x20
DB or resistance coming down with tubing	Internal Rotation	2x20
DB or resistance coming down with tubing	External Rotation	2x20

PROGRAM 6	Rotator Work B	Reps
	Scapula Dips	2x20
DB or Tubing	Horizontal Internal Rotation	2x20
DB or Tubing	Horizontal External Rotation	2x20

PROGRAM 7	Rotator Work C	Reps
vary box height	Step Over	2x20 ea
	Marshall Rotations	2x15 ea
	45 degree DB Raise	2x12
	DB Shrug	2x20

PROGRAM 8	Shoulder/Upper Back [1-2x's]	Reps
	DB Single Arm Row	x15 ea
	"L" Raise	x15
	Straight Arm Pulldown	x15
lower 1/3	DB Empty Can	x15
	DB Straight Arm Pullover	x15
tubing	Standing Reverse Fly	x15

PROGRAM 9	Shoulder/Upper Back	Reps
	Lying Front Raise to Pullover	3x10
lower 1/3	DB Empty Can	3x15
	DB Seated Snatch	3x12

PROGRAM 10	Shoulder/Upper Back Circuit [1-2x's]	Reps
stab ball option	Scapula Push Ups	x25
low height	Step Overs	x15 each
forward/back	Wheel Barrow Walks	x10 yards
	Marshall Rotations	x12 each
tubing	Internal Rotation	x15 each
tubing	External Rotation	x15 each

PROGRAM 11	Shoulder/Upper Back Circuit [1-2x's]	Reps
both arms on bar	Barbell Front Raise	x15
bands or high cable	Straight Arm Pulldown	x15
tubing or DB	Lateral Raise	x15
	DB Straight Arm Pullover	x15
	DB Bent Over Raise	x15
	DB Front Raise thumbs down	x15

PROGRAM 12	Shoulder/Upper Back	Reps
	Dumbbell Seated Snatch	3x15
	Posterior Delt Pulls - High	3x20
	Seated Plate Raise	3x15

PROGRAM 13	Shoulder/Upper Back	Reps
	Dumbbell Seated Power Pull	3x15
high cable or bands	Pulls to Face	3x20
barbell or dumbbell	Front Raise	3x15

PROGRAM 14	Shoulder/Upper Back	Reps
tubing	Standing Reverse Fly	3x15
	Dumbbell Incline Fly	3x15
FROM	Empty Can	3x15

PROGRAM 15	Shoulder/Upper Back	Reps
	DB Lateral Raise	2x12
	"L" Raise	2x12
	DB Front Raise	2x12
	DB Bent Over Raise	2x12

PROGRAM 16	TRAP BAR SPECIAL	Reps
	Standing Press	30 reps
	Front Raise	30 reps
	Shrug	30 reps

PROGRAM 17	TRAP SPECIAL	Reps
	Seated Cambered Bar Shrugs	2x15
	Upright Row Clean Grip	2x10
	Seated Dumbbell Shrugs	2x20
	Upright Row Snatch Grip	2x10
substitute seated cambered bar shrugs	Bent Over Shrugs	2x15
substitute trap bar shrugs	Reverse Shrugs	2x15

PROGRAM 18	UPPER BODY BWT Special	Reps
partner assisted	Pull Ups	xMax
	Bench Dips	xMax
partner assisted	Chin Ups	xMax
	Parallel Bar Dips	xMax
	Inverted Pull Ups	xMax
	Push Ups	xMax

PROGRAM 19	HAMSTRING Stengthening	Reps
	Single Leg RDL's DB	2x15 ea
tubing	Single Leg Standing Leg Curl	2x15 ea
tubing	Down and Ups	2x15 ea
partner assisted	Eccentric Leg Curl	2x10

PROGRAM 20	HAMSTRING Strengthening	Reps
	Single Leg Reverse Hypers	2x15 ea
lying	Negative Accentuated Leg Curl	2x15 ea
tubing	Cycling	2x15 ea
bands	Glute Ham Raise	2x15

