

Made

Easy?

 Failure is only the opportunity to begin again more intelligently—Henry Ford

 People only see what they are prepared to see—Ralph Waldo Emerson

 Statistics are no substitute for judgement—Henry Clay

Stats On the Sidelines

BASIC STATS & CHARTING

WHAT STATS SHOULD YOU TAKE? And what can they tell you?

• YOUR TEAM's SERVING:

- Who is serving effectively for you.
- In what rotations you are scoring your points.
- % of good serves (GOOD SERVES divided by TOTAL ATTEMPTS).
- % of Aces—and on what # serve (ACES divided by TOTAL ATTEMPTS).
- ACE AVERAGE (TOTAL ACES divided by TOTAL GAMES PLAYED).
- Number of Errors and on what # serve (1st, 2nd, 3rd, etc.)

YOUR TEAM's SERVE RECEPTION PASSING:

- Zero to 3 point scale (0= aced to 3= perfect)
- Figure average QUALITY (add PASS SCORES and divide by TOTAL ATTEMPTS).
- Figure % of good (2's & 3's) to bad (0's & 1's) by adding 2's & 3's and dividing by TOTAL ATTEMPTS.
- Who is passing effectively & who do you need to relieve of passing duty?

YOUR OPPONENT's SERVE RECEPTION:

For the same reasons you chart YOUR passers... who/where should you serve in what rotations?

YOUR ASSISTS & ATTACKS:

Who is hot & who is not?

- Number and % of ATTACK ATTEMPTS, KILLS and ERRORS
- HITTING EFFICIENCY of individual players and the team (KILLS minus ERRORS, divided by TOTAL ATTEMPTS).
- Figure your ATTACKS PER GAME and KILLS PER GAME AVERAGES (ATTACKS or KILLS divided by TOTAL GAMES PLAYED).
- What rotations are most effective offensively?
- Which type of play or set is most effective for a particular hitter, rotation or against an opponent's block or defense?

your athletes and their parents (or other volleyball fans) can be taught to use the simplified statistical charting forms included in this section while on your sideline, freeing YOU up to actually COACH!

Why keep stats at all?! There are several reasons...

1) To enable you to show individual players, the team, their parents and your club or school administration the amount of progress from game to game, match to match, tournament to tournament, & season to season.

2) To establish Team Records.

3) To help set Team and Individual "Goals" for performance.

 To select and justify starting players and rotations.

5) To be able to make adjustments during games, matches or tournaments.



WHAT STATS SHOULD YOU TAKE?

- Which Setter is connecting better with which hitters (ASSISTS divided by TOTAL ATTEMPTS)?
- Figure your ASSISTS AVERAGE (TOTAL ASSISTS divided by TOTAL GAMES PLAYED).

YOUR OPPONENT's ATTACKS:

- What the current rotation is & which hitters are in the front row.
- What each hitter's tendencies are—where they hit from/approach patterns in each rotation; where they hit to (line, angle, deep, short, etc.) and the effectiveness against your defense.
- Whether you need to make defensive adjustments and what they should be.

YOUR BLOCKS AND DIGS:

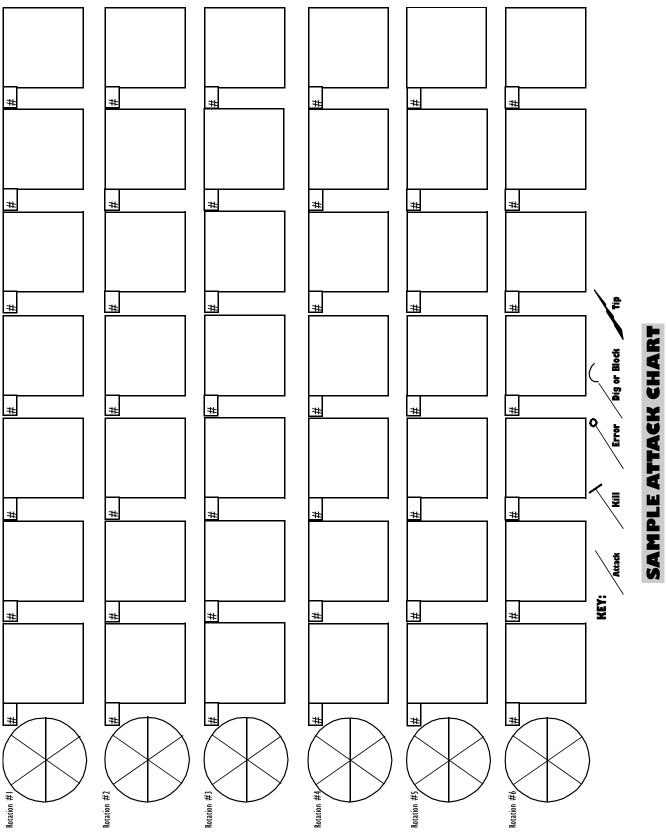
- Number of Digs (up & playable).
- DIG AVERAGE (TOTAL DIGS divided by TOTAL GAMES PLAYED).
- Number of BLOCK KILLS (SOLO = I point and ASSIST BLOCK = 1/2 point for each blocker up).
- INDIVIDUAL BLOCK AVERAGE (TOTAL SOLO BLOCKS + TOTAL ASSIST BLOCKS, divided by TOTAL GAMES PLAYED) and TEAM BLOCK AVERAGE (TOTAL SOLO BLOCK POINTS + TOTAL ASSIST BLOCK POINTS, divided by TOTAL GAMES PLAYED).
- How effective your Blockers are in certain rotations or combinations or against certain hitters or plays.
- How often you are able to run your transition offense off of a dug ball.

