# Flying Disc 

 Parasport
## Wheelchair

## Ultimate

BOOK 1
author
José Amoroso

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## Prefaces - Flying Disc Parasports



Robert "Nob" Rauch


Volker Bernardi

We at WFDF are honored to introduce to the eBook "Flying Disc Parasport Wheelchair Ultimate - BOOK 1 " written by José Amoroso, which is being introduced as an important resource to promote the adaptive disciplines in our sport to our global audience of more than 100 National Federations.

Initial discussions on the topic of the introduction of Wheelchair Ultimate as a Flying Disc sport under the WFDF umbrella emerged during the 2013 WFDF Congress and it was broadly agreed that WFDF should support the development of Wheelchair Ultimate competitions globally. The WFDF Board of Directors approved moving ahead, adding the disabled sport section of the Flying Disc sports Ultimate (Wheelchair) and Disc Golf to the event portfolio. WFDF had obtained positive reactions from major WFDF member countries such as Australia, Belgium, Canada, Chinese Taipei, France, Germany, Great Britain, Hong Kong China, Hungary, Ireland, Japan, Portugal, South Africa, Switzerland, and USA, when checking on Parasports activities and interest to develop national adaptive programs.

In the following period in 2014/15 after the recognition granted by the IPC in October 2014, WFDF collected further contacts from Wheelchair Ultimate groups and worked with them on gaining practical expertise on how Wheelchair Ultimate should be structured as a sport. The Action Plan based on this valuable input created for two-year periods starting in 2014 has resulted in improvements on the outreach program, the discussion with the felIow IFs like IWBF Wheelchair Basketball, IWRF Wheelchair Rugby, and IWAS Wheelchair Fencing to learn on the operations of crucial competition rules, classification and accessibility check of venues. The participation of WFDF
in the IPC Observer Programme at the Rio 2016 and Pyeongchang 2018 Paralympic Games were milestones in the understanding of requirements of adapted sports on highest competition level.

The present ebook is the next step in our process and establishes the first set of competition rules including the guidelines on venue layouts for Wheelchair Ultimate. And will greatly contribute to staging continental competitions in Wheelchair Ultimate in Europe, America, Asia/Oceania within the next working period. This will eventually lead to World Championships in the next 2-3 years.
We thank our partners at the International Paralympic Committee (IPC), International Wheelchair and Amputee Sport Federation (IWAS), and our scientific partners for their contribution. Our great thanks and appreciation go to the editor of the "Flying Disc Parasport Wheelchair Ultimate - BOOK 1" José Amoroso from Portugal who worked tirelessly on the project.


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## Recognised by




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ORCID


One more step. The path around disc sports looks challenging and with a lot of work to be done. As a Physical Education professional, I feel honored by the possibility of working in this area. The world of adapted sports deserves more engagement from all of us. I AM grateful for being part of this NEW project and FOR HAVING THE TRUST OF THE WFDF IN its elaboration.
The International Paralympic Committee highlights promote four values present in sport: courage, determination, inspiration, and equality. Based on these premises and with more than twenty years involved with disc sports, the time has come to make a humble contribution to its development.
The elaboration of this eBook was a huge challenge, with many doubts, lots of questions, and an investigation was made to find solutions.
It was necessary to carry out some studies to understand which path to draw and how to carry it out. It will certainly be a strong ally in the promotion of adapted sports given its characteristics. The ultimate in a wheelchair shows us enormous potential for sports practice.
IN THE NEAR FUTURE IN COLLABORATION WITH OTHER COLLEAGUES I intend to continue MY research AND WORK TOWARDS its development and growth, as adapted sport deserves.
I hope this e-book LEADS TO MORE interest IN our COMMUNITY. It is important now to have the courage to experiment, the inspiration to throw a frisbee better than yesterday, the determination to never give up, and equality in life always present! Values that ARE AT THE VERY CORE OF ULTIMATE.

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## Chapter 1 Introduction to Wheelchair Ultimate

Wheelchair Ultimate is a mixed team sport, male and female quadriplegics. A unique sport created by athletes with a disability, it combines elements of basketball, rugby, and handball. Players compete in teams of four throwing a disc across the opposing team's goal line. Contact between wheelchairs is not allowed. Wheelchair ultimate players compete in manual wheelchairs. Players must meet minimum disability criteria and be classifiable under the sport classification rules. Wheelchair Ultimate is a sport in development.

### 1.1. Who Can Play

To be eligible to play Wheelchair Ultimate, individuals must have a disability that affects the arms and legs. Most players have spinal cord injuries with full or partial paralysis of the legs and partial paralysis of the arms. Other disability groups who play include cerebral palsy, muscular dystrophy, amputations, polio, and other neurological conditions. Men and women compete on the same teams and in the same competitions.
Players are assigned a sport classification based on their level of disability; teams must field players with a mix of classification values, allowing players with different functional abilities to compete together.

### 1.2. What Equipment is Needed

Athletes compete in manual wheelchairs. The rules include detailed specifications for wheelchairs to ensure safety and fairness. To begin playing, any manual wheelchair may be used, although the game is easier when played in a lightweight sports wheelchair such as a wheelchair basketball chair. The game is played with a white "Disc". Four cones, pylons, or markers are used to mark the goal lines. A game clock is also required; any clock used for basketball, handball, or other similar sports will be enough.

### 1.3. What Facilities are Required Wheelchair Ultimate

Is played indoors on a regulation-sized Basketball court. Hardwood is the preferred surface, although other surfaces are acceptable. The playing surface must be accessible to people in wheelchairs. Any facility used for wheelchair basketball can also be used for Wheelchair Ultimate.

## Chapter 2 Rules of the Wheelchair Ultimate Game

## The 10 main rules to start playing:

1. Court - rectangular with "goal line or end zone" at each end. According to the regulation, the field should measure 28 m by 15 m , with a 2 -metre-long end zone at each end.
2. Starting the game - each point begins with both teams lining up on the front of their respective end zone line. The defence team throws the disc to the offence team. The regulation allows for 5 players per team on the field.
3. Scoring - each time the offence team completes a pass within the end zone of the defence team, the offence team scores a point. The team scoring the point restarts the game.
4. Movements of the disc - the disc can be advanced in any direction by completing a pass to a teammate. Players cannot run while holding the disc. The player holding the disc must pass it within 10 seconds. The player defending the person holding the disc counts the seconds out loud.
5. Change of possession - when the pass is not completed (the disc is out of bounds, falls, is blocked or intercepted), the opposing team immediately gains possession of the disc.
6. Substitutions - substitutions are allowed once a point as been scored or when time has been discounted due to non-compliance with the rules of the game.
7. Non-contact - No contact whatsoever between players is allowed. Blocking and screening are not allowed. Contact between players results in a foul.
8. Foul - When a player initiates contact with another player, it is foul. If such foul means the disc was thrown out of the hand of a player, the game continues with the player in the position prior to the foul. If the player committing the foul disagrees, he is expected to leave the field.
9. Self-refereed - Players are responsible for calling their own infractions. Players are expected to resolve their own disputes.
10. Spirit of the Game - sportsmanship and fair play. Competitiveness is encouraged but respect among players, following rules, and playing for the simple pleasure of it are always upheld.

## Chapter 3 General and Specific Features of the Sport (Official Rules)

Number of Players
The number of players $5 \times 5$
Game Area
Lawn


### 3.1. WU - Wheelchair Ultimate (official rules)

## Introduction to wheelchair ultimate

Following a Chapter 7 and based on information from different realities, we reached the conclusion that wheelchair Ultimate can easily be introduced in different realities, with no major constraints in terms of logistics. We looked at several other similar sports, such as wheelchair handball, wheelchair basketball and wheelchair rugby, when preparing this technical regulation as these sports are equally evasive and so gave us a better understanding of what wheelchair Ultimate is and how to adapt it to this environment. Three studies were also carried out to better understand the differences between throwing in the sitting and standing positions.

