

# *Gold Medal Volleyball*

*fourth edition*

by

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# ***Gold Medal Volleyball***

*fourth edition*

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The authors and publisher of this book assume no liabilities for the information contained herein. All recommendations are intended for trained, professional coaches and players in structured programs.

This edition, the fourth, has some of the same materials found in the third edition book, *Volleyball Notes*, the second edition, *Volleyball Tips for the '90s*. The editor suggests getting either *Volleyball Notes* or *Volleyball Tips for the '90s* (second edition) to accompany this edition.

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# Gold Medal Volleyball

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# **Foreword**

Since 1984, almost four thousand coaches have participated in this unique program led by several of the most successful coaches in the sport. The Gold Medal Clinics have set a new standard of excellence for coaches' training, unparalleled in volleyball or any other sport.

Every year this book is filled with up-to-date information written by the clinic faculty. This basic text for the program contains many practical ideas for success which may help you become a better coach or player.

I'm pleased to welcome you to this program. It has been an important part of the tremendous growth of volleyball throughout this country. I hope you will find it helpful in your personal development as a coach or player.

Doug Beal  
1984 USA Olympic  
Gold Medal Coach

• •

## Points to Ponder

*The six “Ts” of volleyball*  
*Teaching*  
*Techniques*  
*Theory*  
*Tactics*  
*Teamwork*  
*Training*

• •

### **Strong teams are based on six basic foundations or building blocks:**

1. Physical characteristics (size, agility, speed, strength, power),
2. Tactics are supported by the technical expertise and level of the players,
3. Experience level of the team,
4. Mental components, particularly the ability to shift tactics and strategy (the teams sophistication),
5. The teamwork characteristics, the ability of the team members to compliment each other and to cooperate, and
6. The coaching strength that the team possesses.

## **A coach would do well to constantly ask these questions:**

- *How can I get what I want?*
  - *What exactly do I want?*
  - *Is what I want equal to what the players want?*
  - *How is time spent at practice?*
  - *Can I get what I want by doing a certain drill?*
  - *Can I change the pace of practice?*
  - *Can I better control the objectives of a drill by how the ball is tossed?*
  - *Would word clues be of assistance?*
  - *Is the drill's criteria appropriate?*
- .....

## **Coaching Senses**

1. *Coach for one factor.*
  2. *Coach for another factor until it is learned.*
  3. *Repeat the learned factor until it becomes a trained response.*
- .....

### ***Individual training***

*skills, technique, conditioning, leadership of self*

### ***Group training***

*support movement, off-the-ball movement, relationships, responses, extended success*

### ***Team training***

*conversion, system cues, team responses*

### ***Competitive training***

*results, effort, joy, identifying success*

## **Sample Anærobic Workout**

<u>Activity</u>	<u>Duration</u>
Block Jumps	15 seconds
Rest	45 seconds
Block Jumps	15 seconds
Rest	45 seconds
Block Jumps	15 seconds
Rest	130 seconds
Defensive Shuffles	15 seconds
Rest	45 seconds
Defensive Shuffles	15 seconds
Rest	45 seconds
Defensive Shuffles	15 seconds
Rest	130 seconds

Repeat the above series two times.



## **Sample Weight-Lifting Program**

### **Upper Body**

Flat press  
Incline Press  
Bench Press  
Dumbbell Pull-overs  
Lat Pull-downs

### **Lower Body**

Leg Press or Squats  
Quadriceps Extensions  
Hamstring Curls  
Lunges



## **Leg Exercises for the Swim Pool**

*Leg Circles*

*Abduction - Adduction*

*Flexion - Extension*

*Full Range of Motion*



## **Sample Pool Jumping Workout**

Block Jumps	20 to 25 repetitions
Leg Circles	60 seconds
Approach Jumps	20 to 25 repetitions
Abduction - Adduction	60 seconds
Squat Jumps	20 to 25 repetitions
Full Range, Ab-Add	60 seconds
Block Jumps	20 to 25 repetitions
Flexion - Extension	60 seconds
Approach Jumps	20 to 25 repetitions
Full Range, Flex-Ext.	60 seconds
Squat Jumps	20 to 25 repetitions
Two laps Jog	
Cool down	

## **Movement Training Check List**

Hand-eye coordination

Reaction

Perception

Vision Training

Quickness, fast and slow twitch muscles

Body to ball awareness

Turning movements

Air pivots, shifts of body mass

Static / Dynamic

Specific Skills

Movement as it affects concentration

Movement as it affects flow

Starting, stopping, clearing, and opening

Acceleration

Point of contact / Direction of swing dynamics

Skill movements

Serve, set, spike, etc.

Movement intervals between skills

Body postures

Eye sequences and tracking

Foot speed and reactions

Movement directions

Lateral, front-back, rotational, high-low, arm speed,

Flexibility

Change of direction

Platform speed



## **Rank of Specialist**

*A. Blocker*

*B. Server*

*C. Practice Player*

*D. Attacker*

*E. Passer*

*F. Setter*

*G. Defender*

## **Switching, Penetration & Specialization**

Considerations for switches include:

*Serve/Receive target area*

*Offensive sophistication and goals*

*Right-handed vs. Left-handed*

*One vs. two setters*

*Team level*

*Degree of specialization*

*Number of switches affects transition*

*Length of rally affects switching*



## **Reasons for keeping players beyond the expected ending time at practice:**

1. If we are scrimmaging and everyone wants to stay to continue playing.
2. If we are particularly terrible, and we want to end practice on a positive note. We will keep the team until they improve their performance.
3. We may ask certain players to remain for five to ten minutes to work on a specific problem.

Planning should take into account how many courts are available and how many coaches you have. Make sure that everything you will need for the day's training session is available and ready at the start of practice. Check for the items listed below. Some items are used every day. Other items are used less frequently.

## **Everyday Equipment:**

*standards, safety pads, nets, antennas, ball carts, balls, hitting platforms, flip-score keeper, whistle.*

## **In use from time to time:**

*jump training equipment, surgical tubing, medicine balls, cones, plastic trash cans, area markers, Vertec.*

(See game check-sheet later in book.)



## **Typical Practice Agenda**

- 1. Discussion/Announcement of today's practice goals*
- 2. Warm-up running and stretching without volley-balls*
- 3. Review of old skills and/or fundamentals*
- 4. New skills introduction and repetition*
- 5. Competitive practice (3-on-3, 4-on-4, 6-on-6)*
- 6. Cool-down*
- 7. Evaluation*



## **Time Out Topics**

- *Rotational information*
- *Hitter tendencies*
- *Specific situation reminders*
- *Refocus on pre-game goals*
- *Performance feedback, especially on what is working*
- *How to deal with specific failures*

## **Reasons to substitute:**

- To play more players
  - To change the momentum
  - To rest a player, either physically or mentally
  - To use a specialist
  - To talk to a player
  - To reward a player
- .....

## **Keys to look for from setters:**

- Get into position quickly,
  - Set feet under the ball,
  - Hands should be above the forehead waiting for the ball,
  - Ball-shaped hands,
  - Right foot slightly forward,
  - Knees bent slightly,
  - Face the target in the left front position,
  - Extend arms and legs simultaneously,
  - Follow through to the target,
  - Cover.
- .....

## **With the back-set, work on these activities:**

- Simple back-set,
- Forward movement and set back,
- Backward movement set back,
- On the net and off the net set back,
- Block set back.

## **Team Passing**

- Players need to be aware of their position on the court.
  - Passers and team players need to be aware of the weaknesses of both the court positioning and individual limitations.
  - Make a visual check to the sidelines just prior to the whistle.
  - Assume a passing posture.
  - Study the server's contact with the ball.
  - Make a movement of at least one step in the direction of the serve.
  - Continue to pursue a ball until you either pass the ball or you make a decision not to pass the ball.
- .....

## **Different types of attackers:**

**QH** = quick hitter, 1st tempo

**PSH** = play-set hitter, 2nd tempo

**SH** = swing hitter, 2, 5-3rd tempo

**BR** = back-row hitter, 3-3, 5th tempo

**RH** = release hitter, 4th tempo

.....

## **Standing before the jump**

Body posture

Weight shift

Use of gravity and acceleration

## **Blocking technique**

Hand form

Body posture

Minimum distance

Outside hand penetrates farther

Inside hand follows/ form

## **Blocking with Pursuit**

Lateral jump,  
Lateral slide,  
Free form, with body control,  
Side step,  
Cross over.

.....