HOW TO USE THIS CHART: SAMPLE SERVE & SERVE RECEIVE CHART

Players or parents can easily use all the charts in this manual while on your sideline. Judging the quality of a Serve Receive Pass (on a 0-3 scale on this chart) is probably the most difficult task a statistician will have. Therefore it is important that you have consistency. One person (the spotter) calls the passer's name (or number) and the quality score to the recorder, who writes the appropriate symbol in that player's Passing Column. Using a 0-3 point scale, a "O" indicates the passer got aced (which means an Ace should also be recorded for that server); a "I" indicates a served ball that may have been passed but was either passed over the net or was such that setter only had one option (usually a high set or no attack was possible); a "2" pass indicates that the setter had more options available; and a "3" pass is a "perfect" pass with all Setter-Hitter options available. Pass Quality statistics are figured by adding up the player (or team) total pass points and

SAMPLE SERVE & SERVE RECEIVE CHART			
DATE: 11/11/00	<u>MATCH SITE: @ HOME</u> <u>GAME SCORES: 15-12</u> OPPONENT: USA HS <u>16-14</u>		
SOUAD: Varsity #10 #4 #5 #6 #22 FR 11			
US GAME # OUR SERVERS lenny #1- 1° jill #2 - 1 2 1° atty #3 - 1 1 2 5° Carol #4 - 1° 5° 9° 1 2 Sarah #5 - 9° 1 9° Debbie #6 - 1 2 1 5°		US GAME #2 THEM OPPONENT PASSERS #15 - 0 1 2 #20 - 3 3 2 3 #9 - 1 1 2 0 1 1 1 0 0 1 0 #12 - 3 0 1 2 0	GAME #3 the
TEAM SERVE % Ist Serves -13/15= 78.7 All Serves—23/27= 78.5 Aces - 7/27 = 72.6	TEAM PASS QUALITY 49/32= 1.53	OPPONENT PASS QUALITY 29/24= 1.21	

dividing by the number of attempts. This results in a pass quality score between 0 and 3.0. An opponent's passers may be evaluated the same way. In the Serving Column, a player's first serve of a rotation is indicated by a "1"; if her team wins the rally, her next serve is marked as a "2", followed by her third serve ("3"), etc. The result of her serve is either "kept in play" (no further marks), an "Ace" (marked by slashing the number of the serve), or an "Error" (marked by circling the number of the serve). The next time that player rotates into the serving position, her stats start over again with a "1", and so on. One sheet can be used for an entire match by simply changing the color of the pen or pencil used by the recorder. Stats can then be computed for each individual game of the match. Your team's and the opponent's starting rotations for each game can be tracked on this same chart, allowing you to track which players are in the front row, player subs and positions. In Game #1 above, your team is running a 6-2 offense with #1 and #4 setting. The active setter in this starting rotation (#1), will be subbed out when she reaches the front row, replaced by #22 (who entered this game twice). Your opponent is running a 5-1 offense with #7 setting all positions. Their middle hitters are #14 (#10 is her sub) and #15; # 12 will be subbed out and replaced by #3 when she reaches the front row.