### 3.2. Rules WheelChair Ultimate "Hands Signals"




## First rule - THE SPIRIT OF THE GAME

## Article. 1. Spirit of the game

1.1. Wheelchair Ultimate is a non-contact, self-officiated sport. All players are responsible for administering and adhering to the rules. Wheelchair Ultimate relies upon a Spirit of the Game that places the responsibility for fair play on every player.
1.2. It is trusted that no player will intentionally break the rules; thus there are no harsh penalties for inadvertent breaches, but rather a method for resuming play in a manner which simulates what would most likely have occurred had there been no breach.
1.2.1. If there is a deliberate or egregious breach of the rules or Spirit of the Game, the captains should discuss this and determine an appropriate outcome, even if that outcome is not in accordance with a specific rule.
1.3. Players should be mindful of the fact that they are acting as referees in any arbitration between teams.

Players must:
1.3.1. know the rules;
1.3.2. be fair-minded and objective;
1.3.3. be truthful;
1.3.4. explain their viewpoint clearly and briefly;
1.3.5. allow opponents a reasonable chance to speak;
1.3.6. consider their opponent's viewpoint;
1.3.7. use respectful words and body language with consideration of potential cultural differences;
1.3.8. resolve disputes as quickly as possible;
1.3.9. make calls in a consistent manner throughout the game; and
1.3.10. only make a call where a breach is significant enough to make a difference to the outcome of the action.
1.4. Highly competitive play is encouraged, but should never sacrifice the mutual respect between players, adherence to the agreed-upon rules of the game, player safety or the basic joy of play.
1.5. The following actions are examples of good Spirit:
1.5.1. retracting a call when you no longer believe the call was correct;
1.5.2. checking in with an opponent on the sideline after a contentious interaction;
1.5.3. complimenting an opponent for good play or Spirit;
1.5.4. introducing yourself to your opponent; and
1.5.5. reacting calmly towards disagreement or provocation.
1.6. The following actions are clear violations of the Spirit of the Game and must be avoided:
1.6.1. dangerous play and aggressive behaviour;
1.6.2. intentional fouling or other intentional rule breaches;
1.6.3. taunting or intimidating opposing players;
1.6.4. celebrating disrespectfully after scoring;
1.6.5. making calls in retaliation to an opponent's call;
1.6.6. calling for a pass from an opposition player; and
1.6.7. other win-at-all-costs behaviour.
1.7. Teams are guardians of the Spirit of the Game, and must:
1.7.1. take responsibility for teaching their players the rules and good Spirit;
1.7.2. discipline team-mates who display poor Spirit;
1.7.3. provide constructive feedback to other teams about what they are doing well and/or how to improve their adherence to the Spirit of the Game; and
1.7.4. call a Spirit Stoppage to address Spirit issues, as appropriate.
1.8. In the case where a novice player is involved in a breach and does not know the rules, experienced players should assist to explain the breach.
1.9. An experienced player, who offers advice on rules and guides on-field arbitration, may supervise games involving beginners or younger players.
1.10. Calls should be discussed by the players directly involved in the play, and by players who had the best perspective on the play.
1.10.1. If a player who was not directly involved believes that a team-mate has made an incorrect call, or caused a foul or violation, they should inform their team-mate.
1.10.2. Non-players, apart from the captains, should refrain from getting involved. However, players may seek other peoples' perspectives to clarify the rules, and to assist players to make the appropriate call.
1.11. Players and captains are solely responsible for making and resolving all calls.
1.12. If after discussion players cannot agree, or it is not clear and obvious:
1.12.1. what occurred in a play, or
1.12.2. what would most likely have occurred in a play, the disc must be returned to the last non-disputed thrower.

## Second rule - POINT, GOAL AND GAME

## Article. 2. Point, goal and game

2.1.1. A game consists of a number of points. Each point ends with the scoring of a goal.
2.1.2. A game is finished and won by the first team to score tenth (10) goals.
2.1.3. A game is separated into two (2) periods of play, called halves. Half time occurs when a team first scores fourth (4) goals.
2.1.4. The first point of each half starts when the half starts.
2.5. After a goal is scored, and the game has not been won or half time has not been reached:
2.1.5.1. the next point starts immediately;
2.1.5.2. the teams switch the end zone that they are defending; and
2.1.5.3. the team that scored becomes defense and pulls next.

## Third rule - PLAYING COURT AND EQUIPMENT

## Article. 3. Playing Court

### 3.1. Playing Court

3.1.1. The playing court is a rectangular area with dimensions and zones as shown on Figure 1 and should be essentially flat, free of obstructions and afford reasonable player safety.
3.1.2. The perimeter lines surround the playing field and consist of two (2) sidelines along the length and two (2) end lines along the width.
3.1.3. The perimeter lines are not part of the playing field.
3.1.4. The goal lines are the lines that separate the central zone from the end zones and are part of the central zone.
3.1.5. The brick marks are the intersection of two (2) crossed one (1) meter lines in the central zone, located a distance equal to the length of the end zone away from each goal line, midway between the sidelines.
3.1.6. Eight brightly-colored, flexible objects (such as plastic cones) mark the corners of the central zone and the end zones.
3.1.7. The immediate surroundings of the playing field shall be kept clear of movable objects. If play is obstructed by non-players or objects within three (3)


## Article. 4. Equipment

### 4.1. Equipment

4.1.1. Any flying disc acceptable to both captains may be used.
4.1.2. WFDF may maintain a list of approved discs recommended for use.
4.1.3. Each player must wear a uniform that distinguishes their team.
4.1.4. No player may wear items of clothing or equipment that reasonably could harm the wearer or other players or impede an opponent's ability to play.
4.1.5. Other equipment shall be required:

Game clock; Scoreboard; Stopwatch or suitable (visible) device (not the game clock) for timing time-outs; scorer/timer; Scoresheet; Playing floor; Playing court; Adequate lighting.

## Article. 5. Wheelchairs

### 5.1. Wheelchairs

5.1.1. Particular attention must be paid to the wheelchair, as it is considered to be part of the player. Contravention of the following rules will result in the wheelchair being banned from the game.
5.1.2. A protective horizontal bar at the front/side of the wheelchair must be 11 cm from the floor at its most forward point and throughout its whole length. Such a bar may be straight, angled or curved between the two front castors. Where the angle is made up of two or more straight bars joined, the external angle of the joined bars should not be more than 200 o degrees. Wheelchairs with the footplate positioned behind a single front castor must have a protective horizontal bar extending to the rear wheels in advance of the castor.

The measurement is taken when the front castor(s) is in the forward driving position.
Where a protective horizontal bar is not present the footrest must be 11 cm from the floor at its most forward point and throughout its whole length.
Where a protective horizontal bar is present the footrest behind the bar can be any height as long as it does not touch the floor.
5.1.3. The wheelchair shall have either 3 or 4 wheels - i.e. 2 large wheels at the back and 1 or 2 small wheels at the front of the chair. The large wheels, including the tires, may have a maximum diameter of 69 cm .

Wheel hubs must be of round outer construction with no sharp points, edges or protrusions.

In the case of the 3-wheel wheelchair, the small wheel (or castor) must be located at the center and inside of the horizontal bar at the front of the wheelchair. A second small wheel
(or castor) may be added to the single small wheel at the front of the wheelchair. Lighting that reflects or flashes, is not permitted on the wheels, the chair or the castors.
5.1.4. There must be 1 handrim on each wheel.
5.1.5. No steering devices, brakes or gears are allowed on the wheelchair.
5.1.6. Any tire or castor(s) that marks the floor is not permitted. Exceptions may be made where it can be demonstrated that the marks can be easily removed.

