USA Women's National Team Techniques

The following are the key technique points and cues used by the USA Women's National Team.

Philosophy behind technique concepts:

- 1. Repeatability; i.e., consistency of actions
- 2. Reduce variance; i.e., relates to consistency of results and range of error
- 3. **Manage risk**: reduce errors by making good decisions; e.g., know when to "hit it hard" and when to "keep it in"; don't try to go from bad to great just go from bad to good.

Consistency, of actions and results, is best achieved through mechanically sound and efficient technique and unnecessary movements should be eliminated – "less is more." Learning to make good decisions (managing risk) should be incorporated into the teaching process.

I. Forearm passing

Main Cues:

Face the server – angle the arms

Arms straight – before, during, and after

Shuffle footwork – track ball with the arms

Pass and freeze (i.e., hold the platform for a brief instant after contact)

Additional key points/discussion:

- *wrists and hands together
- *one move to the ball

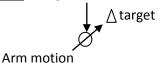
Easy ball - use balanced body position (weight forward) and your arms (a little, if at all), not legs, to "push" to target

- *arms straight: before, during, after
- *face the server angle arms to target
 - lead leg
 - -drop shoulder
- *be balanced at contact

(act on the ball – don't let the ball act on you)

- *watch the server and track the ball
- * shoulder movement is around a saggital-horizontal axis keeping the arms in the lateral/frontal plane (i.e., the plane the arms move when doing a jumping jack (but with arms in front of body which requires some slight flexion at the waist)

Don't swing the arms across the line of the incoming ball as is shown in the diagram below:



- *shuffle to move
- *pass and hold platform
- *passing is a "quiet activity"
- *Change height of passer by bending at the knees, not the waist

Overhead passing:

- *face target
- * hands and elbows more together and stronger than regular set

Passing comments: emphasis on balance, getting the ball in the mid-line and quiet upper body. ready position: initial starting position with arms resting on the thighs or hanging straight down. The movement from there is to straighten the back a little and, after tracking the ball with straight arms, redirect the ball by angling the platform to the target. Shuffle movement is facing the ball with the arms straight, there should be no attempt to "get the hips around the ball" although do try to play ball in the midline.

II. Attacking

Main cues:

Approach: 4 steps; little to big/slow to fast Both arms up: non-hitting high; hitting elbow up and shoulder back Load-unload (shoulder to shoulder) Stay tall

Additional key points/discussion:

*4 Step Approach

Right foot forward

Little to Big

Slow to Fast

*The goal here is to create momentum and load for the jump and to help the attacker get their feet to the ball; same contact point (relative to body) every time.

Step 1: transfer weight

Step 2: on or around the 3 meter line (on setter contact for "2nd step tempo set); slight pause on this step to be able to adjust to the set

Step 3: dynamic

Step 3/4 (plant) Feet Turned to jump (45 – 60 degrees to net)

- *Feet to ball; turned and together (pointed in same direction although the last step may be <u>slightly</u> turned more than other foot) with feet under the hips (not wide apart) to jump
- *Swing arms to jump

(arms move in a forward – backward plane; sequence -neutral (side), forward but kept at or below waist height, back – as far as you can; forward and up to jump)

- *Elbow Up and Shoulder Back
- *Non hitting arm up high and straight
- *generating torque

Cue - "Load/unload" -

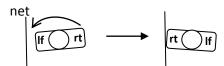
Load: as the hips twist toward the net the "non-hitting arm is up high" with the "hitting elbow up and shoulder back" hitter should feel a stretch/tension from hitting shoulder to the opposite hip;

Hips are parallel to the net; shoulders are perpendicular

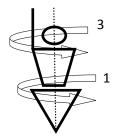
<u>unload</u>: non-hitting arm pulled down close to the body (break at the elbow) and the hitting shoulder is brought through to contact

*cue -"Shoulder to Shoulder"

in load position the shoulders will be almost perpendicular to the net; the hitting shoulder will be brought through to where (approx.) the non-hitting shoulder was - shown from above



Rotation is around a vertical (long) axis with a sequential pattern of 1 -hip turn; 2 -opp. arm pulled down (not shown), 3 -hitting shoulder through to ball contact



Don't want: lean to side or pike at waist Cue – "stay tall"





*"let the arm go through in direction of the hit" – **don't** try to stop the arm or bring it to a certain point such as to thigh or opposite hip – let it go where it takes you

Other cues

- *Extend
- *hit on the way up
- *Try to contact the ball same place relative to your body every time
- *Hit it high, deep, with range (must be able to vary speed, trajectory, and direction)

Attacking comments: Coach McCutcheon does not use a cue for the action of the wrist as it is natural motion as a result of the "whip" of the arm; however, he does want the wrist fairly firm at contact "it's like a mallet!"