PROGRAM 21	HAMSTRING Strengthening	Reps
	Single Leg Back Ext	2x15 ea
	RDL Barbell	2x20
	Combo Walking Lunge	3-5 20 yds

PROGRAM 22	HAMSTRING Strengthening	Reps
	Reverse Hypers	3x12
tubing - multi hip	Hip Flexion	3x12 ea
tubing - multi hip	Hip Extension	3x12 ea

PROGRAM 23	HAMSTRING SLED	Reps
	Leg Curl - single leg	x30 ea
	Hip Flexion - single leg	x30 ea
	Hip Extension - single leg	x30 ea

PROGRAM 24	QUADRICEPS Strengthening	Reps
	Short Arcs	2x20
	Negative Accentuated Leg Ext	2x10 ea
	Double Leg Leg Ext	2x12
	Single Leg Leg Ext	2x15 ea

PROGRAM 25	Lower Leg Strengthening	Reps
stretch board	Calf Stretch	
in/out/straight	Heel Raises	3x15
in/out/straight	Toe Raises	3x15
lying - tubing/leg curl in/out/straight	Dorsi Flexion	3x15
alphabet	Ankle Circles	x1

PROGRAM 26	BAND SPECIAL LOWER BODY	Reps
looped over head - [advanced - looped thru belt]	Good Mornings	2x20
	Glute Ham Raise	2x20
band across chest - attached high	Partner Leg Curl	2x12
low box	Pull Aparts	2x15

PROGRAM 27	LOWER BACK Strengthening	Reps
	Romanian Deadlift	3x10
if weighted plate behind head	Back Extension	3x12
	Reverse Hyperextension	3x15

PROGRAM 28	ABDUCTION/ADDUCTION	Reps
sled, multi hip, tubing	ABDuction	2x15 ea
sled, multi hip, tubing	ADDuction	2x15 ea
bands, sidewinders, tubing	Shuffle Lunge	2x15 ea
bands	Pull Aparts	2x15

PROGRAM 29	TEMPO SHOULDER CIRCUIT [1-2x's]	Reps
4/2/8 tempo	DB Lateral Raise	x6
4/2/8 tempo	DB Front Raise	x6
4/2/8 tempo	DB 45 Degree Raise	x6
4/2/8 tempo	DB Bent Over Raise	x6
4/2/8 tempo	"L" Raise	x6
4/2/8 tempo	Empty Can FROM	x6

PROGRAM 30	TEMPO BACK CIRCUIT [1-2x's]	Reps
Pink/Green band/High Cable	Straight Arm Pulldown	x8
DB or BB	Straight Arm Pullover	x8
Green/Blue band/High Cable	Wide Grip Pulldowns	x8
Green/Blue band/High Cable	Curl Grip Pulldowns	x8
	4/2/8 TEMPO	

PROGRAM 31	TEMPO ROW CIRCUIT [1-2x's]	Reps
4/2/8 tempo	Bent Over Row BB Pronated	x8
4/2/8 tempo - low cable	Seated Row Green Bands	x8
4/2/8 tempo	Bent Over Row BB Supinated	x8
4/2/8 tempo - barbell/dumbbell	Upright Row Green Bands	x8
4/2/8 tempo	Dumbbell Single Arm Row	x8 each

PROGRAM 32	TEMPO CHEST CIRCUIT [1-2x's]	Reps
4/2/8 tempo	Grip7 Bench Press	x6
4/2/8 tempo	DB Incline Press	x6
4/2/8 tempo	DB Flat Fly	x6
4/2/8 tempo	DB Bench Press	x6
4/2/8 tempo	DB Incline Fly	x6

PROGRAM 33	SHOULDER PRESSES	Reps
balance board	Standing Barbell Press	2x12
balance board	Snatch Grip BN Press	2x12
balance board	Alternate Arm Arnold Press	2x12 ea
balance board	DB Muscle Clean to Press	2x12