## Fourth Rule - TEAMS

## Article. 6. Teams

6.1. Definition
6.1.1. A team member is eligible to play when he has been authorized to play for a team according to the regulations, including regulations governing age limits, of the organizing body of the competition.
6.1.2. During playing time, a team member is:

A player when he is on the playing court and is entitled to play.

- A substitute when he is not on the playing court, but he is entitled to play.
6.1.3. During an interval of play, all team members entitled to play are considered as players.
6.2. Rule
6.2.1. Each team shall consist of:
- No more than 12 team members entitled to play, including a captain a spirit captain, a coach and, if a team wishes, an assistant coach.
- A maximum of 6 accompanying delegation members who may sit on the team bench and have special responsibilities, manager, doctor, physiotherapist, statistician, interpreter, etc.
6.2.2. During playing time 6 team members from each team shall be on the playing court and may be substituted.
6.2.3. Each team will put a maximum of five (5) players.
6.2.4. Each team must designate a captain and a spirit captain to represent the team.
6.2.5. A team may make unlimited substitutions after a goal is scored and before their team signals readiness for the pull.


## Fifth rule - Starting a Game, Pull

## Article. 7. Starting a game

7.1. Representatives of the two teams fairly determine which team first chooses either:
7.1.1. whether to receive or throw the initial pull; or
7.1.2. which end zone they will initially defend.
7.2. The other team is given the remaining choice.
7.3. At the start of the second half, these initial selections are switched.

## Article. 8. The pull

8.1. At the start of the game, after half-time or after a score, play commences with a throw by the defense, called a "pull".
8.1.1. Teams must prepare for the pull without unreasonable delay.
8.2. The pull may be made only after both teams have signaled their readiness by having the puller and a player on offence raise a hand above their head.
8.3. After signaling readiness all offensive players must stand with Wheelchair on their defending goal line without changing location relative to one another until the pull is released.
8.4. After signaling readiness all defensive players must keep their Wheelchair entirely behind the vertical plane of the goal line until the pull is released.
8.5. If a team breaches 8.3 or 8.4 the opposing team may call a violation ("offside"). This must be called before the offence touches the disc ( 8.8 still applies).
8.5.1. If the defense chooses to call offside, the thrower must establish a pivot point as per $8.9,8.10,8.11$, or 8.12 and then play restarts as soon as possible as if a time-out had been called at that location.
8.5.2. If the offence chooses to call offside, they must let the disc hit the ground untouched and then resume play as if a brick has been called (no check is required).
8.6. As soon as the disc is released, all players may move in any direction.
8.7. No player on the defensive team may touch the disc after a pull until a member of the offensive team contacts the disc or the disc hits the ground.
8.8. If an offensive player, in-bounds or out-of-bounds, touches the disc before it hits the ground, and the offensive team fails to subsequently establish possession, that is a turnover (a "dropped pull").
8.9. If an offensive player catches the pull and subsequently establishes possession, they must establish a pivot point at the location on the playing field nearest to where possession is established, even if that pivot point is in their defending end zone.
8.10. If the disc initially contacts the playing field and never becomes out-of-bounds, the thrower must establish a pivot point where the disc stops, even if that pivot point is in their defending end zone.
8.11. If the disc initially contacts the playing field and then becomes out-of-bounds without contacting an offensive player, the thrower must establish a pivot point where the disc first crossed the perimeter line, or the nearest location in the central zone if that pivot point would be in their defending end zone.
8.11.1. If the disc does contact an offensive player before it becomes out-of-bounds the thrower must establish a pivot point where the disc first crossed the perimeter line, even if that pivot point is in their defending end zone.
7.12. If the disc contacts the out-of-bounds area without first touching the playing field or an offensive player, the thrower may establish a pivot point either at the brick mark closest to their defending end zone, or at the location on the central zone closest to where the disc went out-of-bounds (Section 11.8). The binding brick option must be signaled before the disc is picked up, by any offensive player fully extending one arm overhead and calling "brick".

## Sixth rule - Stall Count, the CHECK

## Article. 9. Stall Count

9.1. The marker administers a stall count on the thrower by announcing "Stalling" and then counting from one (1) to ten (10). The interval between the start of each number in the stall count must be at least one (1) second.
9.2. The stall count must be clearly communicated to the thrower.
9.3. The marker may only start and continue a stall count when:
9.3.1. Play is live, or until a pivot is established after a turnover;
9.3.2. They are within three (3) meters of the thrower's pivot point, or the pivot location if the thrower is not at that location; and
9.3.3. All defenders are legally positioned (Section 18.1).
9.4. If the marker moves beyond the appropriate three (3) meter radius, or a different player becomes the marker, the stall count must be restarted at "Stalling one (1)".
9.5. After a stoppage in play the stall count is resumed as follows:
9.5.1. After an accepted breach by the defense the stall count restarts at "Stalling one (1)".
9.5.2. After an accepted breach by the offence the stall count restarts at maximum nine (9).
9.5.3. After a contested stall-out the stall count restarts at "Stalling eight (8)".
9.5.4. After all other calls, including "pick", the stall count restarts at maximum six (6). However:
9.5.4.1. If there is a call involving the thrower, and a separate receiving breach, and the disc is returned to the thrower, the stall count is resumed based on the outcome of the call involving the thrower.
9.5.4.2. If there is a violation called related to The Check (Section 10.), the stall count resumes at the same count that was determined prior to that violation.
9.6. To restart a stall count "at maximum $n$ ", where " $n$ " is determined by 9.5.2, 9.5.4, or 20.3.6, means the following:
9.6.1. If " $x$ " is the last agreed number fully uttered prior to the call, then the stall count resumes at "Stalling (x plus one)" or "Stalling n", whichever of those two numbers is lower.

## Article. 10. The check

10.1. Whenever play stops during a point for a foul, violation, contested turnover, specified turnover, contested goal, stoppage, discussion, or at the completion of a time-out, play must restart as quickly as possible with a check. The check may only be delayed for the discussion of a call.
10.2. Player positioning after a call (except in the case of a time-out, and unless specified otherwise):
10.2.1. If play stops before a pass is thrown, all players must return to the location they held when the call was made.
10.2.2. If play stops after a pass is thrown, then:
10.2.2.1. if the disc is returned to the thrower, all players must return to the location they held when the thrower released the disc, or the time of the call, whichever is earlier.
10.2.2.2. if the result of the play stands all players must return to the location they held when either a player established possession, or the disc hit the ground.
10.2.2.3. if a player other than the thrower gains possession as a result of an accepted breach, all players must return to the location they held when the breach occurred.
10.2.3. All players must remain stationary in that location until the disc is checked in.
10.3. Any player may briefly extend a stoppage of play to fix faulty equipment ("equipment"), but active play may not be stopped for this purpose.
10.4. Prior to the check the person checking the disc in, and the nearest opposition player, must verify that their own team-mates are ready, and positioned as per 10.2.
10.5. If there is an unnecessary delay in checking the disc in, the opposition may give a warning ("Delay of Game"). If the delay continues, the team that gave the warning may check the
disc in by calling "Disc In", without verification from the opposition, but only if the team checking the disc in are all stationary and positioned as per 10.2.
10.6. To restart play with a check:
10.6.1. when the thrower has the disc:
10.6.1.1. if there is a defender within reach, the defender must touch the disc.
10.6.1.2. if there is not a defender within reach, the thrower must touch the disc to the ground and may call "Disc $\ln$ ".
10.6.2. when the disc is on the ground, the defender nearest to the disc must call "Disc In".
10.7. A player may call a violation regarding the check if an opponent:
10.7.1. attempts a pass without an appropriate check as per 10.6; or
10.7.2. restarts play without verification from their nearest opposition player; or
10.7.3. is moving immediately prior to the check; or
10.7.4. was not in the appropriate position.
10.7.5. After this violation call any pass does not count regardless of whether it is complete or incomplete, and possession reverts back to the thrower (unless 16.3 applies).