McCutcheon - "maintain the integrity of straight line"; follow through to target; range may be increased by contacting at a different point of the ball (which could result in the thumb slighting turning down or up but he does not use "thumb up or thumb down" as a cue). There may be a time when an attacker would use a "chop shot" which is a cross-body arm swing

Torque is generated by the body rotating around the vertical axis; there is not rotation around the horizontal axis; i.e., piking forward with the head coming down and the back rounding

Transition footwork:

Farther the pass is off the net the more into the court to start approach

OH: strong side: 4-4 preferred if time, i.e., 4 steps off – 4 step approach;

For right hander: block turn into court; rt. – left – rt – left

(pivot on 3rd step; finish facing net with rt. foot forward

ready to initiate a 4- step approach)

or 3 – 3 for quicker transitions

Weak side: 5 -4 or quicker transition = either 4-3 or 3-4

MH: athlete's preference on which way to turn after blocking; 3 or 4 step approach

Hitting a slide set: keep ball in front and chase; use angle approach $\mathcal I$

not parallel



III. Setting

Main cues:

Face target

Shape the hands: preliminary position – thumbs up; ready position - thumbs down); elbows

wide Extend elbows

Footwork: right – left – right (before contact)

Additional key points/discussion:

- *shape the hands (like you're going to chest pass a ball to the floor) and bring them up early off forehead; ball shape with 2 hands – (not 2, one handed ball shapes)
- *elbows are wide
- *face the target stride position with right ft. in front Take the ball in same place every time
- *extend elbows (like a chest pass)

Setting comments: "elbows move not wrists" - Coach McCutcheon does not want the wrist in the action – or at least there should be no conscious action as he purposefully does not use cues relative to wrist action; e.g., loose wrist/let the ball bend the fingers naturally etc., (wrist action is another layer of movement and reduces "repeatability"); Coach McCutcheon's analogy is the motion is similar to the chest pass in basketball; for example, he would not do wall setting routines to work on "wrist action" as many coaches do. He also does not worry about putting backspin on the set or that the heel of the hands/thumbs come under and up at release and finishing with palms facing the target – "just let it go"

There is emphasis on getting the shoulders square at release with the arms/hands following through to the target. Turn and set – NOT set and turn or set as you turn. If you have to set off one foot then the opposite knee should be brought straight up, and not swung out wide to the side, as you square up to the target – try to avoid falling backwards.

"Front load the play" i.e., decide before the play what set will work

IV. Serving

Main cues: jump spin

4 step approach
High toss after 1st step
Toss with hitting hand
arm swing and contact cues – similar to attack

Float:

toss after 2nd or 3rd step (individual preference but usually after 2nd) toss to right shoulder hitting arm up and back as quickly as possible stay tall – rotate around central (vertical) axis - similar to attacking torque solid hand – drive through the center of the ball – "3:00" swing to target

Additional key points/discussion:

*jump spin

Right hand-right foot: or left hand-left foot 4 steps: step – toss or step, step -toss

Toss it high – more right than center and more into the court

Toss with a firm wrist and elbow with the arm acting like a pendulum at the shoulder

Elbow high and shoulder back

Stay tall

Load/unload, shoulder to shoulder

Swing to target

Accuracy first – then speed; need both Good toss- hit it hard; bad toss – hit it in

*two foot jump float:

Carry ball with two hands or one hand

4 step; slow to fast but shorter than for jump spin

toss after 2nd or 3rd step (individual preference but usually after 2nd)

toss to right shoulder

hitting arm up and back as quickly as possible

stay tall – rotate around central (vertical) axis - similar to attacking torque

solid hand – drive through the center of the ball – "3:00"

swing to target

Serving comments: national team has found that statistically the jump float is the most effective point

scoring serve

both types of jump serves use the same body torque as the spike (around vertical

axis)

velocity of serve: jump – overpower with speed @ 55 – 65 mph

develop a routine –routine gives the player something to go to back to, e.g., breathing pattern. Practice the routine!! (i.e., run back to serve and have

someone hand the ball to server; use whistle in practice, etc);

national team % goals: spin – 88-90% in; float – 93-96%

V. Block

Main cues:

Read: BSBH (ball (see) – setter (look) – ball (see) – hitter (look) Move: footwork pattern depends on speed/placement of set

Block: straight up and straight over

Arms – extended, locked and over at contact

Block where you want the ball to go

Swing blocking: bring hands back to in front of shoulders before extending (i.e., do not sweep the arms)

Additional key points/discussion:

* READ

("see" is a broad focus and "look" is a narrow focus)

- See the pass (and your hitter)
- Look at the setter
- <u>See</u> the set

Direction

Velocity (determines footwork pattern)

Location

- Look at the hitter

Where are they in relation to the set?

Block the power shot

Where is the set?

Where is the hitter in relation to the ball?

Know: What is the hitter's history?

* MOVE

- shuffle steps (i.e., 2 steps)
- 3-step crossover (first step is small, weight transfer)
- quick 3 (when set is too fast for cross-over)
- 5 step (2 step shuffle + 3 step crossover)

*BLOCK

- wing blockers

Turn it in; Outside hand: straight line through the web (i.e., thumb and index finger/ line through the radius bone of the forearm); Inside hand: straight line through pointer finger

- middle blockers

Both hands: straight line through the web Late – lead with the hands

-other concepts

Start in a great position – adjust from there
Extended, locked, and over net at hitter contact
One move over the net – lead with the hands
Straight up and straight over
Block where you want the ball to go
Turn and run whenever possible
Crossover as much as you can
Start with hand shoulder height and width –

Blocking Comments: The national team will use swing blocking but it is not the only technique used; when swing blocking the amount of back swing of the arms (full extension vs. keeping elbows at 90 degrees) is dependent upon time available. Key is not to sweep arms when penetrating the net – hands should be brought up to front of shoulders before extending over the net. Coach McCutcheon does not want "skipping steps" – i.e., the four step footwork that is very common with club age middles who can't get outside in 3 steps – if blocker can't get there in 3 then use 5 steps (a 2-step shuffle followed by a 3-step crossover.

lower hands to move or when hitter is out of your zone

<u>Bunch blocking</u>: outsides start 3-step crossover from the antenna; blocking is a function of space and time; on a good set – be great in your zone; on a bad pass help responsibility increases; blockers are independent but together; mind set is to stuff block; front load the play (i.e., plan ahead)

VI. Floor Defense

Main cues:

Read: same eye sequence as blocking Good ready position; square to the ball Change angle of arms (upward) for hard driven balls 20-10 (20 high' and 10' off)

Additional key points/discussion:

Ready position:

*feet pointed straight forward, knees in front of toes and butt underneath; back more straight than forward; arms in line with knees and out from body with palms up;

feet are flat on the floor but the weight is forward and over the big toe (but the knees are <u>not</u> "knocked kneed"

*square to the ball

(when on the sideline keep square and don't drop the inside foot back angling the body into the court – angle ball with the arms as in passing)

*Wide feet – but not so wide that you can't take a good first step

Reading (the "premier" skill in playing defense"

- *" Have a Plan": Follow the same eye sequence as the block (see section on blocking) + relationship of the hitter and block; also know the history of the attacker
- *Don't go until you know
- *Body moves in the direction of the ball push big toe to big toe

Movement:

- *shuffle or x-over, run
- *stay off the knee as long as possible

Dig:

- *Try to be stopped, balanced, relaxed and neutral
- *as much as possible, adjust body height by bending at the knees and not the waist
- *Change angle (up) for hard driven balls -
- *dig high and off the net "20 10" (20' high, 10' off net)

Emergency techniques: sprawl, roll, pancake

Floor defense comments: Emergency techniques to be used are the sprawl, roll, pancake, and maybe dive (not recommended for younger girls). Coach McCutcheon does not believe that you can actively "absorb" the ball, although arms and shoulders should be relaxed. For hard driven balls the angle should be changed to direct the ball more up than out – "20-10".

Discipline is necessary – "stay disciplined to have the freedom to play the ball"

- " effort is good but effort with execution is what is needed"
- "go for every ball"
- "stay in play until the rally is over"
- "if you don't go we won't know" i.e., won't know if the ball is playable or not if you don't go
- "Start low and stay low" i.e., if you're not the digger don't stand up if the ball is not hit to you
 - stay in a low position to react to the dig