PHOTOGRAPHER NOTES

Manual or Auto	Manual for everything to get fast focusing, etc.
ISO	5000-10000, frequently 6400 or 8000. Better to be brighter than darker
Shutter	1/1000 per sec.
F-stop	F2.8
Electronic or mechanical shutter	Electronic to get best frame rates.
File type	.jpg, no raw
Frame Rate	Around 20 fps. Don't go below max of 15 if possible and don't go much above 20 or otherwise too many similar shots.
1 st Curtain	Disable – otherwise slows down frame rate considerably
File size	~ 7MB – 9MB. Use camera compression setting to get to this target size
Pixels	Image size to capture maximum pixels on CCD (e.g. 4000x6000 pixels)
Compression	Fixed (if available on camera) or quality based to get to ~7MB - 9BM
White Balance	Auto. Auto White Balance is safest given the variances in court color, jersey color, and lighting (near outside walls versus center of hall)
Rotate	Auto. Nearly all photos will be portrait with only a few exceptions.
Color	rgb
Mem Cards	Need 6-8 2MB or more. If not SD or CF or CF Express, then bring your reader just in case
Focus	The goal is to frame the main player in the center. Therefore focus on this point or central region. Because we can't rely on the face of the main player being in the shot, focusing based on faces won't work in general. Some cameras allow you to control size of focus region in central – if so, keep it rather tight.
Speed of Cards	As fast as possible – please no old cards
Tracking	For action where action is moving left to right and to avoid focus change when players quickly go in front of main player. Tracking with emphasis on tight center usually is best.
Anti-flicker	If the camera supports it and the lighting indicates flicker is likely, then set Anti- fliicker on.
Card/Court	Always 1 card per court even if shooting both sides of the same court. Don't use 2 cards for 1 court – just 1 per court.1 or 2 and sometimes 3 per court – keep with card in container – please don't mix them up. Make sure your initials are on each slip – either preprinted or handwritten in case of slips that were switched with another photographer.
Request Slips/Courts/Hour	1, 2 ,or sometimes 3 courts per hour. Keep with card in container – Don't mix them up. Make sure your initials are on each slip – either pre-printed or handwritten in case of slips that were switched with another photographer.
Getting new cards	We plan to deliver them to you every hour and picking up any courts you have shot. We plan to come about 30 minutes before your next hour of matches. Stay at your courts for the hour and shoot as long as play is happening during that hour. Balance your time so you keep the photo counts per court relatively even. We may need you to come back if we are short handed – we will let you know ahead of time. The photographer scheduler will text to the group text if it is necessary to come back to the booth.
Need to format	We upload, but don't format. You need to format prior to reuse. Please don't forget. If you do forget and recognize this, then write on the slip didn't format.
When you get to a court	Shoot CLOSEUPS in portait mode of Flag (1 shot only), Team name on jersey you are shooting as big as you can get (1 shot only). Then shoot portrait of each player on slip, preferably with their face – not necessarily ball since you will be doing this quickly. If shooting both sides, photograph the players on the slips from one side and then the players on the slip on the other side. The the slips