## **Better Blocking**

Hitter's approach angle; Height of contact;  
Acceleration of arm swing; Timing of arm swing;  
Depth of set; Width of set, Speed of set, Preference  
and tendencies

.....

## **Systems of Blocking**

Read / React  
Read / Commit  
Read / Switch  
Man to Man  
Stack Series

.....

## **Blockers should not guess because:**

- There is a time lapse between the touching of the ball by the setter and the delivery of the ball into the hitable area.
- There is another time lapse between the arrival of the ball into the hitable area and the contact by the spiker.
- There is a third time lapse between the contact by the spiker and the instant that the ball crosses the net.

## **Cue for the blockers:**

What side of the court is the ball being passed from?  
What is the direction of the pass?  
Is the ball high or low?

.....

## **The Ball Tells All**

Is the pass close to the net?  
Is the pass left or right?  
Is it fast or slow?  
Will the Setter have to jump-set the ball?  
Does the Setter have to move away from position?

.....

## **Notes for Setting the Block**

- Move with both feet simultaneously.
- In one-on-one blocking, make the hitter change his or her plans.
- To block the angle, set the block on the center line of the body on the hitting shoulder.
- To block the line, set the blocker's inside hand on the ball.
- To force the line, move the inside contact point of the block as far as possible so that the hitter is left with only a straight line spike.

## **Teamwork & Tall Roles**

**T**eamwork is a component to success. Actually, teamwork is difficult to define. Mostly as coaches we understand if we have good teamwork. If we don't have good teamwork, we know too. But, we do not always know how to develop good teamwork.

If there is good communication of individual and cooperative roles, teamwork is a much simpler process of development. Spend a lot of time on role definition.

Role definition is much more than talking to the players one-to-one. Teamwork can not be fostered by simply telling the players to “Do this! Do that! Don’t do this!” and “Don’t do that!” Role definition is at least 75 percent developed by how the player is used in the training process. The majority of the role definition is obtained without verbal interaction. Doug Beal coaches with the belief that role definition is developed through the training process, not verbal interaction between coach and player. The player can discover the role based on how he/she is used.

When did you substitute the player in the game? How do you use him in practice? What drills are the prime areas involved in that player's activity? This is how to develop roles. Certainly there is some verbal feedback, but develop teamwork through the important process of role definition. Encourage and convince the player to accept the role. The most important thing is that the player knows what the role is.

Good teamwork includes great cooperation.

Volleyball teams can allow for a contrast among the universal players and the role players. Because players must rotate in a volleyball match, and because there are limited substitutions allowed in each game, it is best for a team to have a balance with universal players and role players. A team consisting of only universal players will not be as strong as a team that can specialize.

The roles of players, their specialty or position, becomes more sophisticated and complex as the team becomes more skilled. The

players' roles also change with the team's tactics and systems. It is somewhat difficult to classify players with only one title.

Look for physical speciality traits in the individuals. Physical specialties, such as size, jumping ability and quickness are some of the several options to identify. If a player has one exceptional ability, he/she will be a good choice as a specialist. However, a player with only one ability will be limited in the types of situations. A specialist with only one ability could not be used in too many situations in the game.

## **How to Use a Tall Player**

One of the best ways to use a tall player is as a blocking specialist. A tall player in the NCAA Division I women's game would be defined as 6-foot-2-inches and above. A blocking specialist may be the most valuable role player on a team's roster. The primary reason for using a tall player in this capacity is to stuff block the opponent. However, even if this is not accomplished, a tall player can force a hitter to hit a secondary shot, or may cause a setter to go to another hitter away from the block.

In addition to the role a tall player can have in a match, a tall player can make a significant contribution in practices. This player can be used as much as physically possible to block against the first team, or block during specific hitting drills.

A tall player can also be developed into a hitting specialist. Because of her height, she will be able to hit shots that smaller players can't. She might also have the capabilities of hitting over the opponent block, particularly if the block is small.

The ideal situation is to have a tall player developed into a front-row specialist. A tall person that has been taught good blocking and hitting skills will be a major problem for the opponent. This person can cause the opponent to alter its offense by trying to avoid the block, and the opponent may also have to alter its defense to stop the attack of the tall player.

The coach must be creative in designing practices to maximize the time for role players to practice their roles. It is not necessary for a front-row specialist to practice back-row defense or serve/receive. While it may be fun sometimes for everybody to do everything, it simply isn't the most efficient way to prepare a team.

The most critical part of developing this role is communication with the individual and the team. A player will not automatically accept and understand her role. She must have it communicated to her, and she must receive positive feedback throughout the season about fulfilling her role.

Utilizing tall players in specific, designed roles can greatly enhance the success of your team. While it is not ideal to have an entire team of role players, a few used in the proper way, will add a positive dimension to your team that you wouldn't have if your entire team was made up of universal players.

# Injury Prevention with Volleyball Footwear

**A**ppropriate footwear for volleyball can help players stay healthy throughout the season.

Ankle injuries are the most common type of injuries as they relate to footwear and volleyball. Ankle injuries account for 25–30 percent of all injuries. Ankle injuries result from both excessive forces and misalignment of the joints. These injuries can be chronic resulting from repeated stresses over a long period of time. Or, ankle injuries can be acute, resulting from a single incident, like an ankle sprain. Volleyball footwear that is designed to provide stability and cushioning can reduce the risk of ankle injuries.

After ankle injuries, the knee injury is the next most common. Many chronic knee injuries result from insufficient cushioning in the footwear worn by the athletes. The impact of landing from a block or spike on the heel can be as high as eight-times one's body weight. The force generated on the forefoot can be as high as four-times the body's weight.

Evidence suggests a recent increase in stress fractures occurring in volleyball. Peak lateral forces are applied to the lateral fore-foot of the shoe and can be as much as two-times a player's body weight. Cushioning is critical for preventing stress-fracture injuries in volleyball.

# **Attacking Systems and Names**

Every team needs common terminology and a common communication system.

## **Define the systems:**

1. Two attackers high-outside system
2. Two attackers high variation system
3. Three attacker system
4. Quick attack options
5. Combination plays
6. Back-row system

## **Transition to offense:**

1. From serve reception
2. From “Free Ball” position
3. From “no block” position
4. From defense behind block

One basic numbering system for communication between the Setter and Spiker has the first numbers according to the position of the ball along the net. The second number describes the height and the speed of the set of the ball.

These numbers are the front-row attack zones. Each zone is one meter wide beginning at the left sideline. The center of the court divides zone five. The Setter normally positions near the division of zone six and seven. This figure is one of the most basic in all of volleyball and is a critical key to understanding systems. For new players to the sport, these zones should be one of the earliest lessons.

## **The second number describes the set.**

- 0 = normal high ball, four to six meters above the net
- 1 = 30 cm. above the net
- 2 = 60 cm. above the net
- 3 = 1 meter above the net, etc.
- 9 = an extremely high set, six or more meters above the net

# **Practices**

## **Keeping Momentum Throughout The Season**

A challenge for every coach is to keep momentum and enthusiasm throughout the season. Always at the onset of a new season, players are eager and willing to work hard, to practice and to compete. As the season progresses, some common occurrences are often repeated, like a lack of motivation and enthusiasm—both in practices and in games. Players often seem to get bored as the season progresses.

As a coach, you ask yourself, “How is it possible that the players are getting board?”

Here are some suggestions for keeping things lively and interesting for your team.

Practices can become tedious. Only at the highest levels can a coach sometimes get away with repetitive practices. When players are highly self-motivated, coaches don’t have to be as innovative to capture and keep players attention. But the best coaches, even at the highest levels, try to keep their players challenged.

Especially in the pre-season, practices can become dull, simply because there isn’t an opponent to get after other than teammates in scrimmages. From the first practice, coaches should set a tone for the type of practice they want, making sure all players understand what is expected of them.

At least the first week should be disciplined and follow the schedule. It is a good idea to ease into practice physically, allowing the players’ bodies to get into volleyball shape. No matter what kind of condition an athlete’s body is in physically, the stress volleyball drills puts on a body are different.

Once the team has gotten into a good routine, then you can throw in some variations that keep the players alert.

1. Vary the warm-up.
2. Play creative, warm-up games like tag, soccer and aerobics.
3. Change warm-up partners.

4. Change the order of drills: Warm-up and then scrimmage on some days. And then, do some spiking and passing drills at the end of practice.

5. Practice your game-warm-up routine, scrimmage, and go home.

6. Finish early and go get ice cream!

7. Use video tape during practice to help analyze players' performance. Videos help to break up the routine.

8. Take a day off. Early in the season, use a day off to get the players involved socially. Go to a movie or host a barbecue.