PROGRAM 34	CHEST/BACK COMBO A	Reps
3 supersets - 1 minute rest in between	Decline Press/Seated Row	x10
3 supersets - 1 minute rest in between	DB Incline Press/DB SA Row	x10/10ea

PROGRAM 35	CHEST/BACK COMBO B	Reps
3 supersets - 1 minute rest in between	DB Bench Press/Front Pulldown	x10
3 supersets - 1 minute rest in between	DB Incline Fly/Curl Grip Pulldwn	x10

PROGRAM 36	FOREARMS	Reps
	Barbell Reverse Curl	max15
	Dumbbell Hammer Curl	max15
	Wrist Curl	max15
	Reverse Wrist Curl	max15
holding plates	Finger Curls	x20
	DB Wrist Flips	x60 secs

PROGRAM 37	19" Gun Salute	Reps
3 supersets - 1 minute rest in between	Barbell Curl / Barbell Ext lying	x10/12
3 supersets - 1 minute rest in between	DB Incline Curl / Rope Pushdwn	x10/12

PROGRAM 38	21" Gun Salute	Reps
3 supersets - 1 minute rest in between	Preacher Curl / Pushdown	x10/12
3 supersets - 1 minute rest in between	Wide Grip BB Curl/DB Ext	x10/12
3 supersets - 1 minute rest in between	DB Curl / Reverse Pushdown	x10/12

PROGRAM 39	Single Joint Arm - MASS ACTION	Reps
30 second rest in between sets	Barbell Curl	7x6
30 second rest in between sets	Barbell Extension - on floor	7x8
30 second rest in between sets	Barbell Reverse Curl	5x8

PROGRAM 40	Single Joint Arm A	Reps
	DB Curl	3x12
	DB Extensions	3x15
	DB Wrist Flips	2x60 secs

PROGRAM 41	Single Joint Arm B	Reps
	DB Hammer Curl	3x12
	Triceps Pushdown	3x15
	Reverse Wrist Curl	2x15-20

PROGRAM 42	BACK TRAINING	Reps
	Seated Row	3x10
	Front Pulldown	3x10
	DB Row	2x12
	Chin Up	2xm12

PROGRAM 43	BACK TRAINING	Reps
	Barbell Bent Row	3x10
	Curl Grip Pulldown	3x10
	Chest Supported Row	2x12
	Pull Up	2xm12

PROGRAM 44	Upper Body Explode	Reps
against wall - tire	Med Ball Chest Pass	2x12
against wall	Med Ball Overhead Throw	2x12
partner - tire	Med Ball Power Drops	2x12
25x6k 25x5k 25x4k against wall	Med Ball Quick 75's	1x75

PROGRAM 45	Triceps Only	Reps
stability ball, inlcine, flat	Tate Press	3x15
hands narrow	Reverse Cambered Bar BP	2x12
inside camber	Close Grip Cambered Bar BP	2x12
2 count hold at extension	Pink Band Pushdowns	2x25

PROGRAM 46	Lower Body Extra	Reps
sets are for time	Tire Flips	3x10
around neck or combo with looped through belt	Band Good Mornings	3x20

PROGRAM 47	Lower Body Extra	Reps
walking	Safety Bar Crucific Lunge	3x10ea
forward walk - looped through belt	Band Walks	5 minute

PROGRAM 48	Sled Drag	Reps
50-70 yards or 90 seconds	Forward Walks	x4
50-70 yards or 90 seconds	Backwards Walks	x4
1=straight legged 1=bent legged	Pull Thru's	2x15

PROGRAM 49	Sled Drag Single Leg	Reps
50 yards or 60 seconds	Ankle Drag Forward	x2 each
50 yards or 60 seconds	Ankle Drag Backward	x2 each
	Abduction	1x15t30ea
	Adduction	1x15t30ea

