# IFBA <br> Official Rulebook 2024 <br> Team and Individual Events 

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President: Guenter Moeller
Email: guenter@themoellers.de
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## Table of Contents

A. General Rules ..... 4

1. IFBA Rulebook Editing ..... 4
2. Boomerang Safety Guidelines ..... 4
3. Obligations of Contestants and Teams ..... 5
4. Stopwatch Requirements .....  .6
5. Rights of Contestants and Teams .....  8
6. Responsibilities of Officials ..... 8
7. Tournament Field and Throwing Assignments ..... 10
8. Officiating Responsibilities of Teams (Teams' Judging Members) ..... 12
9. Teams' Throwing and Judging Lists ..... 12
10. Scoring Accuracy (Accuracy and Australian Round) ..... 13
11. Judging ..... 13
12. Relay Starts ..... 15
13. Timing ..... 15
14. Legal Throw ..... 16
15. Monitoring Weather Conditions ..... 16
16. General Warm-up Periods ..... 16
17. Intentional Interference/Fouls ..... 17
18. Protests ..... 20
19. Penalties ..... 20
20. Short-Handed Throwing ..... 22
21. Injury during team event ..... 22
B. Award System ..... 24
C. Nationality ..... 26
D. Events ..... 28
22. Accuracy 100: Individual ..... 28
23. Accuracy: Team ..... 30
24. Australian Round: Individual ..... 31
25. Australian Round: Team ..... 35
26. Endurance: Individual ..... 36
27. Endurance Relay: Team ..... 38
28. Fast Catch: Individual ..... 41
29. Maximum Time Aloft (MTA) - Best 1 of 5: Individual ..... 43
30. Maximum Time Aloft (MTA) - Best 3 of 5: Individual ..... 45
10.MTA Relay: Timed Team Event ..... 45
31. 30-Meter Relay ..... 49
32. Team Super Catch ..... 53
33. Trick Catch/Doubling 100: Individual ..... 58
34. Trick Catch/Doubling 100: Team ..... 61
35. Team Tapir Terror Relay: Timed Team Event ..... 61
36. Long Distance ..... 65
E. Glossary of Terms ..... 71
F. Organizing the Tournament ..... 84
37. Order of Throwing. ..... 84
38. Announcements ..... 84
39. Organization of Events ..... 84
40. Team makeup ..... 85
41. Use of Extras for Team Events ..... 85
42. Scoring the World Championships 2024 ..... 86
43. Scoring Systems ..... 86
44. Cancellation of Events ..... 94
45. Rescheduling Events in Team Championships ..... 95
46. Rescheduling Events in Individual Championships ..... 96
G. Recording World Records ..... 97

## A. General Rules

These general rules apply to both the team championships and the individual championships.

## 1. IFBA Rulebook Editing

a) This rulebook will be edited between World Boomerang Championships to account for new events and changes in rules and procedures as well as to clarify old rules. The IFBA Rules Committee is solely in charge of adopting new events, changing rules, clarifying preexisting rules, text-editing, and formatting of the IFBA Rulebook. All proposals for new events or changes to rules should be submitted to the IFBA Rules Committee for consideration. To help facilitate the editing process we have adopted certain deadlines. These deadlines will create adequate time for competitors, teams, WBC organizers and judging staff to adjust to new rules and events. These deadlines are as follows:
b) New events cannot be added in the 12-month period leading up to the WBC. If an event is proposed after this deadline, it will be considered in for the next rulebook for the following WBC.
c) The final version of the Rulebook must be published 6 months before the WBC start date. This includes all changes to events, rules, and procedures.
d) However, changes to grammar, syntax, formatting, etc. can still be done up to the WBC start date.

## 2. Boomerang Safety Guidelines

a) Boomerangs need plenty of space for safe use. Boomerangs should only be used in large open spaces where they have plenty of room to fly or bounce without danger of hitting anyone or anything.
b) Throwers are responsible for the safety of everyone within the flight path of their own boomerangs. Throwers should always keep their sight on their boomerangs during flight.
c) If the thrower sees anyone in danger of being hit, he should give a prompt, clear, loud, verbal warning to the person in harm's way such as yelling, "HEADS".
d) Safety during Practice
(i) Any thrower who hits a person with a boomerang during its outward flight - and is clearly at fault - is disqualified from his next event, even if it is on another day.
(ii) Any thrower who is warned by a tournament official or circle master to stop throwing dangerously on two separate occasions during the same day, or who hits someone after being warned once, is disqualified from warm-up, practice, and competition for the rest of the day.
(iii)Exceptions:
a. The accident is clearly the fault of the victim.
b. The victim is in organized warm-up or practice (in the line for throwing) and is not paying attention to returning boomerangs and is hit as a result.
e) Safety During Competition
(i) Competitors must make sure the circle judge has given the "circle clear" announcement before they throw.
(ii) Do not enter another thrower's circle without checking to see if it is safe and telling the thrower that you are entering his circle.
(iii)Throwers are responsible for moving range spotters, judges, spectators, or anyone else before they throw to keep others out of danger. If any of these persons are hit, the thrower gains no score on this throw. Time will be allowed for people to move, but no re-throws are given if range spotters, etc. are hit on a throw. Exception: The accident is clearly the fault of the victim.

## 3. Obligations of Contestants and Teams

a) By entering the competition, contestants and teams agree to accept the decisions of the tournament officials and circle masters.
b) In timed events, it is the competitor's responsibility to be sure the timers are ready before he begins his turn. A thrower who throws before the timers are ready receives no score for that turn. However, it is good if the circle master also checks to make sure spotters and timers are ready.
c) In all events, it is the thrower's responsibility to be ready to throw when it becomes his turn. If he does not throw within the designated time allotted after the circle judge gives the "circle clear" announcement, he loses his turn.
d) Contestants may not talk unnecessarily with the judge or scorekeeper during an event.
e) When throwers/teams report to their circles, the names of the throwers are entered into the score sheets. If a thrower or team is not fully present to register with the circle master at the beginning of the event, the thrower (in individual-style events) or the team (in team-style events) will receive a 0 in that event.
f) It is the responsibility of each thrower/team to know when it is his/their turn, and to be ready to throw upon the official's signal.
g) When throwers/teams have registered at the beginning of the event, no changes may be made, except in the case of an injury substitution in team events. See section: "Injury During Team Event"
h) Warm-up and practice throws are allowed in designated areas at designated times.
i) Warm-up throws, practice throws, and range checks are not allowed from or over a competition circle in which an event is in progress.
(i) Contestants caught making such throws, are disqualified from their next event, even if it's on another day.
j) Foam boomerangs with range of less than 20 meters may be used by competitors between events, during general warmups, and while "on deck". "On deck" might be the next group or the next two groups depending on the event.
(i) During the event: Only throwers "on deck" may use foam warmup boomerangs. A designated warmup area will be assigned by the judging staff. The warmup area will be far enough away from the competition field that there will be no interference with the competitors.
(ii) During the event: Throwers who are not "on deck" may not throw any boomerangs (foam or otherwise). This includes throwers who are spotting, judging, timing, scoring, or on break.

## 4. Stopwatch Requirements

a) Every thrower must have a working stopwatch that times to $1 / 100$ of a second and has a lap timer.
b) Stopwatches must be the hand-held type, not wristwatches or smartphones
c) Always have a stopwatch with you!
d) Throwers must have a stopwatch to register for the team and/or individual tournament.
e) Always use LAP button (not the stop button) on stopwatch except when an injury occurs in individual endurances. See section: "Endurance: Individual"

## 5. Rights of Contestants and Teams

a) Competitors may replace a boomerang at any time between flights during an event. The event must not be slowed by more than 15 seconds as a result, or the turn is lost.
b) Only 1 boomerang ( 1 pair of boomerangs for doubling) may be used at any given time. If a thrower wants to change boomerangs, the one being replaced or a substantial part of it must be returned to the bull's-eye by the competitor before any more throws can be made.
c) Throwers are responsible for removing obstacles on the competition field before their turn - excluding previously specified field obstacles. Hitting any object that could have been removed is not interference and the score of this turn is 0 , except when the turn consists of more that 1 throw, such as Fast Catch, Endurance, or Team Super Catch.
d) Legal gloves may be used in any competition. Legal gloves are those that are used to protect the hand(s) during catching but not used as a catching aid like a baseball mitt.

## 6. Responsibilities of Officials

The tournament director, head judge, judging staff, and circle master may compete in the tournament in which they are officials. If they do, they must have designated alternates to perform their duties in any action or decision in which they are involved as competitors.
a) Tournament Director
(i) Organizes and is generally responsible for a tournament.
b) Tournament Officials
(i) Provide adequate control of spectators to maintain their safety.
(ii) Prepare and distribute flyers to spectators. Flyers must include appropriate warnings and should include a program.
(iii) Conduct a pre-tournament meeting to make announcements and review rules.
(iv) Make a copy of current tournament rules available to all contestants for reference
(v) Assist officials and judges as needed in resolving protests.
(vi) Provide for field sanitation/toilet devices.
(vii) Approve and publish results
c) Head Judges
(i) Organize and facilitate the captains' meeting
(ii) Acceptance of the field condition including removal of obstacles and fencing-off of unsafe areas
(iii) Timekeeper of the schedule
(iv) Start and stop warm-up period
(v) Assign team judges to circles so that they are not judging their own teams.
(vi) Prepare team events
(vii) Responsible for checking the weather conditions and for making the call to pause an event. See section: "Monitoring Weather Conditions"
(viii) Final decision making
(ix) Reviews rule book and evaluates changes on their feasibility
d) Officials/Judges
(i) Responsible for fair conduct of the tournament.
(ii) Appoint assistant judges to perform his duties when he cannot conduct events himself (as when multiple throwing stations are used or when 2 or more events are running simultaneously).
(iii) Determine the score to be awarded for each throw in each event.
(iv) Organize and collect data from stewards and timekeepers for scorekeepers.
(v) Judge interference and rules appropriately.
(vi) Confer with tournament director and head judges to resolve protests.
(vii) Use whatever method seems fairest to determine how an occurrence should be scored including, but not limited to, information from witnesses of the occurrence.
(viii) If he has doubt about the score for the throw, the benefit of the doubt should always go to the thrower. The circle master may not force the thrower to repeat the throw just because the circle master is in doubt of the score.
e) Circle Master
(i) Makes sure the field is prepared for the event.
(ii) Responsible for fair conduct of events at each circle included in the tournament. This includes interpreting the rules, organizing other officials and stewards, and recording scores.
(iii) Watches for foot faults and decides on legal/valid catches.
(iv) In relay events, he determines whether the thrower has tagged the center circle.
(v) Announces when the turn begins and signals that the circle is clear.
(vi) May be any thrower who is familiar with the rules and understands English well enough to keep the scores.
(vii) If he has doubt about the score for the throw, the benefit of the doubt should always go to the thrower. The circle master may not force the thrower to repeat the throw just because the circle master is in doubt of the score.
f) Scorekeepers
(i) Appointed by judges to record scores during event.
a. Duties may be performed by any person approved by head judge when necessary.
b. Records all scores for the event.
g) Steward (Range Steward, Timer)
(i) Appointed by judges to assist in range determination, timing, determination of accuracy or catching points as requested.
(ii) All competitors are to perform some steward duties when their turns to throw are not imminent.
(iii)May be assigned before the start of an event/turn.
h) Head Scorekeeper/Score Analyst
(i) Prepares score sheets.
(ii) Rechecks calculations on score sheet.
(iii)Determines official placing in each event.
(iv)Compiles data to determine overall placing.
(v) Reviews rule book and evaluates changes on their feasibility.