9. Take a day off. Once in a while, just let everyone get away from each other.

10. Use the same basic drills, but change the goals and complexity of the drills.

11. Design game-like drills.

12. Be imaginative, creative and keep adding new challenges for the team.

The bottom line for coaches is to be in tune with your team and know when to back off and when to push hard and stick to the routine. Players need both extremes. The players need to learn discipline, and how to prepare themselves everyday to practice and compete, but the players also need variation and opportunities to show their individuality.

The coach must know when the team is genuinely fatigued or simply whining. The coach, with the help of the trainer, must know when a player is really injured or sick or merely trying to get out of practice. The coach must know when the team is stressed and must decide what is the best way to relieve the stress.

Usually there are one or two players whom the coach can use as sounding boards. Get sounding board players who are hard workers, but will give the coach an honest opinion about the feelings of the team. Often it can be a good idea to let the team members give input on how practices are going, what things they like, dislike, and why, and suggestions for improvement.

Where student-athletes are concerned, class work and exams are a major consideration when planning practices. Remember, volleyball is a game and it should be fun at all levels.

Practice begins with a brief warm-up period. The warm-up is no more than 15 minutes and includes some jogging, stretching, and short sprints. Do footwork drills at this time especially if they serve as a preparation for the drills that follow. There is no standard warm-

up for volleyball, so you may incorporate what you like. Ask your players what they would like to do or what they feel they need.

The warm-up should be followed by ball handling and fundamentals. Every team at every level needs to keep up with fundamentals. Include serving, setting, passing, defense, blocking and hitting at the beginning of each practice. Use simple, individual-skill drills or simple combination-skill drills.

A portion of the practice should be spent on new skills. These are new techniques that you are working on to improve your team's level of play. For example, approaching from inside the court towards the outside rather than from outside to inside, setting and hitting new types of sets, anything that is new to your team.

Try to make all drills competitive no matter how simple the drills are. Simple drills can be competitive.

The last part of practice should be mostly six-on-six drills. Sometimes the six-on-six drills can turn into a scrimmage, but more often the six-on-six drills are set up with special kinds of conditions, such as wash-drill scoring.

Always follow the training period with a quick cool-down. Try to make the cool-down routine, and stop players trying to escape as quickly as possible. Every player should stretch after working out.

The evaluation can take place at the same time as the cool-down. Communicate with the player to close the practice. Evaluate the practice and evaluate your own performance as the coach.

# Offense & Smarter Setting

One of the more challenging aspects for volleyball coaches is the distinct advantage that offense has over defense. All things being equal, offensively and defensively, the hitter whose team has possession of the ball has a profound advantage in ability to terminate play versus the six defenders.

In fact, a 2.5 passing team could side out at a 70 percent pace despite the fact that women's teams generally score almost 50 percent of their points in transition. In other words, as good as defense gets, the advantage is still there for whoever controls the possession.

If in doubt, run a drill in your gym with unbalanced teams and equal scoring. Try this; Rally score to 21. Team B always gets first possession downball and is unlimited on areas to attack from. Continuous play. Talent is balanced even though it's two vs. six. Prediction: Team B, the two-player offense, wins decisively. Bad drill.

Recommendation: Adapt the scoring so that team B must have three consecutive kills to score one point. Team B must score six points before the defense wins 25 rallies. Prediction: Good drill. Team B needs a water break.

With that in mind, consider coaching distribution of sets. Usually, through structured competitive circumstances, we teach the setter to follow some time-tested truisms of distribution such as: Set the hot hitter; set the attack versus the weaker blocker, and establish the first-tempo attack as soon as possible.

We also create setter pressure situations through drilling and teaching appropriate choices given certain circumstances. We even provide written exams describing the situation and requesting a response with justification. Here is an easy sample question:

Whom would you set and why under these circumstances? We are in rotation four. The opposing team is in rotation five with a weak left-side blocker. All of your hitters have been effective. The score is 16-15 in game five, and you receive a three option pass.

Answer:

Another valuable tool is to provide your setter with a distribution chart included in a scouting report of your own team. From the reports, a setter can learn about her own tendencies and traditional successes and failures. Sharing statistical data can assist your setter in broadening her perspective about setting and lay a foundation of knowledge for growth.

To complement specific data gained from scouting reports, edit actual match videotapes into specific rotation tapes. Schedule time with your setter to view the video-tape, and teach selection patterns as you proceed through the six rotations. This visual teaching opportunity can really step up the learning curve.

Up to this point, I have focused primarily on training basic setter-decision wisdom. With a solid foundation in the basics, segment the training into tactical application. Entering a match with a game plan is important for many reasons. None of those reasons is any more important than providing direction for the setter.

Directing distribution parameters in practice assists not only the setter but also the opposing blockers. Both will begin to change their perspective of the game

**Let's say this is your team's offensive profile:**

Setter system: 5-1

Passing efficiency average: 2.4–2.5

Setter limitations: none

Left-side hitter No. 1: 4.1 kpg, 29 percent efficiency

Left-side hitter No. 2: 3.5 kpg, 31 percent efficiency

Opposite hitter: 4.8 kpg, 34 percent efficiency

Quick hitter No. 1: 3.4 kpg, 34 percent efficiency

Quick hitter No. 2: 2.4 kpg, 27 percent efficiency

Coach: pretty happy

Consider also that your opponents are an exceptional offensive and defensive team with an average height per rotation of 6-foot-1. not only is your staff deliberating on the preferred rotation matchups but also on the best percentage of offensive distribution to win.

I recommend simplified practice application per rotation, as opposed to just talking percentages and total attempts per hitter with your setter, or at least a combination of both. I also recommend involving your setter in as much offensive strategy-making as possible. The setter will provide a good perspective, and if the setter

understands the reasoning, the setter will learn and apply it more quickly.

Now going back to our hypothetical team, how will you direct your setter to “set to win?”

- A. A balanced attack is the key.
- B. To win, the opposite hitter gets every other set.
- C. Forget it. We do what we do well despite our opponents’ prowess.
- D. None of the above.

Whatever you decide, make sure to practice it successfully prior to using it in a match. It’s hard to win if your team is more surprised than its opponents. By delegating time to coaching set distribution, you just might limit those occasional time-out conversations where you ask your setter the big question and the setter responds, “I don’t know why I did that.”

# Jump Serve

The jump serve has become very popular and effective over the past several years. There are a few factors that you should consider if you want to incorporate it into your game plan.

1. Are there any athletes in your program that have the potential to develop a consistent and effective jump serve?
  - A. Often jump servers miss more than they get in the court.
  - B. Is the serve hard enough to cause the opponents trouble?
  - C. Does the athlete have the stamina to jump serve throughout the match? If the player is lacking the stamina for a jump serve in the middle of the match, that player must also have another effective serve.

## Tactical Aspects of the Jump Serve

The jump serve can be very useful for a number of reasons. It is still relatively new, especially in the women's game. Receivers must focus on a new set of cues to pass the serve well. Often receivers will watch the approach and footwork of the server and not be prepared for the served ball.

If the serve is powerful, the serve can be very difficult for the receiver to move to and also to control on the receiver's side of the court.

Most players serve a float serve or another type of serve from the floor without any approach. The approach of a jump server is a distraction to the receivers. It is also a very different type of serve in the pattern that the ball travels and the velocity of the serve. Receivers get used to a float serve if everyone on the opposing team uses it. When a jump server comes to the service area, it provides enough of a change in the tempo of the game that many teams will have trouble receiving it even if it is not an extremely tough serve.

It is a good idea to have one or two players on your team that have a different type of serve than the other players. It could be someone that serves short or someone who serves from far behind the endline.

## **Technical Aspects of the Jump Serve**

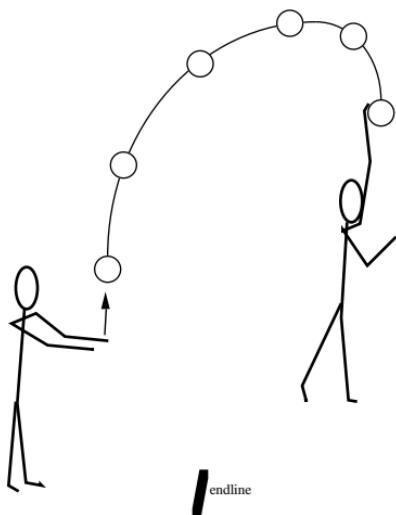
The jump serve can be executed with or without an approach. Most women use an approach to gain height and momentum. The footwork is the same used in a spiking approach. A three-step or four-step approach may be used.