	have TM or ALL for the uniform number which shouldn't be common, shoot the six players on the court for one or more sides. Ready shots work well – Closeups so parents know we are there. If on side line, shoot closeup anyway.
Need to delete bad photos?	Not critical – only if ball goes out of bounds and you have a few seconds to delete out-of-focus shots – don't worry about this too much – keep everything that is not out-of-focus. We sell many shots of players without the ball so just because the ball isn't in the shot, don't delete it.
Right After you get to a court	Follow those players on the slip for the first 5 minutes or so, particularly if they are in the game. Even if they aren't involved in action, still photograph them in ready shots, running, celebrations, etc. We have found that many photographs are purchased where the player isn't doing action or near the ball. They are more like portraits than action. Get full length, waist high, and closeups of all of the players on the slip within the first 5 minutes or so. If they aren't playing, get them on the side line, hopefully cheering or at least eagerly awaiting their turn. Again, get these full length, waist high and closeups. This addresses parents main concern which is they didn't get many photos of their daughter or son that was requested.
Face and Ball	The main goal is to shoot as many in-focus action shots as practical of the main player in isolation with the ball close to their hands and with their face partially or fully visible. The secondary goal is to shoot many non-action shots of the main player, celebrations, and huddles that includes one or more faces with relaxed and or happy expressions.
Players to photograph	Follow the action (mostly ball) with emphasis on the #'s on slips. You want at least 10 good shots for each requested player, hopefully more.
	Follow the action (mostly ball) with emphasis on the #'s on slips. Try to balance your time so that you get at least 25-50% of the shots of players that were requested. They don't all have to be action shots. If requested player is not playing, every 20 frames of following action, still shoot them on the side line. On the last day when sometimes the match requested is their last one of the tournament, focus even more on the requested players.
Request Slips	1 or 2 per court – keep with card in container – don't mix them up.
Requested Player Doesn't Play at all or much	If a requested player doesn't play at all or hardly at all, write DNP (Did not play) or MORE (need more) on the front of the slip.
Shots/Team	Target ~300-400 per 20min (600-800/hr) Take 3-5 shots per touch so as to more likely get the ball. Basic volley sequence: 3-5 serve, 3-5 Dig, 3-5 Set, 3-5 Hit Repeat as long as the volley continues. If same server, change angle or crop (full length, waist up, closeup) a few times so as to get a variety of serves. Once you have at most 4 good shots of a serve, that's enough. Focus more then on other players if they keep serving. Get good ready shots full length and closeup of your player and team.
Location on Court	Stand, don't kneel or sit. The starting position is behind the up judge (the one standing on platform) one step or so toward the requesting team. Stay off the tiles. If you are getting mostly the back of the setter and particularly when setter is a requested player, move to opposite side if you can. There is generally much less room on the down judge side, but that my be the only way to shoot the setter from the front. To get front line players, it can be useful to go to the corners and shoot that way. When shooting both sides, you can shoot both sides intermixed and therefore get the serve of one team and the dig, etc. of the other team in sequence without moving if you are behind the up-judge platform. For getting back row player close ups, you may need to move away from up judge to get closer to the back row.
Portrait Orientation with a few exceptions	Portrait in all cases except the following. For celebrations, it's usually better to get more players, centered, in landscape mode. For save shots (if you can anticipate) it's usually better in landscape mode. For team huddle shots, it's usually better in landscape. Everything else should be portrait.
Isolating Players for Action, Groups for celebrations, huddle, information team	For action shots, isolating players is the goal. In particular, for shots that end up on deluxe posters where we cut out the player from the background. When players are font (even portion of players), it makes that shot not very usable for a

shots	poster. For action shots, customers want the focus totally on their son or daughter For celebration, huddle, and informal team shots groups of players is the goal.
Cropping	The default should be full length with a little space above the hand/ball/head and a little space below the feet. For 8x10 prints and images for posters, it helps to have a little space above and below. However, it is important not to only do full length, particularly when you have a lot of full length already of the requested players. Waist high shots are particularly appropriate for blockers when you are shooting through the net or on their same side. Waist high shots are also very appropriate for hitters when you want to get a closer view of the player's face. Waist high are also appropriate for servers and setters once you have some good full length shots of them. Close ups are especially good for ready shots with a good view of their face.
Back shots	Back shots are OK and sometimes necessary because of the angle, but not the emphasis – for setters, get front, side, and back shots – much less back than the others.
Full frame or cropped mode	Mostly full frame. Cropped mode only occasionally if can't fill frame with player and ball. Possibly useful for closeups.
Save Shots	Be ready for "SAVE" shots – they are amazing
Shots with Ball	Include ball as much as possible except for ready and celebration shots
Serve Shots	Ready – player more relaxed – extreme closeup
Serve Shots	Full length with emphasis on when the player touches the ball. Once you get a player's serve sequence, if they continue to serve, have fun with angles and cropping. For high jump serves (particular upper ages), you may need to get a shot without the ball since the best position is when the ball is still high above the player.
Dig Shots	For serve returns, you have a bit more time to anticipate which player is likely to receive the ball. Get digs of these returns. If the same player returns the ball over and over, have fun with angles and cropping for variety. Try to isolate the player during the dig if possible.
Kill Shots	Full length and waist high, mostly from team's side. If blockers are in the way, try to change angle or zoom in more to isolate the hitter. Do some (15% or so) through the net to get more of the player's face.
Block Shots	Full length and waist high mostly from team's side. Do some (*15% or so) through the net to get more of player's face.
Celebration Shots	Landscape with all included and emphasis on expressions.
Huddle Shots	Landscape with all included and emphasis on expressions. If coach's face is visible, all the better.
Informal Teams	Sometimes teams will pose for the photographer at the court. Landscape with all included and multiple shots to get a variety of expressions
Ref Shots	Sometimes up or down refs will request photos. The uniform # on the slip will say RUP (up Ref on stand) or RDO (down ref by court). Get a variety of them using their hand signals.
Coach Shots	Sometimes coaches request photos. Mostly portrait unless they are in a huddle with their team. The uniform# on slip will say COA.