## 7. Tournament Field and Throwing Assignments

a) Field
(i) The tournament field must be flat, level, with well cut grass and free of obstacles such as trees, light posts, goal posts, etc.
(ii) Obstacles must be a least 10 meters away from the outermost range circle required for the event.
(iii)The circle markings must be immovable and highly visible. All circle lines must be continuous.
(iv) The tournament field area must be clearly defined and properly marked. This is especially important for the MTA events.
b) Throwing Order and Event Seeding for Individual Competition
(i) The order of throwers may not disadvantage or advantage any thrower. Prior to the start of the tournament, throwers will be seeding based on the results of the previous WBC. Throwers who did not attend the previous WBC will be randomly assigned into the seeding. Note: Make sure that enough experienced throwers are in the last group to run a circle.
(ii) In each event, throwers will be seeded into groups of primarily 5 but can be 4 or 3 depending on the event.
(iii)If necessary, "dummy" throwers can be used to even the groups to 5
(iv)The groups will be sorted so that there are equal numbers of high, middle, and low ranked groups on each circle.
a. Example: Consider a small tourney of 44 in which one of the events will use 3 circles. The groupings on the circle might look like this:
o Circle 1: Throwers 1-5, 16-20, 31-35
o Circle 2: Throwers 6-10, 21-25, 36-39
o Circle 3: Throwers 10-15, 26-30, 40-44 + plus 1 dummy
(v) The Circle Assignment Tool (CAT) will be used by the scoring staff to post circle assignments sheets prior to the tournament.
a. The groupings (rank numbers) will be posted before the tournament begins.
b. After each event, throwers will only need to find their overall rank on the scoresheet then look for that number on the circle assignment sheets for the next event.
c) Throwing Order Team
(i) In tandem style events, pairs of throwers from the same team may not throw on the same or adjacent circles.
(ii) They should also be assigned to different time slots for the event.
(iii) Two teams may not compete against each other in Thirty Meter Relay twice during a team tournament.

## 8. Officiating Responsibilities of Teams (Teams' Judging Members)

a) At least 1 thrower from each team is required to officiate in each event. Each team's officiating assignments are posted in the same way as the team's circle assignments and throwing orders. Exceptions depend upon team size and can be approved by the head judges.
b) Teams' throwing members may be required to judge, time, and/or spot range before and/or after their turn at the circles where they are competing.
(i) Absence or not fulfilling the required actions may result in a yellow card.
c) Designated team officials (teams' judging members) must be at their circles 5 minutes before the event starts and report to the circle master.

## 9. Teams' Throwing and Judging Lists

a) Teams are required to submit the names of their 4 throwing members to the circle master after each event warm-up.
b) Teams are required to submit at least 1 judging member's name for each event after warm-up of each event to the head judges. Exceptions depend upon team size and can be approved by the head judges.
c) At the captains' meeting, each team will receive copies of the circle assignments and judging assignment. These sheets will also be posted.
d) It is each team's responsibility to be sure that their throwing members are at their assigned circles on time. If the teams' judging members list indicates that teams are to supply an official, this team member should be at his assigned duty on time as well. Absence may result in a personal penalty.
e) Teams with only 5 members will still have to deliver a team's judging member.
f) Teams with only 4 members might also be required to deliver a team's judging member and be forced to throw short-handed. See section: "Short-handed Throwing". This can be petitioned with the head judges, but the decision of the head judges will be final.

## 10. Scoring Accuracy (Accuracy and Australian Round)

| Scoring Location | Accura <br> cy | A u s s i e <br> Round |
| :--- | :---: | :---: |
| Inside the 2-meter circle | 10 | 10 |
| On 2-meter circle* | 9 | 9 |
| Between 2-meter and 4-meter circles | 8 | 8 |
| On 4-meter circle* | 7 | 7 |
| Between 4-meter and 6-meter circles | 6 | 6 |
| On 6-meter circle* | 4 | 5 |
| Between 6-meter and 8-meter circles | 3 | 4 |
| On 8-meter circle* | 2 | 3 |
| Between 8-meter and 10-meter circles | 1 | 2 |
| On 10-meter circle* | 0 | 1 |
| Between 10-meter and 20-meter circles | 0 | 1 |
| On 20-meter circle* |  | 1 |
| * Also means one foot on each side of the circle |  |  |

## 11. Judging

a) Judges may use any means available to determine how an occurrence should be judged, including help from witnesses that had a better vantage point than the judge.
b) Circle master's decision can be protested. See section: "Protests"
c) Clear, obvious, or suspected rule violations should be brought to the immediate attention of the official required to make the call by any official who sees the violation. The official required to make the call will then do so.

## 12. Relay Starts

a) Standing starts are made from the team's gate on the starting line upon audible signal from an event official. Running starts may not be used.
b) After the event is started, no thrower may touch the area inside of the competition circle (including the line) until he is tagged. No part of the throwers body may extend over the line while he is awaiting the tag.
c) After he is tagged, he may enter the circle.

## 13. Timing

a) Method of Timing:
(i) Three primary timers and a backup timer will be designated before each turn and all 4 will keep time.
(ii) If a timer feels that he did not start or stop his stopwatch at the appropriate moment on any turn he must disqualify his time.
(iii)If one or more of the primary timers are not within the limits designated below or he has disqualified his time, backup timer is used in place of the disregarded time:
a. If the 3 primary times are used, the times are considered valid if the shortest and longest times are within 0.75 seconds of each other. The official time is the middle time. If the longest and shortest times are more than 0.75 seconds apart, the 1 further from the middle time must be disregarded. In that case, the backup is used. Then the process is repeated to make sure the backup is within the 0.75 second tolerance.
b. At that point, if only 2 stopwatches are within the 0.75 s tolerance, the official time is the inferior of the 2 times.
c. If only one stopwatch has what appears to be a valid time, this is the official time. Note: The thrower may not choose to re-throw if only one stopwatch got a valid time. Giving a re-throw is seen as giving an advantage to the thrower to improve his score.
(iv)For team events where the overall time and lap times are recorded (e.g., team relay and MTA relay) the official timer is the one with the middle overall time. From this timer all lap times are taken, if necessary.

## 14. Legal Throw

a) If there is no event specific rule, a throw is only legal when it was done from inside of the bull's-eye. No stepping on the line (foot fault).

## 15. Monitoring Weather Conditions

a) There will be at minimum of two weather stations on the field to monitor wind speed and temperature. The monitoring stations should be spaced so that all competitors and judges have access to call for a "wind check"
(i) Weather monitors will be assigned to keep track of changing conditions and be available to give a reading when a competitor or judge asks for one.
(ii) Monitors can be judging staff, a team's judging member, a competitor who is not currently competing or anyone who the Head Judge deems capable of the task.
(iii)Current weather condition rules are as follows
a. Maximum temperature $38 \mathrm{C} / 100.5 \mathrm{~F}$
b. All events: maximum average winds speed of $6 \mathrm{~m} / \mathrm{s}(21.6 \mathrm{~km} / \mathrm{h}, 13.4 \mathrm{mph})$ *
c. Doubling: max average wind speed of $5 \mathrm{~m} / \mathrm{s}(18.0 \mathrm{~km} / \mathrm{h}, 11.1 \mathrm{mph})$ *
*Wind speed will be measured at 2 meters above ground on the playing field and monitored continuously over 10-minute intervals
(iv)In case these limits are crossed the head judge will follow the rules for "Cancelation of events"

## 16. General Warm-up Periods

a) There will be a 10-minute general warm-up period before each event
(i) Exception 1: There is no general warmup for Australian Round. Instead, there will be a 5 -minuted controlled warmup for each group before their turn. See section "Australian Round"
(ii) Exception 2: 15 minutes for Super Catch, MTA, and MTA Relay.
b) The warm-up period begins soon after the previous event is finished, including any protests.
c) A loud signal will alert the throwers of the beginning (such as one hoot) and end (such as two hoots) of warmup.
d) No competition-style boomerangs may be thrown after the signal marking the end of warm-up.
e) After the warm-up period has ended, throwers and officials have 5 minutes to report to their circles.
f) Warm-up throwing may take place on either the tournament fields or the designated practice area. Throwers using the tournament field must avoid using the bull's-eyes. See events for exceptions.
g) For the Australian round and Accuracy events, warm-ups by the first group may only be made in ways and locations that other teams will be allowed to use to warm up.
(i) Example: if, after the event starts, other groups will not be allowed to have warmup throws that fly into the 50 -meter competition circle, then the first group may not have warm-up throws that fly into the competition circle
h) No throwing outside competition shall occur anywhere while an event is in progress accept the "on-deck" throwers using foam boomerangs in a designated area. The only throwing of any other boomerangs will be in active circles by throwers competing in their turns or in official warm-up before their turns.
i) Any thrower, who is illegally throwing after the end of warm-up or illegally during an event, is disqualified from the event for which he is warming up, or his next event (if he has already competed in the current event), even if it's on another day.