The ball may be tossed with either hand or with both hands. Younger players may need both hands for better control. The toss should be high enough and far enough in front of the player so that he or she can make the approach and contact the ball at a high point and still out in front of the hitting shoulder. The toss should be made into the court.

The player must take off from behind the endline, being careful not to touch or go over the endline. The player making the jump serve may land inside the court after contacting the ball.

Some players prefer to angle their approach to the endline instead of taking a straight-on approach. Because of the trajectory that the ball must take to make it over the net, most players must contact the ball closer to their heads rather than out in front like a spike.

On a jump serve, the player holds the contact hand in an open and relaxed manner, just like a spiker's hand is held. The arm should follow through all the way to the hip to generate the most power.



# Attacking

## Multiple Attack System

Develop a cumulative effect by continually initiating the patterns the same way every time. A general scenario of the attack pattern will force the blockers to pinch inside due to the attacker's inside moves. Then get the set to the outside of the end blockers. This will force the blockers to reach away from the court to block the ball.

A secondary scenario or goal is to split two blockers to allow the Playset Hitter to go one-on-one with the blocker.

Have all the attackers run their patterns all the time. Continuous movement in the Playset roles is essential to developing the cumulative effect.

Each attack approach requires specific footwork and attack angles. Generally the attacks are three or four steps and end on the left foot. Individual differences are possible if the desired effect is attained.

The setter jump-sets every ball. The offense should be designed for this. The passing is designed for the jump-sets. Pass the ball to the top tape of the net.

It is the attacker's responsibility to establish the correct positional and timing relationship with the setter. It is the setter's responsibility to establish the same, correct position each time. The players must understand and be able to execute effectively the individual and team offensive tactics.

There are an infinite number of combination plays.

## Combination Plays:

*Crossing patterns, usually right to left movement*

*Reverse plays, usually left to right movement*

*Double quick plays, two or more quick spikers*

*Left side plays*

*Right side plays*

*Center plays*

All successful combination plays involve coordination between the serve receiver who must accurately pass the ball to the setter target. The setter must control the rhythm and timing of the release of the ball and select the spiker most likely to score. The spiker must watch the ball as it is in the air to the setter and the other spiker for accurate timing. The spiker must time their approach to correctly coincide with the speed of the pass, the location of the pass, the setters' contact of the ball and the approach of the other spikers.

## **Three Attacker System**

The setter establishes his position in between zone six and seven on the net. The spikers move positions relative to the setter. The usual line up includes one ace spiker, one quick spiker and one all-around spiker.

The setter penetrates to the net from the back row and can use all three spikers. The spikers will change positions as necessary to specialize and confuse the block.

The setter (S) moves from the back row to the front row to make the plays. Three options are available. The sets are the two digit numbers over the net. The curved arrows over the net represent the angle and path of the ball headed to the spiker. The first number indicates the position along the net where the ball will land. The second number indicates the height of the set.

## **Back-Row Attack**

In the back row, it is difficult to pinpoint the positions so four zones are preferred instead of the nine zones as used in the front row. The back-row attack can be behind the quick spiker, away from the two front court spikers, or in the slot between the two spikers.

Back-row attacks use a four zone communication system, A, B, C, D. A back-row spiker, BR, can follow a quick hitter, Q. A back-row spiker can go to the other side of the court, either far right or far left. This can keep the blockers at bay or be a surprise to the defense.

In another play, the back-row spiker moves to the middle of the court for the attack. The front-row players make their motion out to the sides of the court making an opening.

## **Transition Offense Considerations**

*Change to offense from serve / receive or defensive maneuvers.*

*Counter attack coordination.*

*Positional reorganization.*

*Quick spiker role: get up quick, threaten on any good pass, fast approach, change positions.*

*Setter priorities: who sets, the best choices for back-row setters, or hitters as setters.*

*Trick plays when a spiker sets or hits on the second pass.*

*Reorganization of attack and player movement.*

# Defense

Defense is a reaction skill therefore trained responses are paramount. Individual, group and team responses to stimuli determine success. Defense is relentless. Defense is eager. Defense is joyful in effort. Defense molds the shape and character of a team.

## Goals of Defense:

1. *Keep the ball in play.*
2. *Get a good swing at the ball.*
3. *Score a point or side-out.*

As in all defensive systems used in volleyball, the back court defensive philosophy must work in concert with the blocking scheme of the team. The back court should be integrated specifically to the system of blocking, where the block comprises the first line of defense, and the back court players fill in the holes that will inevitably be left.

All elements of the game must be based on sound principles, and from these principles, a philosophy emerges. The top principles of a defensive system are: 1) Deploy the best defensive players where the ball is most likely to be hit. 2) Use players in the roles of which each is best.

It is certain that defensive play comprises most of a team's ability to score points. Simply stated, there are but four ways to score points in volleyball: 1) serve for a direct point, 2) block a ball that has been served by your team for a point, 3) defend the attack by the opponent and turn a transition attack for a point, 4) score points as a result of opponent error.

Of these four methods of scoring, a team has control of only three. No team can control its opponent errors. Of the three remaining methods of scoring, points scored via the serve are very limited. For example, the USA Men's team averages only 2 points-per-game won by the serve. That leaves blocking and transition attack as the most important avenues to score points. The USA Men's Team hopes for five stuff blocks per game, although the average is less

than five. Thus, a large majority of points per game are scored on transition attack, which is initiated by the back court defense.

Doug Beal has reported that, "Total defense is an inter-relationship involving blocking and back-row skills coordinated to produce numerous point scoring opportunities. There is no question that from a technical point of view, this is the area that the USA Men's Team far exceeds the rest of the world, and where they consistently win match after match."

Employ a defensive scheme that is based on each player's individual strengths. Simply stated, is the player a better blocker or a better digger? If someone is a better blocker, then block. If a better digger, then dig.

Blocking systems feature variable blocker deployment so that a team can match-up blockers differently in a given situations. A system can also feature variable use of the front-row player not involved in the block; the off blocker. Teams should give each player a defensive role or roles.

For the USA Men's team, Acosta, Tanner, Wilde, Gaspar and Root are our best diggers. Their role, as the off blocker is to get back and dig the ball, which is what they do best.

Jones, Ivie, Fortune, Samuelson, Buck, Dendinger, Arnold, and Schirman are our best blockers. Their role is to attempt to block on every set, even when as the off blocker. If these players, the better blockers, cannot get to the point of attack in time to block, they deploy into tip coverage.

Allen is a very good blocker as well as a great defensive player. He has the option to block or dig as he sees fit.

The defense has four different looks in defending the attack from the left side:

- 1) Three blockers get up on the attacker.
- 2) The third blocker may not get there in time to block, in which case the player continues across the court and deploys behind the block in tip coverage, called the blue defense.
- 3) The off blocker may drop off the net to dig, and the left back player goes across the court to cover the tip, called switch defense.
- 4) The off blocker may drop off of the net to dig, and the left back player may drop further toward the left back corner to dig as well, called the modified rotation defense.

The beauty of this system is that all of these different looks are hard for the opponent to decipher, and all four defenses are activated by one player calling one of two words. The scheme is based primar-

ily on who is deployed in the left front position. This player is responsible for calling the defensive scheme on the run. The more predictable the offense situation, the better the deployment, and the better the odds for success.

If the left front player is one of the “blocking specialists,” the left-front must make every attempt to move to the right, and put up a three-person block. The blocking specialists thinks only to the right, and makes every effort to participate in the block. If, as the blocking specialists moves towards the blocking assignment, the player sees that he or she will be unable to put up a stable block just can’t get there, the late-arriving blocker continues to the right and positions in a tip coverage position behind the block, or in a “blue defense.” As the player sees the ball leave the setter’s hands, he or she calls out “Blue” so that the other players, and the three, back-court players have the same positional responsibilities regardless of whether the left-front player gets into the block, or covers the tip.

If the left-front player is a “digging specialist,” then that player wants to get back into the court where the digging specialist can do his or her thing. When the set leaves the setters hands bound for the left side attacker, the off blocker yells “switch” and drops off of the net to a digging position.

This defense gets a bit complicated in the next aspects. The audible call “switch” can mean two things depending on who the left-back player is. Please note that “switch” means only one thing to each individual, as each individual is given a role, and the audible only cues deployment into that role. So, if the left back player is a blocking specialist when hearing “switch”, his or her assignment is to go across the court and deploy into tip coverage behind the block. This move clears the area so that the digger specialist coming off the net has room to operate and handle the ball.