## Seventh rule - Turnovers and Scoring

## Article. 11. Turnovers

11.1. A turnover that transfers possession of the disc from one team to the other occurs when:
11.1.1. the disc contacts the ground while it is not in the possession of an offensive player (a "down");
11.1.1.1. however it is not "down" if a receiver catches a pass before the disc contacts the ground, and maintains the catch while the disc is in contact with the ground.
11.1.2. a defensive player establishes possession of a pass (an "interception");
11.1.3. the disc becomes out-of-bounds (an "out-of-bounds" or "out"); or
11.1.4. during the pull, the offence touches the disc before it hits the ground, and subsequently fails to establish possession of the disc (a "dropped pull").
11.2. A turnover that transfers possession of the disc from one team to the other, and results in a stoppage of play, occurs when:
11.2.1. there is an accepted offensive receiving foul;
11.2.2. the thrower has not released the disc before the marker first starts to say the word "ten" in the stall count (a "stall-out");
11.2.3. the disc is intentionally transferred from one offensive player to another without ever being completely untouched by both players (a "handover");
11.2.4. the thrower intentionally deflects a pass to themselves off another player (a "deflection");
11.2.5. in attempting a pass, the thrower catches the disc after release prior to the disc being contacted by another player (a "self-catch");
11.2.6. an offensive player intentionally assists a team-mate's movement to catch a pass; or
11.2.7. an offensive player uses an item of equipment or object to assist in catching a pass.
11.3. If a player determines a turnover has occurred, they must make the appropriate call immediately. If the opposition disagrees, they may call "contest" and play must stop. If, after discussion, players cannot agree or it is unclear what occurred in the play, the disc must be returned to the last non-disputed thrower.
11.4. After a "stall-out" call:
11.4.1. If the thrower still has possession of the disc, but they believe a fast count occurred in such a manner that they did not have a reasonable opportunity to call fast count before a stall-out, the play is treated as either an accepted defensive breach or a contested stall-out.
11.4.2. If the thrower made a completed pass, the thrower could contest if they believe it was not a "stall-out", or there was a fast count immediately prior to the "stall-out".
11.4.3. If the thrower contests a stall-out but also attempts a pass, and the pass is incomplete, then the turnover stands and play restarts with a check.
11.5. Any offensive player may take possession of the disc after a turnover, except:
11.5.1. after an "interception" turnover, in which case the player who made the interception must maintain possession; and
11.5.2. after an offensive receiving foul, in which case the fouled player must take possession.
11.6. If the player in possession after a turnover, or after a pull that has already hit the ground, intentionally drops the disc, places the disc on the ground, or transfers possession of the disc, they must re-establish possession and restart play with a check.
11.7. After a turnover, the turnover location is where:
11.7.1. the disc has come to a stop or is picked up by an offensive player; or
11.7.2. the intercepting player stops; or
11.7.3. the thrower was located at the time of the call, in the case of 11.2.2, 11.2.3, 11.2.4, 11.2.5; or
11.7.4. the offensive player was located, in the case of 13.2 .6 and 13.2.7; or
11.7.5. the accepted offensive receiving foul occurred.
11.8. If the turnover location is out-of-bounds, or the disc touched an out-of-bounds area after the turnover occurred, the thrower must establish a pivot point at the location on the central zone nearest to where the disc went out-of-bounds.
11.8.1. If 11.8 does not apply, a pivot point must be established according to 11.9, 11.10, or 11.11.
11.9. If the turnover location is in the central zone, the thrower must establish a pivot point at that location.
11.10. If the turnover location is in the offence's attacking end zone, the thrower must establish a pivot point at the nearest location on the goal line.
11.11. If the turnover location is in the offence's defending end zone, the thrower may choose where to establish a pivot point:
11.11.1. at the turnover location, by staying at the turnover location or faking a pass; or
11.11.2 at the nearest location on the goal line to the turnover location, by moving from the turnover location.
11.11.2.1. The intended thrower, before picking up the disc, may signal the goal line option by fully extending one arm above their head.
11.11.3. Immediate movement, staying at the turnover location, faking a pass, or signaling the goal line option, determines where to establish a pivot point and cannot be reversed.
11.12. If, after an accepted turnover, play has continued unknowingly, play stops and the disc is returned to the turnover location, players resume their positions at the time the turnover occurred and play restarts with a check.

## Article. 12. Scoring

12.1. A goal is scored if an in-bounds player catches a legal pass and:
12.1.1. all their ground contacts are entirely within their attacking end zone, or for an airborne player, all of their first simultaneous points of ground contact after catching the disc are entirely within their attacking end zone, and
12.1.2. they subsequently establish possession of the disc and maintain the catch throughout all ground contact related to the catch.
12.2. If a player believes a goal has been scored, they may call "goal" and play stops. After a
contested or retracted goal call play must restart with a check and the call is deemed to have been made when the player established possession.
12.3. If a player in possession of the disc ends up with their selected pivot point behind the attacking goal line without scoring a goal according to 12.1, the player must establish a pivot point at the nearest location on the goal line.
12.4. The time at which a goal is deemed to have been scored is when the player established possession.

## Eighth rule - Fouls and Violations

## Article. 13. Fouls

### 13.1. Dangerous Play:

13.1.1. Actions demonstrating reckless disregard for the safety of fellow players, or posing significant risk of injury to fellow players, or other dangerously aggressive behaviours, are considered dangerous play and must be treated as a foul, regardless of whether or when contact occurs.
This rule is not superseded by any other foul rule. If the dangerous play call is accepted,
13.2. Receiving Fouls:
13.2.1. A Receiving Foul occurs when a player initiates non-minor contact with an opponent before, while, or directly after, either player makes a play on the disc.
13.2.1.1. Contact with an opponent's arms or hands, that occurs after the disc has been caught, or after the opponent can no longer make a play on the disc, is not a sufficient basis for a foul, but should be avoided (excluding contact related to Section 13.1 and 13.3).
13.2.2. After an accepted receiving foul, the fouled player gains possession at the location of the breach, even if that location is in an end zone, and play restarts with a check. If, after the check, the stall count cannot be started until a pivot point is established at the nearest location on the goal line. If the foul is contested, the disc is returned to the thrower.

### 13.3. Strip Fouls:

13.3.1. A Strip Foul occurs when an opponent fouls a player and that causes the player to drop a disc they caught or to lose possession of the disc.
13.3.2. If the reception would have otherwise been a goal, and the foul is accepted, a goal is awarded.
13.4. Blocking Fouls:
13.4.1. A Blocking Foul occurs when a player takes a position that an opponent moving in a legal manner will be unable to avoid, taking into account the opponents expected position
based on their established speed and direction, and non-minor contact results. This is to be treated as either a receiving foul or an indirect foul, whichever is applicable.