WHEN CHARTING DURING THE MATCH, REMEMBER:

- There can only be 3 results on an **ATTACK** (can be spiked, tipped, dumped, set over in an attempt to score **NOT** an OVERPASS, a FREE BALL, or a horrible set that the attacker is just trying to save):
 - \Rightarrow a **KILL** (ball is terminated or the blockers called for an error, resulting in a point or sideout),
 - \Rightarrow an **ERROR** (an illegal contact, hit out, hit into the net or the antenna, a net or center line violation or is blocked for a point or sideout),
 - \Rightarrow or an **ATTEMPT** (the ball can stay in play).
- There are only 3 possible outcomes of a ball being **SET** (any contact by any player putting the ball into position for an attacker to hit it):
 - \Rightarrow an **ASSIST** (awarded to any player who sets the attacker for a KILL),
 - \Rightarrow an **ERROR** (a grossly bad set or a **BALL HANDLING ERROR**),
 - \Rightarrow or simply a **SET ATTEMPT** (ball is attacked but kept in play by the defense).
- There are also 3 possible outcomes for a **SERVE**:
 - \Rightarrow an **ACE** (ball hits floor untouched or first contact is unable to be kept in play),
 - \Rightarrow an **ERROR** (too much time, hit into the net or antenna, hit out of bounds, a foot fault, illegal contact or server out of rotation),
 - \Rightarrow or the ball is **RECEIVED** and kept in play.
- A SERVE RECEPTION ERROR is charged to a player if:
 - \Rightarrow the serve hits the floor near them, or they pass the ball but it cannot immediately be kept in play, or the player is called for a lift.

 \Rightarrow the ball falls between two players and cannot be determined to have been the fault of one or the other, a **TEAM RECEPTION ERROR** is given.

 \Rightarrow Every time an **ACE** is awarded to one team, the opponent must receive a **RECEPTION ERROR**.

- A **DIG** is awarded only on an **ATTACKED BALL** that is:
 - \Rightarrow dug "up and playable" (anywhere on either team's side of the net).
- **BALL HANDLING ERRORS** are awarded for **DOUBLE HITS**, **THROWN** or **LIFTED** balls, except :
 - \Rightarrow on SERVE RECEIVE (which is a SERVE RECEPTION ERROR),
 - \Rightarrow on an **ATTACK** (which is an **ATTACK ERROR**),
 - \Rightarrow or on a **BLOCK** (which is a **BLOCKING ERROR**).
- There are 4 possible results on a **BLOCK** :
 - \Rightarrow a **SOLO BLOCK KILL** (if one blocker is up alone),

 \Rightarrow an **ASSIST BLOCK KILL** (if more than one blocker is up on a block leading directly to a point or sideout– whether they both actually touch the ball or not),

 \Rightarrow a **BLOCK ERROR** (anytime the official whistles the block for touching the net, a center line violation, reaching over, blocking the set, or a back row block, but **NOT** for getting "used" or "tooled" by the hitter).

 \Rightarrow a block attempt and the ball is kept in play, either on the hitter's or the blocker's side of the net (no "official" box score statistics are kept for this category, but many coaches like to keep a **BLOCK TOUCHES** statistic for feedback or team goal setting purposes).



STATISTIC AND VIDEO PROGRAMS

DIGITAL SCOUT

The leader in handheld Palm Stat and Scouting technology, and official handheld software of USA Volleyball Coaching Education. Know more, win more

- Easy to use, point and touch
- Team and individual stats
- Game and cumulative stats
- Printed stat reports
- Printed attack charts
- Real time on-screen summaries
- Runs on all handhelds using the Palm OS, 3.1 or greater
- PC compatible only

Discounts for Volleyball coaches at <u>www.digitalscout.com/volleyball/</u> GET IT!!!!!

DARTFISH

Dartfish is the USA Volleyball Coach Education official video analysis, as an important performance-impacting and educational program and as powerful tool for video performance analysis. The USOC also uses this technology within the elite training programs. Want to know how video can become your ally in your movement training? Now you can try out the basic versions of the DartTrainer and DartGolfer software programs for **FREE** and discover for yourself what all the buzz is about!

Go to http://www.dartfish.com/en/support/download.jsp

- 1. Register and become a member of the Dartfish Community
- 2. Download and install your FREE 30 day trial version of DartTrainer or DartGolfer

DartTrainer software is already revolutionizing the use of video in sport training by giving instant and automatic visual feedback of the subtleties and nuances of athletic technique both during the workout as well as for post performance analysis. The advantage of DartTrainer to traditional video equipment/software is that it has been developed in collaboration with coaches and institutes that wanted an easy-to-use performance analysis tool which is fully integrated into the flow of the training session or competition.

The DartTrainer software integrates dynamic features into one video analysis product to meet coaches' needs. Dartfish's breakthrough technologies, SimulCamTM and StroMotionTM provide a powerful platform for the software. SimulCamTM creates a finite

comparison of two performances overlaid one upon another, allowing coaches to analyze small technique differences for skill development, repeatability of a skill, and reference to "Gold-Standard" performances. SimulCamTM also allows coaches to create psychological goal setting reinforcement, have a tactical analysis of course lines and decisions, as well as acting as a tool to scout and analyze opponents' skills and tendencies.