But if the left-back player is a defensive specialist as well as the player moving back off of the net, the movement changes. Don’t waste the abilities of a great digger by putting him or her into tip coverage. When the left back player is a defensive specialist and hears the “switch” audible, that player drops farther into the corner and two defensive specialists cover the cross court area.

In review, there are two audibles, “blue” and “switch.” Four different defenses are constructed from the individual responses to these audibles. The players do what they do best. Obviously, communication is key, especially between the left-front player and the left-back player. As the players play together, the system gets

smooth. Each player knows the role of each other player, and when the ball is set to the left-side attacker, each player will anticipate the proper response based on the individual deployed in the two movement positions (left front, and left back).

Another key part of the defense that deserves discussion is called the defensive pecking order. It is desirable to have the very best defensive players positioned in the middle-back position when in the back row. The middle-back player is given the most flexibility to do whatever he or she wants. Get the middle-back player to read, anticipate and create digging opportunities. The middle back may play in the seam of the block. The middle back may shade towards the line over the top of a smaller, right-front blocker. The middle back may shade cross court against a hitter that likes to hit cross court.

Usually, it is desirable to have the second best defensive back-row player positioned in the left back. Most balls are hit cross court, so try to get the best diggers in the are most likely to be attacked. This principle may be modified by a couple of considerations. For example, if the second best defender is the setter, play the setter in right back where this good defender can set a transition attack easier. If a certain opponent is a line hitter, deploy the second best defender in right back to dig the attacker's favorite shot.

The swing hitters, who play opposite each other in the rotational order, are given the assignment to deploy the back-row players based on the pecking order and based on the opponents tendencies discussed on the game plan, and from what is picked up on during the match.

The pecking order of the USA Men's team was as follows:

1. Acosta
  2. Tanner
  3. Allen
  4. Wilke (if he is on the court as a defensive substitute)
  5. Gaspar (if he is on the court as a defensive substitute)
  6. Root
  7. Fortune
  8. Buck
  9. Jones
  10. Samuelson
- etc.

The pecking order is basically a list of the best defensive players from the top of the list who are the defensive wizards on down to the others on the team. The list worked like this: If Acosta is in the back row, he plays middle back. If Acosta and Tanner are in the back row together, Acosta plays middle back and Tanner plays left back while the third guy plays right back. If Root, Fortune and Jones are in the backcourt, Root plays middle back, Fortune plays left back, and Jones plays right back.

# The Texas Defensive System

The Texas Defensive System defends against attacks from five zones on the net. Its basic pattern is 6-back using three lines of defense and a zone coverage philosophy.

The system is flexible to accommodate individual hitter tendencies and adjustable to change during play. Specialization is a key for success. The players usually play only one back-row position but may play several positions in the front row.

The techniques required for this defense insist that every player be able to

pen  e on the block. All players must be able to go to the floor skillfully to retrieve the ball and each player must be able to ball control on the run. However, we do not want our defense moving at the point of contact. They should already be positioned, in a balanced stance, and ready to react.

The five zones of the Texas Defensive System are called: A, B, C, D, E. Each zone is about six-feet wide.

The arrow shows the location of the attack from the other team. The position numbers start with #1 as the server. Number 6 is the middle back. The four-digger-defensive system is good for small outside attackers who can not block.

The four-digger defensive system is an alternative system good for small outside attackers who can not block. Player #3 channels all attacks from the middle to zone "A" at diggers #4 and #5. Player #2 blocks middle and to zone "E" forcing the ball at diggers #1 and #6. This system provides a good ball handling team with an opportunity to gain confidence and momentum by keeping the ball in play emphasizing serving and spiking to score points.

Zone “B” attacks - Quick. Player #3 keeps left hand on the ball and tries to prevent the ball from being hit to position #6, middle back. If option blocking is employed players #5 and #1 need to be very active on tips and setter dumps. Player #4 forces the ball to positions #5 and #1.

Zone “D” Attacks - Quick. Player #3 must not let the ball be hit to position #6 or to the seam of position #5 and #6.

Zone “D” Attack - Slow or Lob, Player #3 and #2 must close this block at all times. Player #4 has time to drop if the set is off the net so three diggers can be employed.

Zone “E” Attack. There are three ways to cover a Zone “E” attack. The second manner is good against deep sets and spray hitters. The third way can be used when option blocking allows overload.

Zone “A” attack. The Zone “A” attacks can be handled the same as zone “E” except for back-row attacks in the deep zone “E” area. If you choose to block against the back-row attack this option should

be considered. Remember this attack is very quick due to the short distance from the setter.

## **Zone Protection Blocking**

The concept of zone protection blocking gives the blockers responsibility for defending any and all attack attempts within their designated zone. Outside blockers are the key players in positioning the block in front of the attacker's armswing. Middle blockers are responsible for positioning "hip-to-hip" with the outside blocker to form the blocking wall.

The standard read positions for blockers are as follows:

- Left Outside Blocker - net zone 3 (In).
- Middle Blocker - net zone 4.
- Right Outside Blocker - net zone 8 (50/50).

The Outside Blocker read position adjustments are as follows:

- "In": LF Blocker = net zone 3, RF Blocker = net zone 7.
- "Wide": LF Blocker = net zone 1, RF Blocker = net zone 9.
- "50/50": LF Blocker = net zone 2, RF blocker = net zone 8.

## **Block Down or "No Block" Defense**

The setter must stay in position and play defense. The prime blocker (center-blocker) calls no block and stays at the net. The other blockers pull off to the 3-meter line. The back-row players pinch into the court. Player in center back moves up 3-meters from back line. Players form a cup in line with the direction of spiker's approach. The right-front spiker is usually an auxiliary setter. The blocker closest to the spike can stay at the net for tips.

## **Sideout Chart**

One of the most common tools for gathering information is a “sideout chart.” There are many different variations of this chart but the main items of information gathered would be, who passed the ball, how effectively did they pass it, what play pattern was run, who was set, where did they hit and what was the result. There is one chart kept for each rotation, thus totaling six charts. Some coaches prefer to do this on one sheet of paper with six courts drawn on the paper; others prefer to use a separate sheet for each rotation.

See the chart on the next page. The chart found on the next page is available from the publisher for duplication. If you send the Volleyball Support Syndicate a stamped, self-addressed envelope, the publisher will send you a master copy of the form in 8.5" x 11" size for your own use at no charge. Write to: Sports Support Syndicate, 108 South 12th Street, Pittsburgh, PA 15203.

Use one form for each rotation. Put the rotational order in the wheel on the top left. The wheel looks like a pie chart. Each of the six positions or spokes on the wheel represent a player on the court. Put the player's number in the wheel's position.

On the first court, diagram serve reception pattern and play patterns. On the second court, diagram alternate serve/reception formations if the team uses more than one.

On the bottom section, place the number of the passer, the grade of the pass, the play and the shot. For grades of passing, most coaches use a scale from 0 to 3. As for the play description, write what sets and were the attacking players approach seemed to be headed. Circle the set that was actually made.

In the shot section, document where the shot was hit and if it was a kill. The serving target can be a number, i.e. specific player, or it can be a position on the court.

From the completed information from the scouting chart, you should be able to formulate a game plan for where you want to serve in each rotation. You will also know what the opponent's favorite plays are, who they are most likely to set and where that player likes to hit. You will be able to organize your block and defense to take away their best shots. You will find in each rotation there are certain players who almost never get set (in which case your blockers can practically ignore them) and certain players who get as many as 90 percent of the sets (in which case you should always have a double block on them). It is rare for a team to be so balanced that all players are effective.

Note whether the defense changes throughout the match. Does the setter play a different defense from the other right back player? Are there particularly weak defensive players and, if so, in what positions?

Pick out areas in which your team will have success tipping. Observe the speed, or lack of it, with which the players make the transition to their defensive positions after a serve, do they watch where the serve goes or move into position? Often, when players watch their serve, it results in arriving late to the defensive position. Your setter can tip the second ball to this position and gain an easy sideout for your team.

Strengths and weaknesses of your opponent's blockers should be noted to assist in developing an offensive game plan. Observe their middle blockers to see if they have more trouble going to one side or the other, whether they commit block in the middle, whether they move laterally quickly or if they are often late in closing the block. You might find that some middle blockers block the middle, or quick, very well, but don't close the outside block effectively. In this case, it would be advisable to set outside, either front or back, and make the middle blocker move. If the middle blocker is small, it might be to your advantage to set middle and run inside plays more frequently.