PROGRAM 50	Band Special Lower Body	Reps
looped through belt	Band Low Box Squat	3x12
looped through belt	Band Pull Aparts	3x20
around neck only	Band Good Morning	3x20

PROGRAM 51	Sled Back Special [1-2x's]	Reps
	Reverse Fly	x20
	Posterior Delt Pulls - High	x20
	Posterior Delt Pulls - "L"	x20
	Posterior Delt Pulls - Low	x20
	"L" Raise	x20
	Row	x20

PROGRAM 52	Sled Chest Shldr Tri's	Reps
	Front Raise	x20
	Fly	x20
	Kickbacks	x20
	Bench Press	x20
	Overhead Walks	2 minutes

PROGRAM 53	Posterior Chain	Reps
low row or bands	Pull Thru's	2x20
plate or bands	Glute Ham Raise	2x15
	Back Extension	2x12

PROGRAM 54	Deadlift Special	Reps
off 100's 30 second rest	Speed Deadlifts	x15
	RDL's	2x10
	Trap Bar 1/2 Deads	2x20

PROGRAM 55	Power Benching 1	Reps
chains	Grip 1 Floor Press	max3
bands - 30 sec rest	DB Extensions	7x8

PROGRAM 56	Power Benching 2	Reps
blue, green, pink	Reverse Band Press	max3
	BB Floor Extensions	5x10

PROGRAM 57	Power Benching 3	Reps
2 and 3 board	Grip1 Board Press	max3
Stability Ball or Incline	Tate Press	3x15

PROGRAM 58	BAND SPECIAL LOWER BODY	Reps
looped thru belt	Low Box Squats	3x12
	Glute Ham Raise	2x20
band across chest - attached high	Partner Leg Curl	2x12
low box	Pull Aparts	2x15

PROGRAM 59	General Total/Lower Body	Reps
repeat circuit twice	DB Power Pulls	x8
	Standard Reverse Lunge DB	x10 ea
bands	Glute Ham Raise	x15
45# bar	Overhead Squat on Balance B	x10

PROGRAM 60	Lat. Blow-Out	Reps
repeat circuit x3	Weighted Pull-ups	x8
	Lat. Pulldown (front)	x10
	Seated Row	x12

PROGRAM 61		Reps
drop set	DB Seated Military	2 x 8+8
	Upright Row Barbell	2 x 12
drop set	DB Front Raise	**2x10+10+10**

PROGRAM 62	Low Back Special	Reps
Repeat three times	Lying Shoulder Bridge w/ Ext.	x12
	Single Leg Hip Thrusts	x10 each
stability ball	Reverse Hypers	x12
stability ball	Back Extensions	x12

PROGRAM 63	Med. Ball Blitz	Reps
Repeat 2x	Lying Med. Ball Punch	x10
	Partner Med. Ball Overhead Toss	x10
	Med. Ball Side Toss EA SIDE	x10 each
position stance	Three Point Med. Ball Punch	x10

PROGRAM 64	Back Blaster Circuit 3xs	Reps
	Green Band Seated Row	x12
use bands to assist the chin & pull-ups	Band Assisted Pull-up	x10
	Band Assised Chin-up	x10
	Straight Arm Pull-down	x12

PROGRAM 65	Rotations and Twists	Reps
use Medicine Ball for all exercises	Standing Twists	**x10 ea way**
	Wood Chopper	x10
	Diagonal Chops	**x10 ea way**
	Med. Ball Sit Up	**x10 ea way**
	Sit Up and Twist	**x10 ea way**

PROGRAM 66	Push Up Power	Reps
repeat 3 times	Regular Push Up	x25
	Close Grip Push Up	x20
	Plyo Push Up	x10
	Plyo Push Up For Distance	x10 yards
	Plate Plyo Push Up	x10 each

PROGRAM 67	Balance Special	Reps
	Free Squat BB	x10
	Overhead Squat BB	x10
	Balance Beam Side Shuffle	x4 ea way
close eyes	Single Leg Balance Beam	x45 sec ea
	Single Leg BB Ball Toss	x5 tosses