## 17. Intentional Interference/Fouls

a) During Team Championship
(i) If interference appears to be intentional by a thrower during his turn in a teamstyle event, the thrower's team is disqualified from this event and gains no score (one for all and all for one).
(ii) If interference appears to be intentional by a thrower during his turn in a tandemstyle event, the thrower is disqualified from this event and gains no score.
(iii)If interference appears to be intentional by a competitor other than the thrower during his turn:
(iv)If the interfering competitor is one of the team's throwing members, he gains no score (score is cancelled in case the thrower has already thrown the event).
(v) If the interfering competitor is a team's judging member or non-throwing member, he is disqualified from the next event even if it is on the next day. That member will not be allowed on the field as a competitor, judge, nor extra member for that next event.
(vi)In a team event there are no personal penalties, because they have impact only on some teams depending on their number of throwers. See section: "Penalties" for how to score team events.
b) During Individual Championship
(i) If interference appears to be intentional by a thrower during his turn, the thrower is disqualified from this event and gains no score.
(ii) If interference appears to be intentional by a competitor other than the thrower during his turn, the interfering competitor is disqualified from this event.
c) Re-throws
(i) Circle masters attempt to prevent re-throws from creating an unfair advantage or disadvantage for any team or thrower.
(ii) Teams and throwers have the option of refusing the re-throw to keep the score earned during the round where the interference took place, unless the circle master determines that fairness requires a re-throw.
(iii)If a re-throw is taken, the score of the re-throw counts. See event rules for when re-throws are performed.
(iv)If no event specific rule for when to perform the re-throw exists, the re-throws are made as soon as all competitors have finished the event on a given circle or a group of throwers have completed their round - after the protested act occurred.
d) Delay in Throwing
(i) After the previous thrower's turn is scored, the circle master will tell the next thrower verbally, "Circle is clear"
(ii) This thrower then has 15 seconds to make his throw.
(iii)He should be heading to the bull's-eye and know how he is going to throw as soon as the bull's-eye is clear.
(iv)If he does not throw within 15 seconds, he loses his turn and receives a 0 for that turn.

## 18. Protests

a) Any protest must be reported to the circle master immediately. It will be dealt with at that time, if possible.
b) Any act, occurrence, or judgment that causes an unfair advantage or disadvantage to any contestant or group of contestants may be protested. E.g., if rules are misinterpreted or wrong advice is given, the disadvantaged may protest. This may result in a re-throw of the event.
c) No protest may be made more than 30 seconds after the protested act, occurrence, or judgment took place - unless event rules state differently.
d) Incorrect scores don't have to be protested. If enough evidence is available, any scoring error will be corrected.
e) Placing cannot be protested except for mathematical or logical errors.
f) Protests must be resolved quickly and fairly without disrupting the contest in progress more than necessary.
g) Protests may be decided by the circle master or, if circle master's decision is protested, by the tournament officials (up to 3). The tournament officials' decision is final.
h) Protests shall be resolved immediately, if possible, or in any case before the next event begins. If this is not possible, tournament officials or circle masters must tell the protester when to expect a decision and why there is a delay.
i) If interference or confusion occurs during a thrower's round, but he is still able to continue, he must complete his round as well as possible, then file the protest within 30 seconds of the completion of his round.

## 19. Penalties

a) Throwers may be required to judge, time, and/or spot range, before and/or after their turn, at the circles where they are competing. Absence or not fulfilling the required actions may result in a yellow card.
b) Any thrower, who is illegally throwing after the end of warm-up or illegally during an event, is disqualified from the event for which he is warming up, or his next event (if he has already competed in the current event), even if it's on another day.
c) Penalties may be awarded by the circle masters in the following order:
(i) Yellow card: Verbal warning
(ii) Red card: After 2 yellow cards or 1 intentional interference:
a. In individual competition: a thrower will be disqualified from the current event. If he is not competing in the current event, he is disqualified from the next event even if it is on another day.
b. In team competition: if the red card is given to a competing member, the rule is the same as in individual competition (see above)
c. In team competition: if the red card is from a non-competing member the result of the current event for his team is increased by $25 \%$ for team relay and all events where the smallest points/times/catches are best and decreased by $25 \%$ all other events.

- The resulting score from penalty is rounded to the nearest integer in case of points ( 0,5 is rounded to the worse result). In case of times (example team relay) the time is rounded to the next 0,01 secs accordingly. Example $(139,005 \mathrm{sec}$ is rounded to 139,00 secs for MTA or to 139,01 secs for Team Relay)
- Any person who is disqualified from a team event may not represent his team as its designated judge nor non-throwing "coach" for the event. The penalized player will not be allowed on the playing field.
d) If a circle master's decision upon a penalty against a thrower is protested by the thrower or its team, the decision will be forwarded to the tournament officials (up to 3). Tournament officials' decisions are final and cannot be protested.
e) Tournament officials may also yellow-card, red-card, or even disqualify an individual or a whole team immediately (and without any prior card against the thrower or team), if a severe act occurs.
(i) Disqualification may be
a. For this event
b. For the next event, even if it's on another day
c. The whole day
d. The whole tournament
f) The decision by the tournament officials is final and cannot be protested.
g) If a red-carded thrower gets an additional red card, he will be disqualified from the whole tournament (team or individual) and may not be replaced by an extra.
h) If a team with 5 members has a teammate who is red-carded or double red-carded the team will still be required to deliver a team's judging member forcing them to throw short-handed


## 20. Short-Handed Throwing

a) Teams with less than 4 throwing members may compete short-handed in all events except the relay events where the shortest time is rated as best score.
b) In all non-relay style events (except MTA relay) a minimum of 2 throwers must compete for a team score.
c) No thrower is allowed more than one turn in any event.
(i) Exception 1: the final runner in Endurance Relay
(ii) Exception 2: In Team Super Catch, each thrower gets 1 turn only as the MTA thrower and 3 turns as a tally thrower.

## 21. Injury during team event

a) If the injury occurs during an event, the team is allowed to replay the event with a substitute.
b) If the team decides not to replay, it receives the sum points of the other 3 plus any points obtained by the injured player before the injury occurred. This applies to Accuracy, Australian Round, Trick Catch, Super Catch, and MTA Relay.
c) In the case that an injury occurs during a relay event and the team decides not to replay, the score is either handled like a team throwing short-handed or is set to the catches/turns the team managed to do before the injury occurred.

## B. Award System

## 1. Individual World Champion

a) The winner of the individual tournament becomes reigning world champion until the next championship will be held.
b) The winner of an individual event becomes reigning world champion in the event he won until the event will be held on the next world championship.
c) The best female thrower becomes reigning female world champion until the next championship will be held.
d) The best participant under 18 years becomes reigning junior world champion until the next championship will be held.
e) The best participant over 50 years becomes reigning senior world champion until the next championship will be held.

## 2. Team World Champion

a) For any team to become the world champions in the overall or in any event that team must have at least 4 throwers from the same nation. This team becomes reigning team world champion until the next world championship with at least 12 events will be held. It also takes the trophy to its home country.

## C. Nationality

1. Any thrower who is a multinational citizen chooses the nation he wants to represent for his life. A multinational citizen is not allowed to switch from the initially chosen nation to another nation in the future.
2. Any thrower who changes citizenship is representing his new nation. He is not allowed to represent his former nation.

## D. Events

## 1. Accuracy 100: Individual

Points awarded; Best: most points
a) Circles
(i) Contested on concentric circles of $2,4,6,8$, and 10 -meters for accuracy scoring and a 20 -meter range circle.
b) Required for score
(i) 20-meter flight range.
(ii) Boomerang must come to rest without touching or hitting anyone or anything except the ground.
c) Scoring
(i) Points scored according to where the boomerang came to rest.
(ii) Points table: see section "Scoring Accuracy Points".
(iii)Official score for each thrower is the total of 10 throws (5 turns of 2 throws).
d) Round
(i) The event includes 1 round of 5 turns for each thrower.
(ii) During each turn, the thrower throws 2 times on his own (not in tandem).
(iii)The thrower has 15 secs to make the first throw after the circle master announces, "circle clear".
(iv)After his boomerang lands the score is recorded. Then the circle master will again announce, "circle clear", and the thrower will have 15 seconds to make the second throw to complete the turn.
(v) At the signal of the circle master, it becomes the next thrower's turn.
(vi)Contestants generally throw in groups of 5, but groups of 4 or 3 can be used if needed. Each thrower throws in rotation with the other throwers in the group, until all have completed their 5 turns. Then the next group begins its round.
e) Warm-up
(i) General warm-up for 10 minutes will be provided before start of the event.
(ii) General warm-up throws shall be performed outside the 10 -meter circle to preserve the lines.
(iii)Individual warm-up for 3 minutes will be provided to each group before the start of the round.
(iv)Individual warm-up throws may be performed inside the 10-meter circle for range checks.
(v) No practice throws after the warm-up is over.
f) Officials per circle
(i) May be competitors
(ii) 1 circle master who watches for foot faults and tells the thrower when his turn begins by announcing, "circle is clear". At that moment he will start a timer to keep track of the 15 -second throwing window. He will announce: " 10 seconds remaining" then count down $5,4,3,2,1$, stop.
(iii) 1 center judge, who watches for foot faults and announces the score for each throw.
(iv) 1 scorekeeper
(v) 3 range stewards

## 2. Accuracy: Team

Points awarded; Best: most points; Tandem style event
This team event follows the same rules as the individual event with the listed modifications:
a) Required for score
(i) Boomerang must come to rest without touching anyone or anything except the ground or teammate's boomerang. (e.g., if a boomerangs lands on top of the other one, both boomerangs score.) This is only true for the two boomerangs thrown. It does not include other boomerangs laying on the ground. It is the throwers' responsibility to clear the circle of other boomerangs before they throw.
(ii) Two throwers from the same team throw in the same turn from the same bull'seye.
b) Scoring
(i) Each thrower on the team is scored individually.
(ii) The team score is the total of the 4 team members' scores.
(iii) No continuation after a perfect score (100p).
c) Round
(i) Individual warm-up for 3 minutes will be provided to each group before the start of the round.
(ii) Four team members throw in two pairs on 2 different circles.
(iii)Contestants throw in groups of $2,3,4$, or 5 pairs.
(iv)Each group of pairs throws in rotation with the other pairs in the group, until all pairs have completed their 5 turns.
d) Time limits
(i) At the signal of the circle master ("circle clear"), it becomes the first thrower's turn for the team.
(ii) The first thrower has 15 seconds to make the throw.
(iii)The second thrower in a pair must throw within 3 seconds of the first thrower.
(iv)If the circle master rules that more than 3 seconds have elapsed between throws, both throws are scored zero.
(v) This is the same for the first and second throw in the turn.
e) Officials per circle
(i) May be competitors.
(ii) 1 circle master who announces when the turn begins for each pair of throwers by announcing, "circle is clear". At that moment he will start a timer to keep track of the 15 -second throwing window for the first thrower and the 3 -second throwing window for the second thrower. He will announce: " 10 seconds remaining" then count down "5, 4, 3, 2, 1, stop".
a. Once the first thrower releases, the stopwatch continues to make sure the second thrower releases his boomerang within 3 seconds of the first.
(iii)2 center judges - 1 for each thrower, watch for foot faults and announce score for each throw.
(iv) 1 scorekeeper.
(v) 3 range stewards per thrower. 6 total range stewards