Observe the outside blockers to see if they have any particular strengths or weaknesses. There might be a relatively small outside blocker who you will want your team to hit over, or conversely, there may be an outside blocker who is very good who you would want to avoid. Take this information and develop a specific offensive

game plan. It is not important for your whole team to receive this information, but it is essential that your setter receive, understand and implement the plan.

Observe what your opponent's serving tendencies are. Do they have anyone who jump serves an effective topspin? Do they effectively serve short? Whatever information you gather, it will be important for your players to practice receiving the same kinds of serves that they might see from their opponents during game conditions. This may prevent your team from giving up strings of points just because it hasn't seen a certain kind of serve before.

There are several other miscellaneous bits of information that are important to obtain. You should note what rotation your opponent starts in. Then note whether it changes game to game. Many teams will often start in the same rotation each game. Some teams may rotate one position depending on whether they serve or receive. And, other teams may rotate two or more positions if they lose a game or if they are trying to change match-ups against their opponent. If a team always starts the same, then it will make it easier for you to get your ideal match-up.

Note the key substitutes and their particular strengths and weaknesses. When they sub in a particular player, is he/she set right away? What is the main purpose of the sub? Many teams will develop a specific pattern as to what they will do immediately after a timeout. This information could be helpful at a critical time in the match.

This is a lot of information to gather and process. Sift through it and determine what will be valuable to you. You also need to have an idea of how much information your players and team can handle and still perform at a high level. It is possible to give them too much information which can hinder their performance. It will be a challenge for you to determine just what to give them and what to keep for yourself.

Scout and develop game plans for every match possible, not just the tough games. Your team must practice implementing game plans and easy matches are the ideal place to do this. By paying attention to what goes on on the other side of the net and teaching your players to pay attention as well, you will be able to take advantage of your opponent's weaknesses and your team will perform at a higher level.

# Using Rotation Analysis

**C**hoosing the most effective match-up for your team may seem more like rolling dice than rational decision-making. However, by consistent tracking throughout the season, you can monitor your team's trends and, at least, increase the odds of making good decisions.

Rotation analysis consists of two components: points scored and points lost. Note, a third component, the side-out information is not a factor. Side-out information is important, but it is charted only as a "failure to" component. In other words, a successful side-out by either team is not recorded since neither team scored a point.

Use rotation analysis to choose match-ups, starting rotation and to plan practice activities.

The starting point of a rotation analysis is to number the rotations from one to six. For easier notation, the roman numerals are often used, i.e. I, II, III, IV, V, VI. Deciding what is the first rotation is not important as long as the same numbering scheme is used throughout the entire season. Keep consistent numbering of the rotations.

The University of Kentucky team plays a 5-1 system and numbers the rotations by the position of the setter. Rotation one is when the setter is in the right back. Rotation two is when the setter is in the middle back. Rotation three is when the setter is in the left back. Rotation four is when the setter is in left-front. Five is when the setter is in the middle front. Six is when the setter is in the right front.

The game can start with the team aligned in any of the six rotations. The first rotation for the game does not need to be what is called throughout the season as rotation I. The decision as to what will be the first rotation for the game depends upon the opponent's strengths and weaknesses and the best guess as to the most beneficial match-ups for the team. The rotation used at the start of the game does not effect the numbering system. For example, the team may, for a variety of reasons, start a particular match with the setter in the left back. That is rotation three according to the numbering system described above.

Rotation analysis can be done by keeping a running tally during the match, or, if that is not possible, by reviewing the game by game score sheets after the match.

A simple form has been developed to do rotational analysis on the bench during a match. The simple form has the first column titled, "Rotation." This is the starting line-up in rotational order. The next two columns are used to accumulate points scored and points lost in the first game. The next two columns are for game two, and so on for the match. Put the opponent's starting line-up in the row opposite your starting rotation. Write both starting rotation pie charts in each of the games. The opponents servers are written into the small box at the left top corner of the chart.

Write a vertical line mark into a box to show a successful side-out. Write a dash through the vertical line to record that the side-out was the result of a service error. Write a horizontal line to show that a point was scored. Write a "T" to show that a point was scored by an ace. At the end of each game, tally the number of points scored in each rotation by each team. Circle that end of game number. At the end of the match, add the total points won and lost by each rotation.

By keeping the rotational analysis on the bench, the team can decide between games if the starting match-ups is to an advantage or not. If the team is losing a lot of points in a particular rotation, it is likely a good idea to rotate the starting line-up for the next game to deliver a more favorable match-up. If the one team is scoring a lot of points in a particular rotation, that team must take a guess and decide if the opposition will rotate its line-up, and if so, how. The team may take a gamble on its decision by rotating the line-up to counter what the opposition might do.

If you find it difficult or impractical to do rotation analysis during a match, you can obtain the same information from the score sheets after the match. Simply go to the row on the score sheet where your setter was serving and count the number of points the setter scored. This is the number of points your team scored in that game in rotation one (I). Do this for every game. Add the totals together and you'll have the number of points your team scored during the match in rotation one (I). Then add up the points scored by the player that follows your setter in the rotation and you have rotation two (II). Follow this procedure for every rotation.

To check the totals, add together the number of points that the team scored in each game and compare that number with the sum of

the number scored in each rotation. These numbers should be the same.

To calculate points scored against the team per rotation, find the row on the score sheet of the opposing player that serves immediately after your setter serves. This player served at your team when you were receiving in rotation one (I). Remember a box around an "R" means that the player did not serve, so you will have to go down a row to find the team's first server.

Again, check your numbers by adding the total number of points the opponents scored against the team and compare this with the sum of the opponent's six rotation figures.

As matches will differ in terms of numbers of games and outcomes, it is preferable to take the raw rotation data and put it into percentages. Percentages give figures that can be compared among matches. The percentages help to track improvements and other results of the changes the team may have made to improve a particularly weak point in scoring or side-out rotations.

As with most statistics, the easy part is accumulating the numbers. The hard part is interpreting the statistics.

Listed below is a group of matches from a sample schedule. Note the team's rotational statistics on points scored.

## Kentucky's Point Scoring Analysis

Opp.	Rotation	I	II	III	IV	V	VI	Total
A		9	5	7	7	5	12	45
B		10	6	10	6	12	8	52
C		8	4	6	3	5	4	30
D		7	10	4	12	10	7	60
Total		34	25	27	28	32	31	177
%		19.2	14.1	15.3	15.7	18.1	17.5	100

This system compares each of the team's rotations to all the other rotations in terms of points scoring contribution. If all the rotations were contributing an equal number of points, each rotation would show 16.6%. Sixteen-point-six percents is one-sixth of 100%. Rotations that show a scoring percentage that is higher than 16.6% are the team's stronger rotations. Those rotations that are scoring less than 16.6% are the team's weaker rotations.

The first things that can be revealed from the data presented are the strongest and weakest servers. Since the setter is always the server in rotation one (I), the numbers can show that the setter may well

be the best server. The other tough, consistent server is the outside hitter two who served in rotation five. Furthermore, the serving statistics and number of aces can corroborate these ideas about the toughest servers for the team.

To improve the team's situation, spend extra time working on the servers of the players in rotations II, III, IV and VI. The team could also search the substitutes for a player that could enter the game in one of the weaker rotations when a serving specialist is called for.

In the example above, the team had a defensive specialist that entered into the game into rotation three for a middle blocker who was a fairly weak defensive player. The practice statistics showed that the middle blocker was a more effective server than the defensive specialist. To raise the team's scoring capabilities in that rotation, the team waited to make the substitution until after the serve. If the middle blocker could serve, play in the game and not make a defensive error, this substitution pattern was a good strategy.

Assessing the team's serving strengths and weaknesses is, however, only the beginning of analyzing the point scoring abilities. To continue to strictly analyze the data given in this chart, according to serving, the weakest servers were in rotations II and III. However, the serving statistics showed that our weakest server was actually in rotation VI. The serving statistics showed that the player serving in rotation II was above average.

Further analysis found that the defensive alignment in terms of blocking and digging was the strongest in rotation VI. In rotation VI, the three best blockers by position were in the front row and the best three diggers by position were in the back row.

A second component was the fact that the team was getting better transition hitting from the outside hitter #1 in rotations I, V, and VI than the team was getting from the outside hitter #2 in rotations II, III and IV. Therefore, even though the team had a weak server in rotation VI, the team had a good chance of scoring points if that server put the ball in the court. The weak server with a strong team line-up playing in front of the server practiced with a strong emphasis on consistency with relatively little talk of accuracy and toughness.