### 13.5. Force-out Fouls:

13.5.1. A Force-out Foul occurs when a receiver is in the process of establishing possession of the disc, and is fouled by a defensive player before establishing possession, and the contact caused the receiver:
13.5.1.1. to become out-of-bounds instead of in-bounds; or
13.5.1.2. to catch the disc in the central zone instead of their attacking end zone.
13.5.2. If the receiver would have caught the disc in their attacking end zone, it is a goal;
13.5.3. If the force-out foul is contested, the disc is returned to the thrower if the receiver became out-of-bounds, otherwise the disc stays with the receiver.
13.6. Defensive Throwing (Marking) Fouls:
13.6.1. A Defensive Throwing Foul occurs when:
13.6.1.1. A defensive player is illegally positioned, and there is non-minor contact between the illegally positioned defensive player and the thrower; or
13.6.1.2. A defensive player initiates non-minor contact with the thrower, or there is non-minor contact resulting from the thrower and the defender both vying for the same unoccupied position, prior to the release.
13.6.1.3. If a Defensive Throwing Foul occurs prior to the thrower releasing the disc and not during the throwing motion, the thrower may choose to call a contact infraction, by calling "Contact". After a contact infraction that is not contested, play does not stop and the marker must resume the stall count at one (1).
13.7. Offensive Throwing (Thrower) Fouls:
13.7.1. An Offensive Throwing Foul occurs when the thrower is solely responsible for initiating nonminor contact with a defensive player who is in a legal position.
13.7.2. Contact occurring during the thrower's follow through is not a sufficient basis for a foul but should be avoided.
13.8. Indirect Fouls:
13.8.1. An Indirect Foul occurs when there is non-minor contact between a receiver and a defensive player that does not directly affect an attempt to make a play on the disc.
13.8.2. If the foul is accepted the fouled player may make up any positional disadvantage caused by the foul.
13.9. Offsetting Fouls:
13.9.1. If accepted fouls are called by offensive and defensive players on the same play,
these are
offsetting fouls, and the disc must be returned to the last non-disputed thrower.
13.9.2. If there is non-minor contact that is caused by two or more opposing players moving towards a single point simultaneously, this must be treated as offsetting fouls.
13.9.2.1. However if this occurs after the disc has been caught, or after the relevant player/s involved can no longer make a play on the disc, this must be treated as an Indirect Foul (excluding contact related to Section 13.1).

## Article. 14. Violations

## 14.1. "Pick" Violations:

14.1.1. If a defensive player is guarding one offensive player and they are prevented from moving towards/with that player by another player, that defensive player may call "Pick". However, it is not a pick if both the player being guarded, and the obstructing player are making a play on the disc.
14.1.1.1. Prior to making the "Pick" call, the defender may delay the call up to two (2) seconds to determine if the obstruction will affect the play.
14.1.2. If play has stopped, the obstructed player may move to the agreed position they would have otherwise occupied if the obstruction had not occurred, unless specified otherwise.
14.1.3. All players should take reasonable efforts to avoid the occurrence of picks.
14.1.3.1. During any stoppage opposing players may agree to slightly adjust their locations to avoid potential picks.

## Nineht rule - Time-Outs

## Article. 15. Time-outs

15.1. The player calling a time-out must form a "T" with their hands, or with one hand and the disc, and should call "time-out" to opposition players.
15.2. After the start of a point and before both teams have signaled readiness, a player from either team may call a time-out. The time-out extends the time between the start of the point and subsequent pull by seventy-five (75) seconds.
15.3. After the pull only a thrower with possession of the disc may call a time-out. The timeout starts when the " $T$ " is formed and lasts seventy-five (75) seconds. After such a time-out:
15.3.1. Substitutions are not allowed, except for injury.
15.3.2. Play is restarted at the pivot location.
15.3.3. The thrower must remain the same.
15.3.4. All other offensive players must establish a stationary position, at any location.
15.3.5. Once the offensive players have selected positions, defensive players must then establish a stationary position, at any location.
15.3.6. The stall count restarts at maximum nine (9). However, if the marker has been switched, the stall count restarts at "Stalling one (1)".
15.4. If the thrower attempts to call a time-out while play is live and when their team has no remaining timeouts, play is stopped. The marker must add two (2) seconds to the stall count they would have restarted play on before restarting play with a check. If this results in a stall count of ten (10) or above, this is a "stall-out" turnover.

## CONCLUSION

When playing Wheelchair Ultimate the rules must be complied with in a peaceful manner and there must be mutual respect among players. Camaraderie, a smile, being pleasant, and correction are better than being authoritative, disagreeing, contesting, and being incorrect.

The aim of these rules is to show that having fun, enjoying the company of others, the joy and desire to play Wheelchair Ultimate again are the perquisite of this major development on an international level.

Games should end with both teams embracing each other as they form a circle. They should talk about the positive and negative aspects of the game.
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## Chapter 4 Specific Aspects of Wheelchair Ultimate

### 4.1. Throws

Backhand (hold)
Backhand (upper view)


Backhand (full movement)


Side arm or Forehand (hold)


Side arm or Forehand (upper view)


Side arm or Forehand (full movement)


Hammer (hold)


Hammer (side view)


Hammer (full movement)


### 4.2. Receiving



Basic Catching Techniques


Palm facing upwards, thumb up (catching below the waist)


Palm facing downwards, thumb down (catching above the head)


Pancake (catch between the top of the head and the waist), preferred catch, and safer.


### 4.3. Horizontal and Vertical Stack (Offence)

Horizontal - Used when beginning the game and far from the opposing team's end zone.


Vertical - Usually used when halfway in the opponent's field or near their end zone.


### 4.4. Forcing Side Line /// Forcing Straight Up

FORCING SIDELINE - The strength used by the defence so that the handler can't position the disc internally.


FORCING STRAIGHT UP - The force applied by the defence player so that the handler is forced to throw the disc straight up, in this case backwards.


## Chapter 5 SOTG - Spirit of the game

### 5.1. What is SOTG?

We can say it is being positive, conscientious, and encouraging fair play.
Being fully aware of the rules, of how to behave on the field, being fair, having self-control and being able to communicate regardless of their opponent, are all essential aspects of the SOTG.

## Day

## SPIRIT OF THE GAME SCORE SHEET

Your whole team should be involved in rating the other team! Circle one box in each of the five lines and sum up the points to determine the SOTG score for the other team.

1. Rules Knowledge and Use

Examples: They did not purposefully misinterpret the rules. They kept to time limits .When they didn't know the rules they showed a real willingness to learn

## 2. Fouls and Body Contact

Examples: They avoided fouling, contact, and dangerous plays.
Your Team Name (division)

## Opponent


3. Fair-Mindedness

Examples: They apologized in situations where it was appropriate, informed teammates about wrong/unnecessary calls. Only called significant breaches

4. Positive Attitude and Self-Control

Examples: They were polite. They played with appropriate intensity irrespective of the score. They left an overall positive impression during and after the game.


## 5. Communication

Examples: They communicated respectfully. They listened. They kept to discussion time limits.


## Summing the results

Sum the results of every category to a final number and write it into these boxes (the end result should be between 0 and 20).


Spirit Score Total

## *Comment Box

If you have selected $0^{*}$ or $4^{*}$ in any category, please explain in few words what happened. Compliments as well as negative feedback will be passed to the teams in the appropriate manner.

### 5.2. What is it for?

Because Ultimate is a self-refereed team sport, it is essential that all players are taught/are aware that the game must be played according to the rules.

Being aware of the importance of the Spirit of the Game helps to understand the rules and every player becomes more aware of what sports entail.

This is why a Spirit of the Game marking system has been developed.
Immediately after a game, players assess the opposing team and their own team according to the 5 principles of the game:

1. Do they know, and did they follow the rules?
2. Do they avoid physical contact?
3. Were they unbiased?
4. Did they show self-control and a positive attitude?
5. Did they communicate correctly and respectfully?

Within the Ultimate players' community, the result of the SOTG is considered more important than coming 1st.


### 5.3. Spirit Captains

(Adapted by USA Ultimate from WFDF "Spirit Captain's" job description, with permission. April 2016)

Highly competitive play is encouraged, but never at the expense of mutual respect among competitors, adherence to the agreed upon rules, or the basic joy of play.