## 3. Australian Round: Individual

Points awarded; Best: most points
a) Circles
(i) Contested on concentric circles of 2, 4, 6, 8, and 10-meters for accuracy scoring as well as $20,30,40$, and 50 -meter range circle.
(ii) Standard Accuracy circles consisting of 2-meter bull's-eye, 4, 6, 8, and 10-meter circles
b) Aussie round rotation guidelines:
(i) All competitors in Aussie Round will follow a set rotation which will allow the event to run more smoothly. The rotation is as follows:

1. On-deck*
2. Compete
3. Spot range
4. Spot range
5. Spot range
6. Break/wait until called to be "on deck" **
*On-deck throwers will warmup in designated area for 4 rotations of the competing throwers and will be called back by the circle master. They are free to use foam boomerangs, balls, towels, etc. but no other boomerangs.
**Throwers in the break group may not warmup with the on-deck throwers due to space limitation and safety.

Note: if the AR circle only has 5 groupings, the 6th rotation (break/rest) will not be applicable.
c) Required for score
(i) Boomerang must go at least 20 meters
(ii) Legal catch or boomerang stops in the accuracy circle.
d) Scoring
(i) Score for each throw is the total of accuracy, catching, and distance points.
(ii) Official score for each thrower is the total for the 5 throws.
e) Scoring accuracy
(i) The boomerang must cross the 30 -meter circle to achieve accuracy and distance points. Any boomerang with a range of less than 30 meters can only be awarded catching points.
(ii) Accuracy points scored according to where the boomerang was caught or came to rest after a legal throw of at least 30-meter flight range.
(iii)Points table: See section "Scoring Accuracy Points".
(iv)If the thrower catches/drops in the accuracy circles, the location of the catch/drop determines the score.
a. For accuracy points when the boomerang is caught:

- If a competitor makes multiple contacts of his boomerang in different scoring areas before obtaining control, he gets the lowest accuracy points
of any scoring area in which he contacted the boomerang. For example, if the boomerang was first contacted in the 10 , then bobbled into the 8 , then finally caught in the 10 the thrower receives 8 accuracy points.
b. For accuracy points when the boomerang is dropped:
- If a competitor makes multiple contacts of his boomerang in different scoring areas before dropping, he gets the lowest accuracy points of any scoring area in which he contacted the boomerang or where the boomerang came to rest. For example, if the boomerang was first contacted in the 10, then bobbled in the 8 , then dropped into the 6 , before bouncing into the 8 the thrower receives 6 accuracy points.
(v) If a contestant falls after the catch is completed, location of his feet (or last contact of body-to-ground) before his fall determines his location.
(vi)If a contestant is touching the ground when the catch is made, accuracy points are based on the location of all points of contact with the ground.
(vii) If a contestant is not touching the ground when the catch is made, accuracy points are based on the first single point of contact with the ground after the catch.
f) Scoring catching
(i) 20-meter flight range to achieve catching points (in contrast to accuracy points: minimum range of 30 meters).
(ii) Legal catch is awarded 4 points no matter where it is caught. Catching points will not be based on accuracy or location of catch.
g) Scoring distance
(i) Distance points are awarded only if accuracy and/or catching points are earned on the throw:
(ii) 50-meters distance or more: 6 points
(iii) 40 -meters but less than 50 meters: 4 points
(iv) 30 -meters but less than 40 meters: 2 points
(v) 20 -meters but less than 30 meters: 0 points
h) Round
(i) The event includes 1 round of 5 turns for each thrower.
(ii) Contestants generally throw in groups of 5, but groups of 4, or 3 may be used as well. Each thrower throws in rotation with the other throwers in the group, until all have completed their 5 turns.
(iii)Then the next group begins its round.
i) Warm-up
(i) There will not be a general warmup for Australian Round
(ii) Instead, the "on deck" group of throwers will have a designated area in which they can warmup with foam boomerangs, balls, towels, etc.
(iii)Controlled warm-up for 5 minutes will be provided to each group before the start of the round.
(iv)Controlled warm-up throws may be performed inside the 10-meter circle for range checks.
(a) The circle master controls this warmup period. Throwers line up and throw one at a time when given the "circle is clear" call from the Circle Master.
(v) No practice throws after the warm-up is over.
j) Officials per circle
(i) May be competitors.
(ii) 1 circle master who announces when the turn begins for each thrower by announcing, "circle is clear". At that moment he will start a timer to keep track of the 15 -second throwing window. He will announce: " 10 seconds remaining" then count down "5, 4, 3, 2, 1, stop".
(iii) 1 center judge who watches for foot faults and announces the range, catch, and accuracy for each thrower. The center judge can also be the circle master.
(iv) 1 scorekeeper.
(v) 1 range coordinator.
(vi) 3 range stewards on each distance circle ( 30,40 , and 50 m ). Two range stewards can be moved to the 20 -meter circle when needed.


## 4. Australian Round: Team

Points awarded; Best: most points; Tandem Style Event
This team event follows the same rules as the individual event with the listed modifications:
a) Aussie round rotation guidelines:
(i) Same as Individuals - applies to all pairs of throwers
b) Required for score
(i) Boomerang must come to rest without touching anyone or anything except:
a. the thrower (while catching)
b. the ground or teammate's boomerang. For example, if the boomerangs collide in mid-air or one boomerang lands on top of the other.
c) Scoring
(i) Each thrower on the teams is scored individually.
(ii) Team score is the total of the 4 team-member's individual scores.
(iii) No continuation after a perfect score (100p).
d) Round
(i) Four team members throw in 2 pairs on 2 separate circles.
(ii) Contestants throw in groups of 2,3 or 4 pairs.
(iii)Pairs in each group throw in rotation until all pairs have completed their 5 turns.
(iv) Then the next group begins its round.
e) Time limits
(i) At the signal of the circle master, "circle is clear", it becomes the first thrower's turn for the team.
(ii) The thrower has 15 seconds to make the throw.
(iii)The second thrower in a pair must throw within $\mathbf{5}$ seconds of the first thrower.
(iv)Example: if the first thrower throws in 10 seconds, the second thrower must throw in 15 seconds (within 5 seconds of the first thrower).
(v) If the circle master rules that more than 5 seconds have elapsed between throws, both throws are scored 0 .
f) Interference
(i) Any contact between teammates or their boomerangs is not considered interference.
g) Officials per circle
(i) May be competitors.
(ii) 1 circle master who announces when the turn begins for each pair of throwers by announcing, "circle is clear". At that moment he will start a timer to keep track of the 15 -second throwing window for the first thrower as well as the 5 second throwing window for the second thrower. He will announce: "10 seconds remaining" then count down " $5,4,3,2,1$, stop".
(iii) 2 center judges, 1 for each thrower, who watch for foot faults and announce range, catch, and accuracy for each thrower.
(iv) 1 scorekeeper
(v) 1 range coordinator for each team
(vi)At least 3 range stewards on each distance circle (30, 40, and 50m) for each thrower. At least 9 total range stewards per thrower. Two range stewards can be moved to the 20 -meter circle when needed.

## 5. Endurance: Individual

Catching event; Best: most catches
a) Circles
(i) Contested on two concentric circles with 20-meter radius range lines and 2-meter bull's-eyes
b) Required for score
(i) 20-meter flight range.
(ii) Legal catches for all legal throws made before the end of the thrower's 5-minute round.
(iii) 1 catch is scored for each legal catch.
a. If a legal catch is made but the boomerang is dropped in transition to the next throw, the catch is still scored.
(iv)Only 1 boomerang may be used at a time. If thrower wants to change boomerangs, the 1 being replaced or a substantial part of it must be returned to the bull's-eye by the competitor before any more catches can be counted.
c) Scoring
(i) The total number of legal catches is the thrower's score.
d) Round
(i) The event includes one 5-minute round for each thrower.
(ii) The round starts when the thrower releases his first throw after the circle master has announced "circle clear".
e) Warm-up
(i) General warm-up: 10 minutes (outside the bull's-eye circle)
(ii) Individual warm-up: 1 minute before the start of the round (inside the bull's-eye circle)
a. The individual warm-up starts as soon as the circle master signals that the circle is clear.
b. The thrower may start his round before the allowed warm-up is over if he desires.
c. No practice throws after the warm-up is over.
f) Re-throws
(i) No re-throws unless it is impossible to obtain a fair score of the original round, or unless interference results in a delay during the round of the thrower involved as indicated below.
(ii) The problem in the original round must be serious enough to stop the round.
(iii)Simple interference, such as hitting a range steward, is not sufficient grounds for a re-throw. However, range spotters should always maintain adequate distance from the 20 -meter circle during the round. Especially as they move around the circle during shifty winds.
(iv)If interference occurs, the round must be continued as well as possible. A protest may be filed after the 5 minutes have elapsed.
g) Officials per circle
(i) May be competitors.
(ii) 1 circle master who announces when the turn begins for each thrower by announcing, "circle is clear". At that moment he will start a timer to keep track of the 15 -second period in which the thrower must start his round. He will announce: " 10 seconds remaining" then count down " $5,4,3,2,1$, stop". He also watches for foot faults, and counts catches out loud. He must count loud enough that the range stewards can hear him, so they can verify his count after each throw.
(iii)1 scorekeeper.
(iv) 3 range stewards to check each throw for range.
(v) 2 timers: 1 timer to keep the overall time (five minutes) and 1 backup timer.
(vi)The overall timer announces loudly " 4 minutes remaining" then also " $3 \mathrm{~min}, 2$ min, 1 min, $30 \mathrm{~s}, 15 \mathrm{~s}, 10-1 \mathrm{~s}$, stop"
h) Injuries:
(i) If an injury occurs, the circle master stops the round when he recognizes that the injury is serious. The timers stop the stopwatch with the "STOP" (not "LAP") function.
(ii) The circle master announces that the round was stopped because of injury.
(iii)When throwing resumes, the timers restart the stopwatch when the thrower goes to recover his boomerang from where it was when play stopped and resumes his round.