PROGRAM 68	Triple Extension	Reps
2 sets of each	DB Single Arm Snatch	x5
	DB Hang Clean	x5
	DB Power Pull	x5
	DB Power Shrug	x5
	DB Push Jerk	x5

PROGRAM 69	Stability Ball Shoulder	Reps
Lying down on SB feet down on ground. Stomach on ball. shoulders bridged on ball start w/ DBs straight up, then go back and rotate around then raise again	Lateral Raise Prone Row Extension Rotation DB Pullover Around the World	x15 repeat 2 times thru

PROGRAM 70	Snatch Progression	Reps
snatch grip for all exercises Repeat each 2 times	Hips Back(RDL) - slight bend in knees, hips back, chest up Jump Shrug High Pull - elbows higher than wrists Overhead Squat	x10 x10 x10 x10

PROGRAM 71	Whole Body Circuit	Reps
repeat 2 times	Hang Clean to Press Inverted Pull Up Free Weight Body Squat Step Up Plyo Push Up In & Out	x8 x12 x25 x20 each x10 each

PROGRAM 72	Step It Up!!!	Reps
use weight for first three exercises repeat three times thru	Single Leg Step Up Lateral Step Up Cross Over Step Up Plyo Step Up Alternate Leg	x10 x10 x10 x5

PROGRAM 73	Hamstring Direct	Reps
dumbbell/ barbell/ safety bar	Reverse Lunge	2 x 20 yds
dumbbell/ barbell	Single Leg RDL	3 x 12 ea
	Single Leg Reverse Hypers	3 x 10

PROGRAM 74	Hamstring and Low Back	Reps
Band (green/blue)	Good Mornings	2 x 20
	Stability Ball Hip Lift and Curl	2 x 15
	Single Leg Shoulder Bridge	2 x 12
	Supermans	2 x 20

PROGRAM 75	Bicep Blowout	Reps
	Barbell Curls	4 x 8
2 close grip, 2 wide grip	E-Z Curl	4 x 10
superset reverse curl and hammer curl	Reverse Curl (no thumb)	2 x 10
	Hammer Curl	2 x 10

PROGRAM 76	Triceps	Reps
Barbell/ E-Z curl on bench	French Press	4 x 12
	Overhead Triceps Extension	3 x 15
Floor: pick a weight, go until failure then take	Dumbell Lying Triceps	2 x max +
30 seconds, go again 3 times		max + max

PROGRAM 77	Ab	Reps
circuit three times	Bent Leg Tucks	x 25
	Butterfly Curl Ups	x 25
	Seated Rotations	x 50

PROGRAM 78	Lower Body Plyo's	Reps
	Out and Ups	x 8
	Repetitive Rebound Jumps	3 x 5
	Box Jumps	3 x 5

PROGRAM 79	Upper Body Med. Ball	Reps
against wall	Chest Pass	3 x 10
	Single Arm Chest Pass	3 x 5 ea
	Overhead Med. Ball Pass	3 x 15
	Side to Side	3 x 8 ea

PROGRAM 80	Back	Reps
Superset	Lat. Pulldown	2 x 15
	Seated Row	2 x 15
	Bent Raises	2 x 15
	Back Extensions	2 x 12

PROGRAM 81	Posterior Shoulder	Reps
Repeat 2 times	Pulls to Face	
	Forehead/Nose/Chin	x10 each
	L-Raise	x15
	Bent Over Raise	x15
	Seated Row	x15
		x 15

PROGRAM 82	Low Back Post Chain	Reps
two sets of each	Hyper with Med. Ball Pass	x 10
	Glute Ham Raise	x 10
	Band Good Morning w/ Bar	x 12
	Pull Throughs	x 15