Requirements:

- The spirit captain must be an active, rostered player

Responsibilities of the Spirit Captain:

- Before the Tournament
- Know the rules! A big component of Spirit of the Game (SOTG) is knowing
- and properly implementing the rules. Make sure that your teammates know the
- rules too!
- Talk with your team about how to engage in a discussion about calls. Remember to "BE CALM":

Breathe
Explain what you think happened
Consider what they think happened
Ask for advice

## Listen

Make the Call

- Respond to any requests from the Tournament Director or Spirit Director.
- Before the Game
- Meet with the opposing Spirit Captain and Observers a few minutes before the games. Introduce yourself and start off on a friendly note.
- Did your team have any issues in a previous game that you're focusing in on improving (e.g. fast count on the mark, too much physicality on discs in the air)?
- Did your team encounter any exemplary teams or strategies that demonstrate Spirit in the highest regard? It's always great to share these things with other teams!
- During the Game
- Be proactive! Communicate with the opposing Spirit Captain as soon as any issues arise. Earlier is better than later, as this can avoid a game going "bad," especially if each team has differing viewpoints or expectations.
- Encourage your teammates towards positive, spirited, behaviors.
- Take a few minutes to check in with the opposing Spirit Captain and Observers during halftime. Do any issues need to be corrected? Are things going great? Communicate both positive and negative aspects with the Opposing Spirit Captain. Aid your teammates in resolving Spirit issues off the field/between points and after games. Sometimes, things get heated in during the game. Make sure to discuss any contentious calls or plays with teammates involved and offer solutions to avoid future problems.
- Work with opposing Spirit Captains to resolve any serious Spirit issues throughout the game. Take a Spirit Timeout, if necessary.
- After the Game
- Help facilitate a Spirit Circle with the opposing team. If for some reason there is not time, due to schedule constraints, at least check in with the opposing team's Spirit Captain to share any quick thoughts and decide if further discussion is needed.
- Ensure that your team scores your opponent promptly on the five principles of Spirit. Be sure to engage your whole team in this activity, using it as a chance to reflect on the game and on your own team's spirit.
- Enter or return scores promptly to tournament organizers or scorekeepers at your field. Folowing each tournament's directions for returning Spirit score sheets is really important for the system to work. This includes after your last game!
- Keep backup records of all Spirit scores. Take a picture on your phone of the scoring sheet, create a note file in your phone or on a tablet, or write them down in a notebook.
- After the Tournament
- Follow up with teams if necessary.
- Respond to inquiries from other teams, Tournament Director or Spirit Director.


## Spirit Scoring System

You can download a 4-Games SOTG Scoring-Sheet 2014 on the WFDF website

- There are five principles of Spirit:

1. Rules knowledge
2. Avoiding body contact
3. Fair-mindedness
4. Positive attitude
5. Communication

- You can find definitions and examples of these five principles in the Example Behaviors sheet for guidance on scoring, available on the WFDF website
- Spirit scoring is a team effort! Your role is to facilitate scoring with input from your team:
- Encourage all players to hold up fingers to "vote" for the score they think should be given in each category
- People with outlying opinions (0's, 4's or maybe 1's and 3's) should speak about why they feel this way. Other players can then adjust their score, and then na average is taken.
- Please clarify outlying scores of 0 or 4 with comments.
- Reminders for your team:
- Remember: a " 2 " is a "Good" score in any category.
- "Good" total scoring is between 8-13.
- Please use the Example Behaviors matrix on the back of the scoring sheet to help determine a team's score in each category.
- Fun games after the game is over are great but should not contribute to the Spirit score.
- Do not give lower Spirit scores out of retaliation or prejudice (e.g. Based on previous encouters with this team, or hearsay or reputation). Encourage your teammates to justify scores with the example behaviors sheet!
- Make sure to follow tournament directions and hand in your spirit score sheets promptly. This aids in stat keeping and also allowing the tournament organizers to be aware of issues that arise.
- Follow-up from Spirit Scoring
- Scores and comments will be posted after the tournament and may be posted during the event if resources are available.
- If your team receives low scores (6 or lower), high scores (over 14), or 0s or 4s in several categories or over multiple games, expect some follow-up with a Spirit Director from the tournament. We want to help resolve any repetitive issues or highlight great examples.
- If a team has several low scores and doesn't improve, or has a particularly low score, the Spirit Director will address with the team and USA Ultimate competition staff will be informed.
- A team that consistently give scores 15 or higher will be contacted by the Spirit Director, as that is considered a non-standard (unusually high) score and usually indicates that the scoring system is not being accurately employed.


## Spirit Circles

- Spirit Circles are an example of a post-game spirit activity that teams can use to communicate with each other.
- Spirit Circles are intended to be held after the last point of a game ends. Both teams come together (usually near midfield) in a circle and link arms around each other, typically intermingling with opposing players.
- They are an opportunity to address Spirit issues, discuss game situations and/or complement the other team on a great game.
- Be open, honest and candid, but not abusive.
- Use this as an opportunity to learn and educate, if necessary.
- Use this as an opportunity to share ideas or highlight great demonstrations of Spirit.
- Spirit Captains should take the leadership role, helping to create an opportunity for conversation to occur. Although the team will not have done its Spirit Scoring yet, a Spirit Captain should have a pretty good sense of how things went and can help provide space for others to speak as well to convey their experiences. The Spirit Circle communication may help inform the Spirit Scoring process.
- Immediately after the Spirit Circle is a great time for Captains and Spirit Captains to meet briefly and share impressions of the game, to help advise one another on what went well and opportunities for future improvement.

Spirit Timeouts If both teams' Spirit Captains believe that either or both teams are failing to follow the Spirit of the Game (SOTG) and the game has reached a point where they consider it dangerous or simply a game that is no fun to play, they may call a "Spirit Timeout."

A Spirit Timeout can be called if all of the following conditions have been met:

- All other options have been attempted (i.e. both Spirit Captains met to discuss adjustments and one or both teams are not adapting)
- Both teams' Spirit Captains agree.
- Play is stopped, or teams are between points.
- Note: In games with Observers, Spirit timeouts cannot be called directly by Spirit Captain. Instead, the Spirit Captains should be communicating with the Observers as well as each other throughout the game. Observers should continue to use their normal processes to deal with issues that arise in a game, including pausing the game to address concerns or issues with either team. Observers can call a spirit timeout if they feel it is appropriate, or if it is requested by both spirit captains.

During the Spirit Timeout:

- The Spirit Timeout will be capped at 3 minutes.
- Neither team may engage in tactical discussions.
- Spirit timeouts can function in one of two ways, as determined together by the Spirit Captains:

1. Two circles will be formed:
a. The two opposing Team Captains and Spirit Captains shall meet on-field to discuss all current issues with adherence to SOTG, determine actions to rectify those issues, and then convey the agreement to the larger Spirit Circle.
b. All remaining members of both teams will form one "Spirit Circle" in the middle of the field with both teams.
2. All team members of both teams will form one "Spirit Circle". The conversation will then be led by each team's Spirit Captain.

- SOTG stoppages do not affect time-outs available.
- By default, Spirit Timeouts do not affect caps.
- There is always the option for the tournament director to allow the cap to be ex68 tended. This should occur through communication between the Spirit Captains and the tournament director. Teams should not do this on their own without consulting the tournament director.
- After the timeout is over, teams can set up and game restarts as after a normal time-out.


## Chapter 6 Practices Drills

## Key for Diagrams



Thrower


Receiver


Previous Position of an Offensive Player

- Defender/Marker
- Previous position of a Defensive Player
$\longrightarrow$ Cut
-----> Throw


### 6.1. Throwing

Commitment: To warm up and develop disc handling skills.
Participants: 2
Discs: 1
Exercise: Divide into pairs and line up across from each other (6-8 meters). Throw with your partner 10 backhands and then 10 forehands.

Variations:

1. Throw a certain number of passes with no turnovers;
2. Improve, increase more complicated throws such as hammers, scoobers;
3. Throw to each other while cutting up and down the field. Practice hitting a receiver in stride and catching without slowing down;

- Create a group game, analyze which pair can throw the most completed passes in a minute.