## 6. Endurance Relay: Team

Catching event; Best: most catches, Team style Event
a) Circles
(i) Contested on concentric circles with 20-meter radius range lines and with 2-meter bull's-eye
b) Required for score
(i) 20-meter flight range.
(ii) Legal catches are counted for all legal throws made before the end of the thrower's one minute.
(iii) 1 catch is scored for each legal catch.
(iv)Each thrower in each team must keep both feet on the ground prior to start. See "Relay Starts" in General rules section.
c) Scoring
(i) Every legal catch for each thrower is counted.
(ii) Team score is the total of all catches by the 4 team members.
d) Round
(i) One 5-minute round for each team.
(ii) Each thrower has a 60 -second turn. If time remains after all 4 throwers had their 60 -second turns, then 1 thrower, but not the $4^{\text {th }}$ thrower, may have a second turn for the remaining time.
(iii) First thrower makes a standing start from his team's gate on the 20-meter line upon audible signal from the circle master, e.g., by counting down "3-2-1-GO"
(iv) The starting team member now has 60 seconds to run to the bull's-eye and make as many legal throws as he can. The catches from all legal throws are counted.
(v) At the end of 60 seconds the thrower will recover his boomerang and run to the gate to tag the next thrower. At the tag the next 60 second period begins for thrower 2. This is repeated for throwers 3 and 4.
(vi) The throwers cannot stop their round (leave the bull's eye) before the end of the 60 seconds.
(vii) After the timing judge announces that the 60 seconds are done, no more throws for that turn - the thrower must tag the bull's-eye after catching or recovering the last boomerang thrown. Then he tags his team's next thrower at his team's gate at the 20 -meter line to start the next thrower's 60 -second turn.
(viii) At the end of the fourth 60 -second period the fourth thrower will run back to the gate to tag the "cleanup" thrower who will run to the bull's-eye to make as many legal catches as possible in the time remaining on the 5-minute timer.
(ix) All lap times should be recorded in case of need for a rethrow. This is especially important so that the time remaining for the $5^{\text {th }}$ runner can be calculated.
(x) After the event is started, no thrower may touch the area inside of the 20-meter circle until he is tagged. After he is tagged, he makes a standing start.
(xi) Only 1 boomerang may be used at any given time. If thrower wants to change boomerangs, the one being replaced or a substantial part of it must be returned to the bull's-eye by the competitor before any more throws can be made.
e) Warm-up
(i) General warm-up: 10 minutes (outside the bull's-eye circle)
(ii) Individual warm-up: 2 minutes for the team before the start of their round (inside the bull's-eye circle).
(iii)No practice throws after the warm-up is over.
f) Re-throws
(i) No re-throws unless it is impossible to obtain a fair score of the original round, or unless interference results in a delay during the round of the thrower involved as indicated below. The problem in the original round must be serious enough to stop the round.
(ii) Simple interference, such as hitting a range steward, is not considered as a sufficient reason for a re-throw.
(iii)If interference occurs, the turn and the round must be continued as well as possible. A protest may be filed after the five minutes have elapsed.
(iv) In case of re-throw, a complete turn is to be re-thrown.
(v) A re-throw may be awarded only to the thrower in whose turn the protested act occurred. This might be either one of the full 60 seconds turns or the less than 60 seconds turn of the last thrower.
(vi) The full 5 -minute turn will not be re-thrown in any case.
g) Officials per circle
(i) May be competitors.
(ii) 1 circle master who starts the round by counting down "3-2-1-GO", watches for foot faults, counts the catches out loud, and determines whether the thrower has tagged to the center. He must count the catches loudly enough so the range stewards can verify the count after each throw.
(iii)1 official timer to time each thrower's time from the start of his turn (at the tag for all but first thrower) to the end of the 60 seconds. The official timer should announce when the thrower has 10 seconds left then count down the last five seconds of the first four turns.

He should keep the time left for last turn (in case a protest occurs).
(iv) 1 gate judge to ensure that all tags and the start and finish are legal
(v) 1 gate timer to keep the overall time (five minutes), to announce 10 seconds left, and to count down the last five seconds of last turn.
(vi) 1 scorekeeper
(vii) 3 range stewards to check each throw for range.
(viii) A backup for the 60 -second timer and time left for last turn.
(ix)A backup for the 5-minute timer.
(x) Gates are placed approximately downwind from the bull's-eye. Markers are placed on both sides of each gate. Each gate is approximately 3 m wide and approximately 4 meters apart.

## 7. Fast Catch: Individual

Timed event; Best: shortest time
a) Circles
(i) Contested on concentric circles with 20-meter radius range lines and 2-meter bull's-eyes
b) Required for score
(i) 20-meter flight range.
(ii) The time span for 5 legal catches (and a complete return to and touch of the bull'seye if necessary) is timed.
a. If a legal catch is made but the boomerang is dropped in transition to the next throw, the catch is still scored.
(iii)Only 1 boomerang may be used at any given time.
(iv)If the thrower wants to change boomerangs, the one being replaced or a substantial part of it must be returned to the bull's-eye by the thrower before any more throws can be made.
(v) Time limit is 1 minute. If 5 legal catches are not made by the time limit has elapsed, the number of legal catches is the score. If the boomerang is in the air at 1 minute and then caught, the catch counts. If the catch is the 5th catch, the time is given as the score - the time of the catch is determined by when the thrower makes the 5th catch inside the bull's-eye or touches the bull's-eye if the 5th catch was made outside the bull's-eye.
c) Round
(i) The event includes 2 turns for each thrower.
(ii) Each turn must be in a different circle.
(iii)One thrower throws at a time.
(iv)Thrower is responsible for ensuring that the timers are ready before he starts his round.
d) Scoring
(i) Time from release of 1st throw to the thrower touching the bullseye during or after the fifth catch. If the thrower is outside the bull's-eye when he makes his 5th catch, timers stop when he touches the bull's eye.
(ii) Time can be greater than 60 seconds if the final throw was made before 60 -second limit
(iii)The faster time of both turns is the thrower's score.
e) Warm-up
(i) General warm-up: 10 minutes (outside the bull's-eye circle)
(ii) Individual warm-up: 1 minute before the start of the round (inside the bull's-eye circle)
(iii)The timed warm-up starts as soon as the circle master signals that the circle is clear. The thrower may stop his warm-up before the allowed warm-up is over if he desires.
(iv)No practice throws after the warm-up is over.
f) Re-throws
(i) Re-throws (always a complete turn) are after the turns in the thrower's group at the circle where the protest occurred, before moving to the next circle if the first turn.
g) Officials per circle
(i) May be competitors.
(ii) 1 circle master, who tells the thrower when to start his round by announcing, "circle is clear". At that moment he will start a timer to keep track of the $15-$ second throwing window. He will announce: "10 seconds remaining" then count down "5, 4, 3, 2, 1, stop", The circle master also watches for foot faults, tells when the thrower has made the catch, counts the catches out loud, and tells when the thrower has returned to the center. He must count loud enough that the range stewards can hear him, so they can verify his count after each throw.
a. Circle master should help the thrower make sure timers and range spotters are ready
(iii) 4 timers: 3 official timers plus 1 backup. The backup timer is designated before the turn begins. Use lap timers on stopwatch. See section: "Timing".
(iv) 1 scorekeeper.
(v) 3 range stewards help verify legal catches and should be distributed around the circle

## 8. Maximum Time Aloft (MTA) - Best 1 of 5: Individual

Timed event; Best: longest time
a) Circles
(i) Contested from within circles of 50 -meter radius with legal catches allowed anywhere on the tournament field
(ii) Approximately 10 throwers in a group. All groups throw from the same circle
b) Required for score
(i) No minimum range requirement.
(ii) Legal throw from anywhere within the 50 -meter circle.
(iii)Legal catch anywhere on the predefined tournament field boundaries.
a. Note: If contestant is not completely within the field boundary, he must be touching the field boundary or the area within it when he touches the boomerang during the catch until he completes the catch. If he is not touching the ground when he makes the catch, his first point of contact with the ground after the catch must be on or within the field boundary.
c) Scoring
(i) Score is the thrower's longest time that ends with a legal catch with a maximum possible time of 50 s
(ii) No object may be used to knock the boomerang out of the air to make it fall in bounds.
(iii)If a bird or bat knocks the boomerang out of the air, a re-throw will be given at the end of the round.
d) Round
(i) The event includes 1 round of 5 turns for each thrower.
(ii) Flight is timed from the moment of release until the boomerang is first touched. Time is recorded only if a legal catch is made. Each turn is completed by all throwers in the group in rotation before the next turn is started.
e) Warm-up
(i) General warm-up: 15 minutes
(ii) Individual warm-up: None.
(iii)No out-of-turn throws after the warm-up is over.
f) Re-throws
(i) Re-throws are made when everyone in the thrower's group has completed his last throw.
g) Officials per group
(i) May be competitors
(ii) 1 circle master who watches for foot faults
(iii) 1 scorekeeper
(iv) 3 timers for each throw plus one backup timer who will be downwind to also check the location of the thrower at time of catch, making sure that he is within the field boundary.
(v) 3 judges downwind at the field boundary to determine that the catch was in bounds
h) Event placing vs overall rank
(i) Maximum time of 50 s will be used for overall ranking points. However, event placings and trophies will be awarded according to the actual flight times.

## 9. Maximum Time Aloft (MTA) - Best 3 of 5: Individual

This individual event follows the same rules as MTA Best 1 of 5: Individual with the listed modification:
a) Scoring
(i) Official score for each thrower is the total time for the 3 longest times that end with a legal catch.
(ii) Total time possible is 150 s ( 50 s times 3 throws)
b) Event placing vs overall rank
(i) Maximum time of 150 s will be used for overall ranking points. However, event placings and trophies will be awarded according to the actual total time of best 3 flights.