StroMotionTM technology allows coaches and athletes to see an athletic movement unfold in time by compounding images into a frame-by-frame sequence. StroMotionTM is a powerful tool which displays a complete sequence of an athletic movement as well as the subtle changes which occur during the movement. Technical movements can now be broken down, image by image, and studied in precise detail.

DartTrainer also has the capability to draw directly on the video clips to highlight technique and positioning. A new process called 'extraction' allows two athletes from different sessions, venues or competitions to be compared with one another. DartTrainer also has a feature called MultiPlay which allows the user to drag and drop up to four videos into a single screen to create a multi-image video sequence to analyze and compare movements frame-by-frame. The Slide-Show module is useful for creating "snapshot" sequences with personalized comments for customized slide presentations or emails. In today's dynamic sports world, the coach can continue to pan, tilt or zoom the camera to capture the performances without worry as to how it will impact the comparison or feedback to the athletes. The DartTrainer program can handle and provide absolute comparisons with such video tactics, an example of the leading edge technology capabilities of DartFish!

Dartfish strives to create a new dimension in the sport experience by producing digital images that are performance enhancing, developmental, interactive, entertaining and educational. Dartfish technologies and know-how are widely recognized in the sports world for performance enhancing sport training applications, exclusive televised broadcast footage, and interactive Internet content. Dartfish images were used for the 2000 Olympic Games television broadcasts and Internet coverage, many World Championships including the 2001 World Figure Skating Championships, and numerous sport competitions worldwide. Whether it is through the broadcast lens or the lens of the coaches' cameras at the venue, Dartfish technologies are breaking new ground for sports video analysis!



VTT

Jim Welsh has put years of work into the Volleyball Tournament Toolkit, the program used by USA Volleyball at the U.S. Open and as part of the U.S. Junior Olympic Volleyball Championships. One is called Elim and the other VTT. The programs/ documentation are available by anonymous FTP from steph.admin.umass.edu.

Tournament Builder Pro

(800) 450-4697 www.tournamentbuilder.com

This program helps you build brackets and pools, schedule leagues and tournaments, edit events immediately for last-minute changes, create game guarantee formats, save money on award certificates, print rosters and forms in one step, post updates and results to your web site.

Sportistics

111 South Ferguson St., Lamoni, IA 50140 (515) 784-3479

This program has been in use by the USA Volleyball Teams since the early 1980s. Rod Schall, former Graceland men's head coach, has a passion for statistics and information that is matched by few in sport, and with Jim Coleman, he has been building this program to many levels. Both Mac and PC Windows and DOS versions exist.

Scout

(619) 229-0909 e-mail: arksptstek@aol.com

Aldis Berzins, former assistant coach for the USA Women's Volleyball Team, created the statistical video computer software program called SCOUT. It has been extensively used by both the USA men's and women's programs during this quadrennium. During a match, the coach looks at a bench laptop which has statistics transmitted to it through a wireless network. The program also creates a data file which is used by a computer-controlled video editing system for the automatic creation of edited coaching tapes (sideout, point scoring, highlights, etc.). A simplified version of the SCOUT program is available for your club or school team.

Daktronics, Inc.

331 32nd Ave. Brookings, SD 57006 (605) 697-4686

This program is designed to be used to gather ingame statistics and play-by-play information, as well as NCAA cumulative box scores for matches. Multiple printouts (both single game and multiple-game), as well as a conference package, will be offered. Parties interested in beta testing the software should send e-mail to dakstats@daktronics.com. The program will be available as a retail version this fall for the next college season, to be sold for about \$300 for the full college package. A smaller package without support for playby-play may also be available in the future.

Schedule Wizard

macleod@isn.net www.isn.net/~jmacleod.

Timeless Technologies has created a package called Schedule Wizard that can be used by anyone to create balanced schedules for virtually any sports league (including volleyball). The package is extremely easy to use. For more information you can e-mail This product could be of great use for volleyball organizations, schools, etc. A trial version of the product is also available on the web page listed above.

www.qwikstats.com www.turbostats.com www.biggsoftware.com/default/htm www.allstats.com/planner/plvoll.htm www.allstats.com.volleyball/index.html

Great Charting Tutorial

While too big to include here in the IMPACT manual, go to USA Volleyball's education area and download this excellent tutorial on charting. Please note that since the creation of the tutorial, the rules of volleyball have changed to Rally scoring. So, wWhile many of the concepts discussed below are probably still valid, specific implementations may need significant revision. In addition, many hyperlinks may no longer be available. --- Ravi Narasimhan

http://www.usavolleyball.org/educat/statchart.pdf