In rotation II, the team faced the opposite problem. In rotation II, the team had two fairly small blockers in the front row at the same time. The team weakest outside hitter and middle blocker were the transition hitters. Even though the team had a tough server in this

rotation, the team had trouble scoring on anything but an ace or a free ball. The options for improving upon this situation in rotation II were limited. Server accuracy was stressed with the rotation II server. The server attempted to serve to the short middle or the short right areas of the opponents court in order to maximize the chances that the opponent's setter would set the left side attacker. The team could then gamble with the block and release the middle blocker on the short serve in an attempt to ensure a double block on the opponent's left side attacker.

Furthermore, in rotation II, the team's setter was instructed to set the right side hitter on transition as often as possible. Plus, the setter was given the option of calling an audible two in the middle when the attacker wanted to hit a set other than the back lob.

Unfortunately, even after all this team tinkering, rotation II continued to be the weakest point scoring rotation the entire season.

# Glossary

- Ace ..... A serve not returned by the opponent.
- Acute Injuries ..... Result from a single incident, like an ankle sprain.
- Antenna ..... The pole extending from the bottom of the net to a height of 32 inches above the top of the net which represents the continuation of the sideline.
- Area Block ..... Blocking a specific location or area of the net. Also referred to as Zone Block.
- Attack Block ..... A play in which the block tries to stop the ball before it crosses the net, forcing it back onto the opponent's side.
- Attack Coverage ..... Formation of players during or immediately after an attack to provide court coverage behind the hitter.
- Attack Line ..... Same as Three Meter Line
- Attacking ..... Hitting the ball into the opponent's court
- Back Set ..... A set made over the head, behind the setter and usually executed with two hands
- Backcourt ..... The portion of the court behind the Three Meter Line
- Backhand Dig ..... Contacting the ball with the backside of the hand. Frequently performed during a dive for balls close to the court.
- Baseline ..... The boundary line at the far ends of the court.
- Block ..... A play by one or more players attempting to stop a spike at the net. Only a player from the front line may attempt to block an opponent.
- Bow and Arrow ..... The alignment of both arms during an attacking motion that is similar to the movement of drawing a bowstring.
- Bump Pass ..... Same as Forearm Pass

Chronic Injuries .....Result from repeated stresses over a long period of time.

Coaching .....Coaching covers the decision making processes which are imposed upon your team to effectively select the strategies for a particular opponent and to effectively select the tactics that will be developed during the training period and to integrate the available components into a cohesive unit. The effective coach will maximize the individuals and the individual skills and the individual tactics available so that the whole which he/she develops will be greater than the sum of the individual parts. If the coach does that, we would judge him/her to be successful.

Combination .....An offensive play utilizing two or more attackers in one zone of the net.

Cooperation ..... the players are willing to subjugate their own performance and egos for the performance and success of the team. Teamwork and cooperation occur if players are willing to fail individually for the team that succeeds. It is a hard concept in volleyball.

Cross-court Serve .....A serve landing near the opponent's right sideline

Cross-court Spike .....A spike directed diagonally across the opponent's court giving the spiker the majority of court space available.

Cup Serve Reception A Serve/Receive formation using four receivers in a U or cup.

Cushioning the Ball ..Digging the ball with a backward movement of the arms during contact.

Cut Back Attack .....An attack in which the offensive player spikes the ball back against the direction of his attack.

Defense .....Aspect of any game during which the team does not have possession of the ball.

Dig (control) .....To control a dig so that you teammates can make a subsequent play on the ball without having to take a detour through the first eight rows of the bleachers.

Digging .....Passing a spiked ball using a forearm pass while crouching, standing, diving, rolling or jumping.

- Dink .....A one-handed attack using the fingertips used for its ability to surprise opponents by changing speed and direction when opponent is expecting a spike.
- Dive .....A technique in which the body goes into a prone position on the court. Frequently used for balls that will otherwise be land.
- Double Block.....A block performed by two players from the front row.
- Double Quick.....A combination play in which two attackers are available to the setter for quick hits.
- Down Ball.....A play in which the opponent's third contact is hit from a deep position on their court. May be a spike. Similar to Free Ball.
- Down Block.....Blockers retreat from block, either by not jumping or dropping their arms, after deciding that ball will not be spiked or will be spiked softly. Same as Down Ball. 2. A ball directed to your court by your opponents that your blockers choose not to make a blocking attempt.
- Elbow Lock Pass .....Elbows remain locked before and throughout contact. Movement of the arms is directed in an arc from the shoulders
- Eligible Hitter .....Any player whose starting position is #2, #3, or #4 known as the front row.
- Fake Penetration .....An instance in which a backcourt player, usually a setter, fakes or feigns an attempt to move forward to the front-court.
- (5-1) Offense .....An offense in which there are 5 hitters and 1 setter. With setter in the front row, the offense runs similar to a 4-2; with setter in the back row. the offense runs similar to a 6-0 or a 6-2. Switching required.
- 5-Player Serve/Receive..A Serve/Receive formation in which five players are intended to receive the ball. The other player is "hidden."
- Forearm Pass .....A ball played off the forearms in an underhand manner.

**4-Player Serve/Receive ..**A Serve/Receive formation in which only four players are intended to receive the ball. Two other players are “hidden.”

**4-2 Offense .....**An offense in which there are 4 hitters and 2 setters. Front Row will always have 2 hitters and 1 setter. Switching probable but not necessary.

**Free Ball .....**A common reference to a ball crossing the net easily that will not require a defensive play. Usually allows the offense to have more time to set up a play. Any ball that is not aggressively hit by your opponents and is drifting in a lazy arc to your side of the net.

**Front-court.....**The area of the court in front of the Three Meter Line.

**Jump Set .....**A set performed while the setter is jumping usually designed to confuse the defense or save an errant pass.

**Key .....**The term used to describe an opponent’s habitual actions or a specific movement that will dictate a response action. Example: a middle blocker may “key” on the setter’s hand position to determine either a front or back set.

**Kill.....**A spike that cannot be played by the opposition resulting in a point or a sideout.

**Learning.....**The athlete can perform a learned response by engaging his or her brain.

**Line Block .....**A block which denies the close line to the hitter.

**Line Serve.....**A straight-ahead serve landing near the opponent’s left sideline

**Middle-Back Defense ....**A defensive formation which places the Middle Back player deep in the court to cover deep spikes. Also referred to as Six-Back or Man-Back.

**Middle-Up Defense ..**A defensive formation which places the Middle Back player up at approximately the three meter line to cover dink shots. Also referred to as Six-Up or Man-Up.

**Multiple Offense.....**An offensive system that uses two, three or four hitters with set plays.

- Net .....The physical barrier that divides the court and separates the two teams. Also a term referred to when a player makes contact with the net, which is a foul.
- Off Blocker.....A reference to the front line player not involved in the block.
- Off-Hand Side .....The side of the court in which the predominant hand is between the player's body and the closest sideline.  
Example. A right-handed player's off-hand side is the right side of the net.
- Off-Speed Shot .....A ball that rapidly loses its momentum because of the reduced speed of the striking arm just prior to contact
- Offense .....Aspect of any game during which the team has possession of the ball.
- On-Hand Side .....The side of the court in which the predominant hand is between the player's body and the far sideline.  
Example: A right-handed player's on-hand side would be the left side of the net.
- One-Arm Dig .....A forearm Pass using only one arm. More difficult to control, but increases the player's reach capability.
- One-Arm Pass.....Same as One-Arm Dig
- One-Hand Block.....A block using only one hand. May indicate blocker is out of position.
- One-Hand Set .....A set performed with only the fingertips of one hand. Frequently performed in conjunction with a jump set.
- One-on-One .....A common reference to one spiker hitting at one blocker.
- One-on-One Block....When only one blocker is attempting to stop the spike.
- Out-of-Bounds.....A ball is out-of-bounds if it touches the court outside of the court boundary, the net or the antenna. It is also out-of-bounds if it crosses the net not entirely within the court.
- Overhand Floater Serve .An overhand serve that has no spin moves in an erratic path as it approaches the receiver. The ball is hit with only a momentary contact and very little follow through.