PROGRAM 83	Gun Show	Reps
Floor	Lying Down Triceps Extension	x 10
Combo each pair	Barbell Curl	x 10
	Dumbbell Overhead Extensions	x 15
	Dumbbell Bicep Curl	x 10
	Tate Press	x 15
curl 1/2 way, then top 1/2, then full range of motion	Curl 21's	x7 ea

PROGRAM 84	Grip	Reps
three times thru	Farmers Walk	x 40 yds
	Forearm Curls	x 20
one minute	Flip Flops	
	Reverse Wrist Curls	x 20

PROGRAM 85	Chest	Reps
Each exercise three sets	Dumbbell Fly's	x 20
	Dumbbell Pullover	x 15
*Except dips two times	Dips Weighted (optional)	max
	Band Push Up	x 10

PROGRAM 86	Clean Progression	Reps
three sets of each	Hips Back	x 10
	Jump Shrug	x 10
	High Pull	x 10
	High Pull Static	x 10
	Hold to catch	

PROGRAM 87		Reps
balance board	Overhead Squat	x 10
	Sumo Squat	x 10
	Step Up	x 10
body weight	Single Leg Squat	x 10

PROGRAM 88	Walk the Rack	Reps
start at a weight, decrease 5 lbs. on each set	Lying Tricep Extension	7x8
	Dumbbell Curl Alternate Arms	7x6
Finish off with last two exercises	Tricep Band Extension	3x15
	Barbell Preacher Curl	3x12

PROGRAM 89	Lower Body Plyo's	Reps
uni-lateral right, right, left, left	**Single Leg Alternate Leg Bounds** Ice Skaters Out and Ups Box Jumps	x 4 3 x 6 x 5 3 x 5

PROGRAM 90	Hamstrings	Reps
Circuit 2-3 times	Single Leg RDL Standing Band Leg Curls Single Leg Shoulder Bridge	x 12 ea x 25 ea x 12 ea

PROGRAM 91	Triceps	Reps
Circuit 3 times E-Z curl bar	Close Grip Bench French Press Dips	x 12 x 10 x max

PROGRAM 92	Functional Core Exercises	Reps
	Overhead Squats Single Leg Squats Single Leg Hops	3 x 10 3 x 8 ea 2 x 3 ea

PROGRAM 93	Core Stabilization	Reps
Circuit 2-3 times	Side Hip Lift and Hold	x 45 sec
	Shoulder Bridge	x 1 min
	Elbow Bridge	x 1 min

PROGRAM 94	Stability Ball Back	Reps
Stability ball circuit 3 times	Back Extensions	x 15
	Reverse Hypers	x 15
	Hip Thrusts	x 15
	Shoulder Bridge	x 1:30

PROGRAM 95	Stability Ball Abs	Reps
Circuit 3 times	Shoulder Bridge Rotations	x 12 ea
full stretch	Sit-ups	x 25
	Oblique Sit-ups	x 25 ea
	Elbow Bridge	x 1 min

PROGRAM 96	Medicine Ball Abs	Reps
	Side Toss	x 10 ea
	Legs Flat- Overhead Pass Sit- Ups	x 25 ea
	Legs on Bench Crunch/ Pass	x 20

PROGRAM 97	Upper Body Chest/Shoulders	Reps
Stability Ball (Dumbbells)	Bench Press	3 x 12
Stability Ball (Dumbbells)	Fly's	3 x 12
Stability Ball (Dumbbells)	Arnold Press	2 x 12
Stability Ball (Dumbbells)	Military Press	2 x 12
Stability Ball (Plates)	Front Raise	failure

PROGRAM 98	Band Blitz	Reps
Attached low on rack	Single Arm Shoulder Press	2 x 12
Standing on band	Upright Row	2 x 15
Standing on band	Shrugs	2 x 20
	Single Arm Front/ Lateral Raise	2 x 10 ea

PROGRAM 99	Knee Strengthening	Reps
Balance beam	Single Leg Squats	3 x 25 ea
Balance board	Single Leg Stands	3 x 30 sec ea