## 10.MTA Relay: Timed Team Event

Best: cumulative time of 4 laps.
a) Objective
(i) Four team members throw MTA boomerangs in succession, each throw being executed before the previous boomerang is caught. The event consists of 4 timed laps. The first 3 laps begin at the release of each boomerang and end with the release of the next boomerang. The final lap starts at the release of the 4th boomerang and ends when it is caught. Laps are capped to 50s. Therefore, the
maximum achievable time is 200 seconds.
b) Circles
(i) Contested from within 50-meter radii circles.
(ii) At most two teams competing at a time on one circle
c) Required for score
(i) Legal throw: made from within the 50 -meter radius circle.
a. For the first throw: The throw must be made within 15 seconds of "circle is clear".
b. For throws 2, 3 and 4 : the throw must be made before the previous thrower catches his boomerang.
(ii) Legal catch:
a. A catch made within the field boundary resulting from a legal throw.
b. Although legal catches are allowed anywhere on the defined field boundary, the final catch must be made within the 50 m circle.
c. If the last catch is not made within the 50 m circle, the total time for the team will end at any previous legal throw made before a legal catch within the 50 m circle (whether $3^{\text {rd }}, 2^{\text {nd }}$, or $1^{\text {st }}$ ).
d. If none of the catches were within the 50 m circle, the score is zero
d) Scoring
(i) Score is the highest corrected time of the four rounds.
(ii) The corrected time of one round is the sum of the consecutive valid lap times of the middlemost timer, minus the total excess time over 50.00 s of all laps. Maximum score: $50 \mathrm{~s}+50 \mathrm{~s}+50 \mathrm{~s}+50 \mathrm{~s}=200 \mathrm{~s}$.
(iii) Example with 4 legal throws. How to record the corrected time. Middle most timer: 1'40.0. Sum of excess times: $(\mathbf{5 0 . 1}-50)=0.1$ s. Corrected time 1'39.9.

|  | Thrower 1 |  | Thrower 2 |  | Thrower 3 |  | Thrower 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In bounds | no |  | yes |  | no |  | yes |  |
| catch | yes |  | yes |  | yes |  | no |  |
|  | lap | split | lap | split | lap | split | lap | split |


| Timer 1 | 49.9 | 49.9 | 50.1 | $\mathbf{1}^{\prime} \mathbf{4 0 . 0}$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Timer 2 | $\mathbf{5 0 . 1}$ | 50.1 | $\mathbf{4 9 . 8}$ | $1^{\prime} 39.9$ |  |  |  |  |
| Timer 3 | 50.4 | 50.4 | 49.7 | $1^{\prime} 40.1$ |  |  |  |  |

e) Round
(i) The event includes 4 turns for each team. If two 50 -meter circles are available, two turns will be done on one circle and the other two turns on the other circle.
(ii) After a team finishes its turn the team members become catching judges.
(iii)After the team has been catching judges, they will become lap timers
f) Turn
(i) Four team members throw in succession.
a. The order of throwing must be given to the score keeper before each turn.
b. Once the team has committed itself to an order for the turn it is final and cannot be changed for that turn However, the team can change its order for successive turns.
c. It is the responsibility of the team to communicate to the next thrower when he should throw his boomerang.
(ii) The turn ends when:
a. all 4 boomerangs are legally thrown and caught

- Score: Corrected time based on all 4 lap times.
b. a boomerang was not caught legally or was dropped (see above c) ii) )
- Score: Corrected time from start of first throw to release of the last legally thrown boomerang.
o $\quad 1^{\text {st }}$ thrower: 0 seconds (e.g., $1^{\text {st }}$ dropped)
o $2^{\text {nd }}$ thrower: Start until release of $2^{\text {nd }}$ boomerang (e.g., $1^{\text {st }}$ caught, $2^{\text {nd }}$ dropped)
o $3^{\text {rd }}$ thrower: Start until release of $3^{\text {rd }}$ boomerang (e.g., $2^{\text {nd }}$ caught, $3^{\text {rd }}$ dropped)
o $4^{\text {th }}$ thrower: Start until release of $4^{\text {th }}$ boomerang (e.g., 3rd caught, $4^{\text {th }}$ dropped)
c. a boomerang was not thrown legally (see above, c) i) )

Score: Corrected time from start to release of the last legally thrown boomerang
o $\quad 1^{\text {st }}$ thrower late: 0 s
o $\quad 2^{\text {nd }}$ thrower late: 0 s
o $3^{\text {rd }}$ thrower late: Start until release of $2^{\text {nd }}$ boomerang
$0 \quad 4^{\text {th }}$ thrower late: Start until release of $3^{\text {rd }}$ boomerang
g) Time limits
(i) At the signal of the circle master, it becomes the first thrower's turn.
(ii) The thrower has 15 seconds to make a legal throw.
(iii)The $2^{\text {nd }}, 3^{\text {rd }}$, and $4^{\text {th }}$ throwers must make their throw before the previous thrower catches his boomerang.
h) Warm-up
(i) General warm-up: 15 minutes
(ii) Individual warm-up: none
(iii)No out-of-turn throws after the general warm-up is over.
i) Officials per circle
(i) 1 Throwing Judge ("circle master") per group who:
a. assigns and instructs the judges and timers before each turn begins
b. starts the turn with "circle is clear"
c. watches for legal throws (supported by Master catching judge)
d. makes and audible signal on each release of the boomerang (such as one hoot)
e. knows the order of throwers to be able to watch them properly
(ii) 1 Master catching judge (Throwing judge assistant)
a. Watches the catching judges
b. communicates the status of the active flight to the throwing judge
c. signals illegal catches/drops only (such as two hoots)

- Note: There is NO audible signal from the judges on a legal catch. The
time of the catch is not relevant to the event, only the time of release which is kept track by the timers.
(iii) 4 catching judges (one for each thrower) who:
a. runs with his designated thrower
b. watches for a legal catch
c. Hand signals illegal catch or drop to the master catching judge.
(iv) 4 timers: 3 official timers plus 1 backup.
a. starts the stopwatch on launch of the first boomerang
b. record laps and splits on the throws of $2^{\text {nd }}, 3^{\text {rd }}, 4^{\text {th }}$ throw and the catch of the $4^{\text {th }}$ throw.
- It's the team's responsibility to inform the team mates about a 50s flight. The subsequent throw can happen at any time before the catch of the previous boomerang.
(v) Score keeper
a. Recording the throwing order before each throw
b. Recording lap times and overall times of each turn.
(vi)Three line-judges per circle
a. Positioned downwind at the 50 -meter line to help the catching judges determine legal catches.
(vii) Note: The team is free to move around the field as necessary during the round to adjust to changing wind conditions or to take advantage of good wind conditions. But it is the team's responsibility that the throwing judge and the catching judges can follow their movements.


## 11. 30-Meter Relay

Timed event; Best: shortest time; Team Style Event
a) Circles
(i) Contested on concentric circles with 30-meter radius range lines and 4-meter bull's-eyes.
(ii) 2 teams throw at a time in a circle. If there are an odd number of teams, an unofficial team of 4 will be provided to run against the last team.
b) Required for score
(i) 30 meters flight range.
(ii) Legal catch -or- recovering boomerang after second legal throw of 30 meters.
(iii)Legal start. See section: "Relay Starts".
c) Scoring
(i) Time ends when the last thrower finishes his second turn by crossing the 30 -meter line through his team's gate.
(ii) The time of the team's round is the team's score.
(iii)Time limit is 5 minutes. If the team did not complete the round of 2 turns for each of the 4 throwers before the time limit has elapsed, the score is the number of legal catches made.
(iv)If the second throw of the last thrower was done within the time limit the score is the time when the thrower crosses the 30 -meter line.
d) Round
(i) The event includes 1 round of 2 turns in rotation for each of the 4 throwers.
(ii) 2 teams start their round simultaneously in one circle.
(iii) Audible signal from the 'official starter' starts the round, e.g., by counting down "3-2-1-GO"
(iv) Each team member must go into the 4-meter circle and make a legal throw. After catching the boomerang, the thrower must touch the 4-meter circle and then tag his team's next thrower. Tag must be made at the team's gate.
(v) Thrower waiting for tag must keep both feet on the ground behind the 30 m circle prior to being touched by incoming team member. Running starts may not be used.
(vi) After the event is started, no thrower may enter or touch the playing area inside of the 30 -meter circle including the 30 -meter line until he is tagged. After he is tagged, he may make a standing start.
(vii) If a thrower fails to legally catch his boomerang after his first legal throw, he must return to the 4 -meter circle and throw it again. Upon legally catching it - or recovering it after a second legal throw even if he does not catch - he may then return to tag the 4-meter circle and then tag the next team member.
(viii) After each thrower finishes his second turn, he must remain outside the 40meter line behind his team's gate. All non-throwing members of competing teams and non-officials must always remain outside the 40-meter line.
(ix) Range will be checked on every throw. If any throw is short, it doesn't count as a legal throw and must be repeated.
(x) There is no limit on how many times the boomerang must be thrown to make range and therefore be a legal throw.
(xi) Only 1 boomerang may be used at any given time. If thrower wants to change boomerangs, the 1 being replaced or a substantial part of it must be returned to the 4-meter circle by the competitor before any more catches can be counted.
e) Timing the event
(i) Officials record the time when each thrower tags his team's next thrower by using lap function.
f) Warm-up
(i) All throws: outside the 10 -meter circle
(ii) General warm-up: 10 minutes
(iii)Individual warm-up: 3 minutes for the group before the start of their round.
(iv)No practice throws after the warm-up is over.
g) Re-throws
(i) Must be against the same team if at all possible.
(ii) May only be called when intentional interference is made.
(iii) Teams must complete the heat before bringing a claim of intentional interference to the center judge.
(iv) The accumulated time prior to the tag of the interfered thrower is unchanged.