- Overhand Pass .....A pass executed with the hands held higher than the elbows with the palms facing outward.
- Overhand Serve .....A serve performed with an overhand throwing motion.
- Overhand Spin Serve An Overhand serve in which the server contacts the lower mid-section of the center of the ball; server uses the heel of the hand to initially contact the ball, and then uses a wrist snap to roll the hand over the ball, imparting topspin.
- Passing .....The reception of a serve or the first contact of the ball. It is an attempt to control the movement of the ball so the the ball reaches another player.
- Phobias .....one time learnings. Phobias are an exception to the repetition model of training.
- Punch Set .....A set performed with a the knuckles of a closed fist, usually when the setter wishes to avoid being called for a throw.
- Real Points .....Real Points are found as a statistical term in volleyball's rally scoring. Rally scoring is often used in the fifth game of a volleyball match. A real point is a point that a team scores when that team served the ball.
- Repetition .....turns learning into a trained response. Phobias are an exception. The trained response must be cued properly.
- Replay .....The call by a referee meaning that the previous play will have no effect and must be played again. Usually the result of conflicting calls or no call due to not having seen the play.
- Right Cross .....The middle attacker approaches setter for a one set; the right side attacker crosses behind the middle attacker for a two set.
- Roll .....The rotational movement on the ground enabling the player to land safely and return to play quickly.
- Roll Shot .....An off speed shot, generally from the heel of the hand, while still making a full arm swing.
- Roof .....Same as Block

Rotational Order .....The order of players on the court. Each position is given a numerical number: Server is #1, Right Front is #2, Middle Front is #3, Left Front is #4, Left Back is #5, Middle Back is #6.

Round-House Spike..A spike hit with a windmill motion of the arm. The ball is contacted above the shoulder with the body perpendicular to the net.

Roundhouse Serve ....The arm moves in a windmill motion and the ball is contacted directly above the hitting shoulder. Usually served with severe topspin.

Scoring.....A Team can only score when it has served the ball.

Seam .....The area between two diggers, blockers or receivers.

Serving Zones .....Positions on the opposition's court where the server is intended to serve to. Coach often gives hand signals to the server before the ball is put into play.

Setting.....Passing to place the ball in position for a player to spike. The setter is the position played by individual who sets the ball to spikers

- Shoot Set.....**A common reference to a set that is placed close to the sideline, between one and four feet in height, with a relatively flat trajectory. The goal of a shoot set is to deliver it to the spiker quickly enough that there is a one-on-one block as the middle blocker is unable to get outside to participate in the block.
- Side Out.....**The change of serving teams that occurs when a point is not scored.
- 6-0 Offense .....**An offense in which all six players are considered hitters. When a player reaches a specific, designated position on the court, he/she sets for that one rotation. Good for beginning level. Switching not necessary.
- 6-2 Offense .....**An offense in which all players are hitters while in the front row. Two specific players are designated as setters while playing the back-row positions. Switching required.
- Skyball Serve.....**An underhand serve that is hits so high it looks like it is falling straightdown. It is used for play at large arenas or outdoors.
- Soft Block.....**A block in which the hands are leaning away from,or are parallel to, the net. Lacks the downward motion and aggressiveness of an attack block.
- Specialist Player .....**is put in the match to solve a problem and then is taken out again. This is important for both the player and the team to accept. Specialists must be aware and understand their role. They must prepare for the role. The specialized player has to have a certain positive relationship with the other members of the team. More than the physical ability he or she brings to the team. They are important players, even if they don't play one single minute in a game. • A part of the specialist role is to use the audience in the psychological fight against the opponent team. • The team must understand what impact this player has, and the coach must be aware of that impact potential. If the coach does not recognize the specialist player, he/she is bad off..• Most good specialized players tend to be older.. Usually young players think they are used too little. In maturing as a volleyball player, it often happens that you tend to become less specialized and maybe are not used as often as when you were younger.

Specialization .....the priority for success in a team sport. Principally, you can rank the ability of teams, by how well specialized they are. Specialization is another way of saying, “Do you have the people who are most skilled in any area, performing in the area of the most skill needed? Do you have that? Did you match-up?”

Spike .....A ball forcibly attacked with one hand. Backcourt players may not spike unless they take off from behind the 3 meter line.

#### Step Approach for Volleyball Spike

The four-step approach allows for maximum acceleration. It has been shown that there is a high correlation between power and jumping in a four-step attack. Every time a foot hits the ground it is counted as a step. The four-step approach’s other advantage is that it is easy to modify or adjust the approach. In the middle of the court, there are often three-step approaches, but the four-step is used otherwise.

Spiker.....A player who plays the net and is responsible for offensive spikes, dinks and swipes. Also called hitter and attacker.

Strategy .....The application of tactics to the specific opponent that you are playing. When we develop a strategy we are picking and choosing from a broad range of tactics which your own team has mastered. We choose those elements which will be successful because of particular “match ups” that you can predict will occur against your opponent. You will, for example, have certain hitters matched against certain blockers. This is within the tactics that your team has trained for; this is defined as strategy. You will develop a serving strategy within the general tactical serving plan of your team which should take advantage of receiving weaknesses of the opponent. You will develop a particular blocking strategy within the menu of available tactics that your team has mastered which will be most effective in defending a particular opponent’s offense. Strategy should vary from opponent to opponent, even from game to game, and will involve a rotational decision that will be most effective in giving you more successful match ups than unsuccessful match ups against a particular opponent.

Substitute Player .....is one who enters the game to stay there. This then could happen to anyone of the players sitting on the bench.

Systems .....The various methods of deploying individuals on the playing surface. Systems can involve serve-receive patterns, offense maneuvers, setter movement, spiker coverage positions, blocking alignments, back court defensive positions, etc. Any alignment of players which we can codify and describe is a system of play in volleyball.

Tactics .....The application of specific systems to match the strengths of the personnel on your team. As we have already discussed, the tactics can never be more complex or exceed the technical abilities of your players on the six basic individual skills. Tactics are further defined as the coach's decisions to use those systems which will most effectively take advantage of the players' strengths and cover up the players' weaknesses. One of the most important elements to understand about tactics is that they are developed completely based on the abilities of your own team and those systems which you feel will be best suited to the particular individuals that you are coaching.

Tandem .....The middle attacker approaches for a one set; another attacker follows closely behind for a two set.

Team play ..... is another word for tactics. There are two major limiting factors of tactics. One is your team. What systems do we know, what personnel range do we have and what kind of training processes have we gone through, etc. The other tactical limitation is the opponent. Tactics are the choice of systems, based on your team's strength, suitable for the opponents you are playing. It is something like looking over a menu at a restaurant, and deciding what is going to be best for dinner that night. Your team has a style based on team play, and the opponent is going to limit that style.

Techniques of the team ..and their perfection have an interaction with the systems that you can play. To some degree your ability to play different systems is limited by technique.

Theory .....is how we play the game from a systematic approach. Generally as a team becomes more sophisticated or more experienced, or moves up a level, it can increase the number of systems. Theory becomes more complicated. There is some benefit to a complex theory. There is benefit in the ability to change systems and to have a large number of systems in your repertoire. The volleyball team can be like a classical pianist who, as he becomes better and better, increases his repertoire. The team should strive to develop more answers to our opponents problems. A good opponent presents you with different problems. The larger the repertoire, the more systems you can play.

Three Meter Line.....The line which runs across the full width of the court three meters away from, and parallel to, the net.

3-Player Serve/Receive .A Serve/Receive formation in which only three players are intended to receive the ball. Three other players are “hidden.”

3-3 Offense .....An offense in which 3 players are hitters and 3 players are setters. They are set up alternately on the court and no switching is involved. Good for beginning level. Switching not necessary.

Thrown Ball.....The act of contacting the ball too long, or allowing it to come to rest during contact, as called by the official.

Tip.....Same as Dink

Tips .....What this book is full of!

Trained Response .....An athlete can perform a trained response without engaging his or her brain. A trained response is done as a part of that athlete’s automatic pilot. The trained response must be cued properly.

Triple Block.....A block performed by three players from the front row.

2 Player Serve/Receive ..A Serve/Receive formation in which only two players are intended to receive the ball. Four other players are “hidden.”

Underhand Serve .....A serve performed with an underarm striking motion. The ball is usually contacted with the heel of the hand.

**Vocabulary Triggers.** Use key words and phrases to teach your team new skills. Each time in the future when the players are working on a skill, use and repeat the same key words and phrases to help them.

**W Serve Reception** ...A Serve/Receive formation using five players, each positioned at the point of a W.

**Wipe-Off** .....A conscious effort to spike off of the hands of the block into the out-of-bounds area.

**Glossary Credits** .....This section of volleyball terms utilized some of the information found in other volleyball books now available. For further reading, check the following books: Hot Sand; Coaching Volleyball Successfully; Volleyball Encyclopedia; Strategies for Competitive Volleyball; Power Volleyball; Volleyball: Sign-ups to Service; Pass, Set, Crush; and Championship Volleyball Techniques and Drills.



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