PROGRAM 100	Band Rotator	Reps
Mini	Internal Rotation	2 x 15 ea
Mini	External Rotation	2 x 15 ea
Mini	Straight Arm Pull-down	2 x 15
Green	Seated Scapula Pulls	2 x 15
Mini	Empty Cans	2 x 15 ea

PROGRAM 101	BIG GUNS	Reps
super set 1	Super Slow BB Curl [8ct. Neg]	3x8
1 minute rest between	DB Decline Extensions	3x15
super set 2	DB Incline Curl	3x10
1 minute rest between	Super Bar Close Grip	3x12
super set 3	DB Stability Ball combo curl	3x10
30 second rest between	Band Overhead Extension	3x15

PROGRAM 102		Reps
super set 1	DB Combo Curl	3x8
1 minute rest between	Safety Bar JM Ext/Press	3x10
super set 2	BB Bent Over Curl	3x10
1 minute rest between	DB Stability Ball Tate Press	3x12
super set 3	Hammer Bicep	3x12
30 second rest between	Hammer Seated Dip	3x15

PROGRAM 103	Tommy T Gun Special	Reps
	DB Curl	2x20
	Str Bar Curl	5x6
	DB Hammer Curl	5x6
	V grip Super Bar	15,10, 5x5
	Safety Bar JM Ext/Press	4x10
	DB Stab Ball Ext	3x12

PROGRAM 104	Mass Action Back	Reps
extended set	Hammer Hi Row Stg combo	6
x 3 sets - 45 second rest	Hammer Mid Row	10
Pull	Hammer Low Row stg	2x15
off Hi Pull	Hammer Shrug	x20

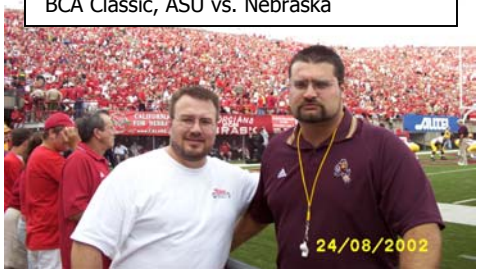
PROGRAM 105	Shoulder Matrix	Reps
3 count holds start - mid point 15 second rest in between	"L" Raise Front Raise - thumbs down Bent Over Raise 45 degree Raise Empty Can - first 30 degrees	1 min 1 min 1 min 1 min 1 min

PROGRAM		Reps

PROGRAM		Reps

PROGRAM		Reps

About the Author



Rich Gray (left) and Kenn at the 2002 BCA Classic, ASU vs. Nebraska

Joe Kenn has been a strength and conditioning professional for 14 years, the last 12 on the collegiate level. Kenn has lead three strength and conditioning departments, Boise State University (May 1994-April 1999) all sports, University of Utah (April 1999-December 2000) all sports, and Arizona State University (January 2001-present) football. Kenn started his career at Pine Crest School in Ft. Lauderdale, Florida, returned to his alma mater Wake Forest for a brief period before heading off to BSU in July of 1991. The first Tier System program was designed for the Women's Basketball and Volleyball teams at BSU in 1992 while working for as the assistant strength and conditioning coach.

Kenn has coached numerous successful athletes in all sports, some who have been able to go on to compete professionally. He has been published in several journals and publications as well as been fortunate to speak at the local, state, regional, and national level. He has received numerous honors and was recently named the 2002 National Strength and Conditioning Association's Collegiate Strength and Conditioning Professional of the Year.

Kenn is a former collegiate football player having played offensive and defensive line at Wake Forest University. Kenn played for both Al Groh and ACC legend Bill Dooley. Kenn continues his lifting passion as a competitive powerlifter.

Kenn and his family, Angela, Joe IV, and Peter reside in Gilbert, AZ.


With Chris Wing at Auzten Stadium, Upset ASU 45 - #6 Oregon 42.