The re-throw starts from a tag with the interfered thrower at a standing start.
(v) Timing for the re-throw starts from the time that the affected thrower was tagged. Timing is done either: just for the interfered lap or for the remainder of the complete round depending on the circle judge's discretion. For example, if the interference caused a boomerang to break which was to be shared by another teammate. Judges decide which way causes the least advantage or disadvantage to any team.
(vi) If center judge decides intentional interference was made, interfering team is disqualified, and a re-throw is granted. The re-throw must be against the same team even though disqualified.
(vii) If the judges believe that interference could reasonably have been avoided by the team affected, a re-throw will not be granted.
(viii) Unintentional contact between players is not considered interference. Play shall continue.
(ix) Unintentional contact between boomerangs is not considered interference. Play shall continue as though the boomerangs did not touch.
(x) If an opponent completed its round and earned a valid time before the interference took place, its score stands. The opponent competes against the rethrowing team to make the conditions comparable.
h) Officials per circle
(i) May be competitors.
(ii) 2 circle masters, 1 for each team. They watch for foot faults in the 4-meter circle and signal visibly (each circle master has a flag in the team's color) and audibly when
a. a throw was short
b. a catch was illegal and
c. when the thrower may return to the team's gate
d. Two distinguishable sounds (a pipe and a horn) may be used on each circle to announce a short range with two hoots. No sound before the catch means: Range is good.
(iii) 1 or 2 scorekeepers
(iv) 1 starter who announces " $3,2,1$, GO"
(v) 3 timers per team plus one alternate per team to record the start and each tag using lap function.
(vi) 2 gate judges: 1 for each team. They watch for foot and hand faults at the team's gate and ensure that the start and all tags are legal.
a. If the start or a tag is not legal, the gate judge can order the thrower to return to the gate. The thrower must cross back through the gate completely then resume his turn.
(vii) Use lap timers on stopwatch.
(viii) 3 range stewards per team (each has 1 flag in the team's color) on the 30 -meter line.
(ix) 1 timer for the five-minute limit or a lap timer for the team.
e. Notes:
(i) Teams have gates approximately downwind from the bull's-eye. Markers are placed on each side of the gate approximately 3 m apart.
(ii) Gates of opposing teams must be separated by no less than 4 m and no more than 10 m .
(iii)The 2 circle masters will be near the bull's-eye, 1 for each team.
(iv)Each team's circle master must alert the thrower if his boomerang is short or if he has made a foot fault.
(v) If a judging error is made, the round will be reconstructed in the fairest manner possible, as determined by the tournament officials. If it is not possible to reconstruct the round fairly, the team or teams with the affected time or times will repeat their turn against the same team.

## 12. Team Super Catch

Catching event; Best: most catches; Team Style Event
a) Circles
(i) Contested on 1 set of 3 tally (fast catch) circles with a 20 -meter radius range line and a 2-meter bull's eye plus the designated duration (MTA unlimited) field.
(ii) The designated field for MTA shall be within the field boundary as defined by the head judges and tournament directors.
(iii)The duration (MTA) thrower will be able to travel anywhere on the designated field.
(iv)If possible, 2 or more sets of tally circles are run independently to save time. For each set of circles: 1 duration thrower from each team throws from anywhere on the field, but only 1 team throws at a time.
(v) While one team competes, the next one prepares to throw. The next team must be ready to throw 45 seconds after the previous team began to throw ( 30 second expected flight +15 seconds to throw). As soon as the flight of the duration boomerang has ended, and scores are recorded, 15 seconds begins (unless the flight was less than 30 seconds - then the 45 -second rule applies).
b) Required for score
(i) Duration thrower: 1 thrower throws a duration boomerang. Any type of boomerang may be used.
a. Throw may take place anywhere on the competition field.
b. Legal catch of duration boomerang anywhere on the competition field.
c. Maximum duration time of 50 s is possible even if the boomerang is in the air longer, but a legal catch is still required
d. If the duration boomerang is not caught, the score is zero for the round. Each Duration boomerang must be timed so that the 50 s maximum can be accounted for.
e. 2 timers ( 1 official and 1 backup are needed)

- The duration boomerang is timed by at least 2 stopwatches. Time is recorded for use in a re-throw in case one is needed on one of the tally circles
- The timers will give a count up from 40 to 50 s so that the duration judge can make an audible signal (hoot) at 50 s
(ii) Tally throwers
a. 3 throwers throw tally boomerangs from 3 separate bull's-eyes.
b. Any type of boomerang may be used. 20-meter minimum range is required on every throw to make a legal catch.
c. If a legal catch is made but the boomerang is dropped in transition to the next throw, the catch is still scored.
d. Tally throwers begin throwing when release of the duration boomerang is audibly signaled (such as one hoot). They must wait for the audible signal. A catch resulting from a throw made before the audible signal will not be counted.
e. The tally throwers stop throwing at the audible signal (success: such as one hoot or failure: two hoots). The signal will occur when the duration boomerang is first touched during the catch or at 50 s from launch.
f. No tally throws after the 50s hoot will count. However, a throw made before the hoot and caught after the hoot are consider good.
g. Only 1 tally boomerang may be used at any given time. If thrower wants to change boomerangs, the 1 being replaced or a substantial part of it must be returned to the bull's-eye by the competitor before any more catches can be counted.
(iii)The audible signal will be heard at different times by people at different distances; therefore, it is the sole responsibility of the center judge to determine if the tally thrower released his final throw before or after the audible signal is heard not by when he sees the catch of the MTA.
c) Scoring
(i) If the duration boomerang is caught, the official score for the round is the total number of boomerangs caught by the 3 tally throwers plus 1 for the duration boomerang.
(ii) If the duration boomerang is not caught, the official score for the turn is 0 .
(iii)A turn's score is recorded as the score for the person throwing the duration boomerang.
(iv)Team score is the total of the scores recorded for each duration thrower's turn.
d) Round
(i) 4 turns; each team member throws a duration boomerang once.
(ii) In each turn, a different team member throws a duration boomerang.
(iii)The same 4 team members participate in all 4 turns.
(iv)Teams throw in rotation.
(v) If there are 2 sets of tally circles: after each team completes 2 turns on 1 set of tally circles, teams will switch sets of tally circles and complete their last 2 turns.
e) Warm-up
(i) All throws: outside the 10 -meter circle
(ii) General warm-up: 15 minutes
(iii)Individual warm-up: none.
(iv)No practice throws after the warm-up is over for any of the throwers.
f) Re-throws
(i) Any contact between teammates or their boomerangs is not considered interference.
(ii) The duration boomerang is timed by at least 2 stopwatches. Time is recorded for use in a re-throw in case one is needed on one of the tally circles.
(iii)All the same throwers must participate.
(iv)The re-throw is performed at the end of the event.
g) Officials
(i) May be competitors.
(ii) One field director who directs which set of circles is throwing if there are two sets of circles.
(iii) 1 duration director who lines up next 6 duration throwers next to him.
(iv) Group travels together to spot where next duration thrower wants to throw.
(v) For each 1 of the sets of tally circles:
a. 3 circle masters ( 1 per tally circle) who watch for foot faults, tell when the thrower has made the catch, and count catches out loud. He must count loud enough that the range stewards can hear him, so they can verify his count after each throw.
b. 1 scorekeeper per set of 3 tally circles
c. 6 (at least) range stewards (At least 2 for each tally circle)
(vi) 1 duration boomerang catching judge
(vii) 2 duration boomerang timers
(viii) One backup timer
(ix) 1 starter
d. Notes:
(i) If the duration boomerang goes off the competition field and therefore out of sight of the catch judge and can obviously not return, or if it climbs out of sight, the score for the round is 0 .
(ii) After the boomerang leaves the competition field, the thrower may not claim interference by anything or anyone.
(iii)The round ends when the boomerang first touches anything or when the duration thrower touches the boomerang for the first time. If the thrower then legally catches the boomerang, the turn counts. Exception: the boomerang comes to a stop, such as stuck in a tree, and is then caught, score is 0 . If the boomerang continues to fall after striking an object on the field and is caught, the catch counts.
(iv)Tally boomerangs thrown before the duration boomerang is caught, are counted if a legal catch is then made.
(v) Any thrower who makes a throw out-of-turn after the official warm-up period has ended will receive a score of 0 for his next turn. If he is a tally thrower, only his score is 0 ; if the thrower is the next duration thrower, his team's score for the next round is 0


## 13. Trick Catch/Doubling 100: Individual

Points awarded; Best: most points,
a) Circles
(i) Contested on concentric circles with 20 -meter radius range lines and 2 -meter bull's-eye
b) Required for score
(i) 20-meter flight range.
(ii) Legal catch(es) of types required in turn
c) Scoring
(i) Throwers attempt 10 trick catches with boomerangs thrown singly. They then attempt 10 additional trick catches in 5 throws with 2 boomerangs thrown simultaneously as "doublers."
(ii) If a thrower scores a perfect score of 100 points, he will continue to throw the same 15 throws in rotation. He will continue to throw until he fails to make a designated catch. He may throw alone if his throwing partner has failed to make a designated catch. In the doubling portion of the round, if he drops the first boomerang he attempts to catch, no points for a catch of the second boomerang of the doubling throw are given. His total score may accordingly be more than 100 points.
(iii)The catches must be done in the following order, and are worth the indicated number of points:

| Single Boomerang Sequence |
| :--- |
| Catch Points <br> Left-hand clean 3 <br> Right-hand clean 3 <br> Behind-the-back 4 |