### 6.2. Go-to Drill

Commitment: To training throwing to a moving receiver, straight cuts, and catching while running.

Participants: 4-6
Discs: 4
Exercise: Begin two single-file lines facing each other at least (10-12 meters). Set cones at the front of each line to help people remember where to start. The lines try to sneak in on each other without the cones. (Fig. 14a)

- The first participant from line A (A1) makes a straight cut towards line B. (Fig. 14b)
- The first participant from line $B(B 1)$ throws it to $A 1$ (Fig. 14b)
- After A1 receives the disc he runs to the back of line B (Fig. 14c)
- B1 makes a straight cut toward line A (Fig. 14d)
- A2 throws the disc to B1 (Fig. 14d)



### 6.3. Full Defense Line Drill

Commitment: To training throwing to a defended receiver, making a straight cut, and catching while being defended.

Participants: 8-10
Discs: 4
Exercise: Set up as above (Fig. 17a)

- B2 sets up on the forehand side of B1, forcing her backhand (Fig. 17a)
- A2 sets up a step behind A1 on the break side (Fig. 17a)
- A1 makes a straight cut for a backhand (open-side) throw from B1 (Fig. 17b)
- B1 throws to A1 while A2 defends (Fig. 17b)
- A1 hands the disc to the first player without a disc in line B (Fig. 17c)
- A4 sets up forcing A3 backhand (Fig. 17c)
- B2 sets up a step behind B1 on the break side (Fig. 17c)
- B1 makes a straight cut for a backhand (open-side) throw from A3 (Fig. 17d)
- A3 throws to B1 (Fig. 17d)



### 6.4. The 3rd participant break mark drill

Commitment: To training marking and breaking the mark. Conditioning, focus on the skills of marking and breaking the mark.

## Participants: 3

Discs: 1
Exercise: Two participants stand facing each other (8-10 meters) apart (Fig. 21a)

- The third participants, the marker, marks the player with the disc straight-up (Fig. 21a)
- The marker starts the stall at "stalling 5."
- The thrower fakes and pivots, to throw to the receiver (Fig. 21b)
- The marker attempts to block the throws and stall the thrower (Fig. 21b)
- Once the throw goes up the marker sprints to mark the new thrower (Fig. 21c)
- Continue for 90 seconds
- Switch markers



### 6.5. Endzone

Commitment: To training endzone offense, dumping and swinging, endzone cuts, and throwing to a moving receiver.

Number of Players: 6-8
Discs: 1
Description: Set up two lines - one in the front middle of the endzone, the other in the back middle. (Fig. 24a)

- A1 starts with the disc (8-10 meters) away from line A (Fig. 24a)
- A2 makes a two-step juke cut to the forehand side (Fig. 24b)
- A1 throws a forehand to A2 (Fig. 24b)
- B1 makes a full cut or a straight cut toward the front corner of the endzone (Fig. 24 c)
- A2 throws a forehand to B1 (Fig. 24c)
- A3 makes a dump cut for B1 (Fig. 24d)
- B1 throws a backhand dump to A3 (Fig. 24d)
- Continue scoring in each corner
- After catching a score recycle into line A
- After throwing a score recycle into line B
- After catching a dump pass, recycle into line A (otherwise the lines will get uneven)


Fig.24a
Fig.24b


Fig.24c


Fig.24b

### 6.6. Defensive Positioning

Commitment: To training defensive positioning, cutting, and catching while being defended.
Participants: 8-10
Discs: 4

- Description: The thrower starts with all the discs within 1 yard of the sideline (Fig. 26a)
- The marker forces the thrower towards the sideline (Fig 26a)
- There is a line of defenders (6-8 meters) across and (8-10 meters) downfield of the thrower (Fig. 26a)
- There is a line of receivers (2 meters) downfield of the defender line (Fig. 26a)
- The first receiver steps out from the line (Fig. 26b)
- The first defensive players sets up in a position to force the receiver either - deep or back to the disc and announces which way he's forcing the receiver to go (Fig. 26b)
- The thrower checks the disc in
- The receiver makes any kind of cut in whatever direction she wants trying to get open (Fig. 26c or 26e)
- The defender tries to cover the cut
- The thrower throws to the receiver
- $\quad$ The receiver brings the disc back to the thrower (Fig. 26)
- The receiver and the defender switch lines
- Every participant is the thrower for five passes


Fig.26a


Fig.26b


Fig.26c

# Chapter 7 Science and applicability 

# Ultimate in a wheelchair, and the path that must be taken 

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Ultimate Frisbee and sports with the use of a Frisbee have a lot to develop and to offer to the world of sports and society itself. Although being a recent sport, it already breaths the need to seek answers in terms of adapted sport. To fulfill that vision, some researchers started looking for answers to fit the ultimate wheelchair to the adapted sports paradigm. Throwing technics and wheelchair used were the two main variables that this team of researchers assessed to help drawing an oriented guideline for a sustainable future of this sport. The team developed three studies to analyze the differences in the sitting and standing positions in the performance of backhand and forehand throws, the most used in the ultimate wheelchair game. According to the results of the first study carried out, they raise the possibility that, in children who are inexperienced in the task, the sitting position may constitute a constraint that hinders postural adjustments in this less usual position in motor practice. Children go through a substantial evolution around their motor development, which seems to occur in parallel with the development of specific cognitive abilities. The objective of this study was to verify whether the position (standing or sitting) in which the frisbee throw is performed, with the backhand and forehand techniques, would be related to the performance of that throw in children. With practice, the movement, direction, and orientation of the hand become more stable and consistent, enhancing performance improvements. Throws in the seated position presented worse results in terms of accuracy. The aim of the second study was to analyze the influence of the standing and sitting positions in a wheelchair on the performance of the "disc throwing" task in backhand and forehand, in Ultimate Frisbee practitioners. Twenty-nine experienced players ( 11 women and 18 men, with an average of $34.36 \pm 12.9$ years old) registered in the Portuguese Association of Ultimate and disco Sports were evaluated. The target
was used on a wall of a sports hall (cross with vertical and horizontal lines 2.10 meters long each, the center of the target at 1 meter high and 5 meters away from the launch position), and performance was measured, through the average of 3 throws (distance in centimeters between the target and the place where the disc touched the wall), for each technique. Results seem to demonstrate that, on average, throws made standing are more accurate. Significant differences were found between standing backhand and standing forehand throwing performances (Cohen's $\mathrm{d}=-0.45, \mathrm{p}<0.05$ ) and between standing forehand and sitting forehand performances (Cohen's $d=-0.62, p<0.01$ ). Results suggest that, in experienced athletes, the sitting position is configured as a constraint to be considered when adapting this modality to adapted sport. Regarding the third and last study, there was a need (through experienced ultimate players) to verify the maximum throw distances in the seated position to understand which field typology/dimensions could make more sense. Adapted physical activity focused on non-athletic individuals performing activities of daily living, many more studies are now addressing on sports performed by elite Paralympic athletes. The results of the studies here presented, even related to adapted sports, are relevant for practice and research. It is to be expected that they will lead to more sports scientists and coaches becoming involved with adapted sport. The results of these sport performance studies suggest that, while there are similarities in the biomechanics of in the sitting and standing positions in the performance of backhand and forehand throws. Coaches and sports scientists wishing to work with athletes would benefit from understanding these similarities and differences if they are to contribute to the continuous development of these athletes and to the overall evolution of adapted sports performance. However, many gaps in this literature remain. For example, non-wheelchair athletes are well-researched groups, whereas very little research has been conducted on wheelchair athletes. We will continue to look for answers that are useful for wheelchair ultimate athletes and beyond.

## Chapter 8 Bibliography

## Bibliography presented in studies:

Akinbola, M., Logerstedt, D., Hunter-Giordano, A., \& Snyder-Mackler, L. (2015). Ultimate frisbee injuries in a collegiate setting. International Journal of Sports Physical Therapy, 10(1).

Amoroso, J. (2020). Ultimate at Schools Program Teachers File - for Physical Education Teachers (primary to secondary school). $1^{\text {a }}$ edição, WFDF . World Flying Disc Federation. Colorado Springs, Estados Unidos da América. ISBN 978-3-00-065900-3.

Amoroso, J. P., Coakley, J., Rebelo-Gonçalves, R., Antunes, R., Valente-dos-Santos, J., \& Furtado, G. E. (2021). Teamwork, Spirit of the Game and Communication: A Review of Implications from Sociological Constructs for Research and Practice in Ultimate Frisbee Games. Social Sciences, 10(8), 300. https://doi.org/10.3390/socsci10080300

Bartlett, R., Bussey, M., \& Flyger, N. (2006). Movement variability cannot be determined reliably from no-marker conditions. Journal of Biomechanics, 39(16), 3076-3079. https://doi. org/10.1016/j.jbiomech.2005.10.020

Bradshaw, E. J., Maulder, P. S., \& Keogh, J. W. L. (2007). Biological movement variability during the sprint start: Performance enhancement or hindrance? Sports Biomechanics, 6(3), 246-260. https://doi.org/10.1080/14763140701489660

Button, C., Macleod, M., Sanders, R., \& Coleman, S. (2003). Examining movement variability in the basketball free-throw action at different skill levels. Research Quarterly for Exercise and Sport, 74(3), 257-269. https://doi.org/10.1080/02701367.2003.10609090

Caporali, J. M. (1988). The Ultimate Alternative. Journal of Physical Education, Recreation \& Dance, 59(7), 98-103. https://doi.org/10.1080/07303084.1988.10606264

Clark, E., Hamilton, R., \& Bowden, R. (1981). Ultimate Frisbee. Journal of Physical Education and Recreation, 52(9), 56-58. https://doi.org/10.1080/07303084.1981.10631065

Cohen, J. (1992). A Power Primer Psychol Bull 112:155-159. Psychological Bulletin [PsycARTICLES], 112(July), 155-159. http://www2.psych.ubc.ca/~schaller/528Readings/Cohen1992.pdf

Crocket, H. (2015). Foucault, flying discs and calling fouls: Ascetic practices of the self in ultimate frisbee. Sociology of Sport Journal, 32(1), 89-105. https://doi.org/10.1123/ ssj.2013-0039

Crocket, H. (2016). An ethic of indulgence? Alcohol, Ultimate Frisbee and calculated hedonism. International Review for the Sociology of Sport, 51(5), 617-631. https://doi. org/10.1177/1012690214543960

Goldstein, J. D., \& Iso-Ahola, S. E. (2006). Promoting Sportsmanship in Youth Sports. Journal
of Physical Education, Recreation \& Dance, 77(7), 18-24. https://doi.org/10.1080/0730 3084.2006.10597902

Griggs, G. (2009). 'When a ball dreams, it dreams it's a Frisbee': the emergence of aesthetic appreciation within Ultimate Frisbee. Sport in Society, 12(10), 1317-1326. https://doi. org/10.1080/17430430903204827

Griggs, G. (2011). "This must be the only sport in the world where most of the players don't know the rules": Operationalizing self-refereeing and the spirit of the game in UK Ultimate frisbee. Sport in Society, 14(1), 97-110. https://doi.org/10.1080/17430437.2011. 530013

Koç, Y., \& Yeniçeri, S. (2017). An Investigation of the Relationship between Sportsmanship Behavior of Students in Physical Education Course and Their Respect Level. Journal of Education and Training Studies, 5(8), 114. https://doi.org/10.11114/jets.v5i8.2477

Koeble, C., \& Seiberl, W. (2020). Functional Adaptations in Isokinetic Performance and Shoulder Mobility in Elite Ultimate Frisbee Players. Sportverletzung • Sportschaden. https:// doi.org/10.1055/a-1023-4983
Krustrup, P., \& Mohr, M. (2015). Physical Demands in Competitive Ultimate Frisbee. Journal of Strength and Conditioning Research, 29(12), 3386-3391. https://doi.org/10.1519/ JSC. 0000000000000989
Lam, H., Kolbinger, O., Lames, M., \& Russomanno, T. G. (2021). State Transition Modeling in Ultimate Frisbee: Adaptation of a Promising Method for Performance Analysis in Invasion Sports. Frontiers in Psychology, 12(May), 1-12. https://doi.org/10.3389/ fpsyg.2021.664511
Leicht, A., Connor, J., Doma, K., \& Sinclair, W. (2019). Cardio-respiratory demands of Ultimate Frisbee in elite male athletes during a national championship. Journal of Science and Medicine in Sport, 22(2019), S64. https://doi.org/10.1016/j.jsams.2019.08.267
McErlain-Naylor, S. A., King, M. A., \& Felton, P. J. (2021). A review of forward-dynamics simulation models for predicting optimal technique in maximal effort sporting movements. Applied Sciences (Switzerland), 11(4), 1-20. https://doi.org/10.3390/app11041450
Neville, J. (2019). Dressed to play: An analysis of gender relations in college women's ultimate Frisbee. International Review for the Sociology of Sport, 54(1), 38-62. https://doi. org/10.1177/1012690217712503
Patatas, J. M., De Bosscher, V., \& Legg, D. (2018). Understanding parasport: an analysis of the differences between able-bodied and parasport from a sport policy perspective. International Journal of Sport Policy, 10(2), 235-254. https://doi.org/10.1080/19406940.20 17.1359649

Penyelidikan, J. (2006). SAMPLE SIZE ESTIMATION USING KREJCIE AND MORGAN AND COHEN STATISTICAL POWER ANALYSIS: A COMPARISON Chua Lee Chuan Jabatan

Penyelidikan. Jurnal Penyelidikan IPBL, 7, 78-86.
Piepiora, P., Sadowska, M., \& Supiński, J. (2020). The personality profile of ultimate frisbee players based on gender. Quality in Sport, 5(4), 28. https://doi.org/10.12775/qs.2019.022

Santos, S., \& Monteiro, D. (2021). Uncovering the Role of Motor Performance and Creative Thinking on Sports Creativity in Primary School-aged Children. Creativity Research Journal, 33(1), 1-15. https://doi.org/10.1080/10400419.2020.1843125
Spencer-Cavaliere, N., Kingsley, B. C., \& Gotwals, J. K. (2017). Ethic of care and the competitive Ultimate Frisbee playing experiences of young women. Leisure Studies. https://doi.org/ 10.1080/02614367.2015.1105859

Wassenberg, R., Feron, F. J., Kessels, A. G., Hendriksen, J. G., Kalff, A. C., Kroes, M., ... \& Vles, J. S. (2005). Relation between cognitive and motor performance in 5 -to 6 -year-old children: Results from a large-scale cross-sectional study. Child development, 76(5), 1092-1103. https://doi.org/10.1111/j.1467-8624.2005.00899.x
Weatherwax, R. M., Byrd, B. R., Van De Velde, S., \& Dalleck, L. C. (2015). the Cardiovascular and Metabolic Responses To Ultimate Frisbee in Healthy Adults. Journal of Fitness Research, 4(3), 36-44. http://search.ebscohost.com/login.aspx?direct=true\&db=s3h\&AN =112229798\&lang=pt-br\&site=ehost-liv

Yang JF, Scholz JP. Learning a throwing task is associated with differential changes in the use of motor abundance. Exp Brain Res. 2005;163(2):137-58. https://doi.org/10.1007/ s00221-004-2149-x

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