Doubling Sequence

| Catch | Points | Total |
| :---: | :---: | :---: |
| Behind the back <br> \& Under the leg | $3+4$ | 7 |
| Hacky catch <br> \& Left-hand clean | $7+3$ | 10 |


| Under-the-leg | 3 |
| :---: | :---: |
| Eagle catch | 4 |
| Hacky catch | 7 |
| Tunnel catch | 5 |
| One hand behind the back | 7 |
| One hand under the leg | 6 |
| Foot/leg catch | 8 |
| Sub-total: Single catches | $\mathbf{5 0}$ |


|  |  |  |
| :---: | :---: | :---: |
| Tunnel <br> \& Right-hand clean | $5+3$ | 8 |
| One hand behind the back <br> \& One hand under the leg | $7+6$ | 13 |
| Foot/leg catch <br> \& Eagle catch | $8+4$ | 12 |
| Sub-total: Double catches |  | $\mathbf{5 0}$ |

d) Round
(i) The event includes 1 round of 15 throws for each thrower.
(ii) 2 throwers throw in rotation with each other. After the turn of the first thrower has been made, the second thrower is given a signal to start his turn. After he has finished his turn, a signal is given to first thrower to start with his next turn
(iii)Both throwers will be given enough time to avoid interfering with each other.
e) In doubling:
(i) If one boomerang is short, both are considered short.
(ii) The 2 required catches for each throw can be made in either order.
(iii)The thrower may try to perform a catch a second time in 1 doubling throw. Example: If he missed the eagle catch on the first boomerang, he can try the eagle catch on the second one.
(iv)To receive points for both catches, the thrower must catch and maintain control of the first catch while completing the second catch.
o If the first catch is not caught or control is 'not maintained, but the second one is caught, the second catch still counts but not the first.
o If the first catch is made, then not kept in the thrower's possession when the second catch is made, only the second catch counts.
f) Warm-up
(i) General warm-up: 10 minutes outside the 10 -meter circle
(ii) Individual warm-up: 2 minutes for each group before the start of their round. Can be from the bull's-eye. Timed warm-up starts as soon as the circle master signals that the circle is clear. The throwers may start their round before their allowed warm-up is over if they desire.
(iii)No practice throws after the warm-up is over.
g) Re-throws
(ii) Re-throws are made at the end of the round for the thrower's group.
h) Officials per circle
(i) May be competitors
(ii) 1 circle master who tells the thrower when he may make each throw by announcing, "circle is clear". At that moment he will start a timer to keep track of the 15 -second throwing window. He will announce: " 10 seconds remaining" then count down "5, 4, 3, 2, 1, stop", The circle master also watches for foot faults and tells when the thrower has made the catch
(iii)In windy conditions the head judges may allow for the throwers to have 30s in the doubling portion of the event. This should be announced by the head judges before the start of the event and apply to all throwers.
(iv) 1 scorekeeper
(v) 3 range stewards also verify whether catches are made or not made. They must be distributed approximately evenly around the full circle.
i) Excess wind rule for doubling:
(i) When wind conditions are too high for doubling, doubling will be replaced with a second round of Trick Catch. However, the sequence of catches will remain as printed on the doubling portion of the scoresheet.
a. If a thrower scores a perfect score of 100 points, he will continue to throw the same 20 throws in rotation if he chooses. If so, he will continue to throw until he fails to make a designated catch. He may throw alone if his throwing partner has failed to make a designated catch. His total score may accordingly be more than 100 points.
b. The wind limit for doubling is define as: max average wind speed of $5 \mathrm{~m} / \mathrm{s}$ $(18.0 \mathrm{~km} / \mathrm{h}, 11.1 \mathrm{mph})$ See sections: "Monitoring Weather Conditions" and "Cancellation of events"

## 14. Trick Catch/Doubling 100: Team

Points awarded; Best: most points; Tandem Style Event
This team event follows the same rules as the individual event with the listed modifications: 2 throwers are from the same team.
a) Scoring
(i) Team score is the total of the four team-member's individual scores.
(ii) No continuation after a perfect score (100p).
b) Interference
(i) Any contact between teammates or their boomerangs is not considered interference.
(ii) Re-throws are made at the end of the round.

## 15. Team Tapir Terror Relay: Timed Team Event

Best: fastest time
a) Objective
(i) Four team members run a relay style race from the 20 -meter circle into the 2 meter circle with each thrower executing varying tasks made up of a combination of Accuracy, Trick Catch, and Fast Catch. The objective is to accomplish all tasks in the shortest time possible or to accomplish as many of those tasks as possible within a 6 -minute time limit.
b) Rules:
(i) There will be a 2-minute warm-up in the circles before the round.
(ii) The 4 laps consist of:
a. First lap: completion of 50 points of accuracy
b. Second lap: attempt to make the first 5 trick catches [left hand clean, right hand clean, behind the back, under the leg, eagle] then; after those catches, if any were dropped, the thrower must make up 5pts each drop. The thrower can choose to make the catch (worth 5points) or to throw for accuracy points. All points made, whether from accuracy or 5pts for the trick catch are cumulative. (One 10-pt accuracy throw cancels two trick catches). The thrower is free to switch back and forth between trick catch attempts and accuracy points but must announces his intentions to the circle judges on each throw.
c. Third lap: attempt to make the last 5 trick catches [hacky, tunnel, 1 hand behind the back, 1 hand under the leg, and foot catch] then; after those catches, if any were dropped, the thrower must make up must make up 5 pts each drop. The thrower can choose to make the catch (worth 5points) or to throw for accuracy points. All points made, whether from accuracy or 5pts for the trick catch are cumulative. (One 10-pt accuracy throw cancels two trick catches). The thrower is free to switch back and forth between trick catch attempts and accuracy points but must announces his intentions to the circle judges on each throw.
d. Fourth lap: completion of 1 round of fast catch
(iii)Touching the boomerang results in 0 accuracy points. However, the thrower is allowed to stop/catch his boomerang to receive 0 points and save time.
(iv)Runners will begin from behind a gate (approximately 3 m wide marked by cones) placed on the 20 -meter line downwind from the bullseye.
(v) Each lap will follow rules for tagging in the general rules.
(vi)All throws must be made from inside the 2-meter bullseye and must pass the 20meter line.
(vii)In case a boomerang has short range, the throw has to be repeated.
(viii)After the runner has completed his lap, he must tag the bullseye before tagging the next runner or crossing the finish line in case it is the $4^{\text {th }}$ runner.
c) Timing
(i) There will be 4 lap timers: 3 official timers and 1 designated backup timer.
a. The round will start with a count down from the Gate Judge of " $3,2,1$, GO"!
b. At the announcement of "GO" the 4 timers will begin their stop watches and use the lap function on each tag then stop their watches when the fourth runner crosses the gate after the completion of his round.
(ii) In the case that the competing team will reach the 6 -minute limit without completing the round it is the responsibility of one of the lap timers to announce " 1 -minute remaining, " $30,15,10,5,4,3,2,1$, stop". No additional timer is needed for this task
d) Officials
(i) There will be 3 judges (Gate, Center, and Assistant Center judges), at least 3 range stewards, 4 timers and a score keeper:
a. The Gate Judge stands outside of the 20 -meter line and gives the countdown to start the event. In addition, he watches for legal tags and starts.
b. The Center Judge watches for foot faults, calls out accuracy points, declares that catches were valid or invalid. The Center Judge can ask the opinion of the Assistant Center Judge if the Center Judge feels that the assistant has a better view of the catch or accuracy points.
c. The Assistant Center Judge also watches for foot faults, accuracy points, and good catches but is only called on by the Center Judge as pointed out above. However, his main job is to call out the trick catches before the throw and to keep track of the dropped catches. Then, if the thrower chooses to re-attempt the dropped catches, to call out those catches or the needed accuracy point total.
d. The Score Keeper writes down the final time of a successful round or the time equivalent of an incomplete round based on the chart in the "scoring" section below. In addition, the score keeper will write down the lap times.
e. The range stewards perform the range check.
f. 4 timers: 3 official timers plus 1 backup. The backup timer is designated
before the turn begins. Use lap timers on stopwatch. See "Timing" in the general rules section.
e) Scoring accuracy points and trick catches
(i) The Center Judge (or Assistant CJ) is solely responsible for determining the accuracy values and his decision is final. However, since this is a fast-paced event, determining the value of accuracy points might sometimes be difficult.
a. In the case that a boomerang lands very close to a line, but not clearly touching the line, the CJ should give the benefit of the doubt to the thrower and award the higher value.
b. If the thrower does not like a decision that the CJ has made, he may ask the CJ to check more closely but the time will not stop. The thrower must determine if it is worth the time or not to ask the CJ to take a closer look.
(ii) The Center Judge (or Assistant CJ) is solely responsible for determining whether trick catches were successfully executed or not and his word is final. However, like in accuracy, in the case of a difficult decision about the validity of a trick catch, the benefit of the doubt should go to the thrower, and he should be awarded 5 points for the trick catch.
f) Re-throws
(i) Re-throws are made analogue to the rules of team relay.
g) Scoring the time if the event was not completed within the 6-minute limit (360s):

| Lap 1 (Accuracy) | score completed | Result |
| :--- | :--- | :--- |
|  | $0-50$ | Accuracy points divided <br> by 10. |
| Lap 2 (Trick Catch 1) | Number of trick catches or compensation completed |  |
|  | 1 | 6 points |
|  | 2 | 7 points |
|  | 3 | 8 points |
|  | 4 | 9 points |
|  | 5 | 10 points |


| Lap 3 (Trick Catch 2) | Number of trick catches or compensation completed |  |
| :--- | :--- | :--- |
|  | 1 | 11 points |
|  | 2 | 12 points |
|  | 3 | 13 points |
|  | 4 | 14 points |
| Lap 4 (Fast Catch) | fast catches completed | 15 points |
|  | 1 | 16 points |
|  | 2 | 17 points |
|  | 3 | 18 points |
|  | 5 | 19 points |
|  |  | $360 \cdot 20 / 19=378.95 \mathrm{~s}$ eror <br> better. (In case the thrower <br> injured himself after catch <br> 5 and doesn't return to the <br> bullseye). |

## 16. Long Distance

## Distance event

Best: greatest distance
a) Circles
(i) Contested on circles of 2-meter radius (which also have bull's-eyes)
(ii) Field: at least 300 m times 300 m
b) Required for score
(i) At least 50 -meter flight range. The 50 -meter minimum may be waived for new throwers or juveniles.
(ii) Legal throw from inside of the 2-meter bull's-eye and behind (down-wind) the 40-meter baseline
(iii) The baseline is a movable straight line (made from a rope) that has its middle on the center point. The bull's-eye is cut in half by the baseline. The end of the baseline is marked with a post on each side. The baseline is usually perpendicular to the wind direction. The thrower may have the line adjusted to the wind direction before each throw. Only if a severe wind shift disables a correct throwing direction, also the center of the line may be displaced. Decision by discussion or vote (more than half of the throwers of the throwing group). The new center position is determined by discussion by the throwing group with the final decision of the tournament director.
(iv) For the throw to be valid, at least one foot of the thrower must be on the ground inside the center half circle during moment of release of the boomerang. The thrower may not cross the baseline at any time while the boomerang is in the air.
(v) Boomerang must cross the baseline upon return either directly or indirectly (from behind) without being touched or hitting anything or anyone.
(vi) For a throw to be invalidated by a pole judge ("outside") the boomerang must be clearly outside, i.e., if the pole judge believes the boomerang MIGHT have touched the imaginary line extending vertically upwards from the pole, then the throw is considered a valid score.
(vii) Likewise, if the line judge believes the boomerang touches the plane extending upward from the throwing line the throw is a valid score. To be invalid, it must clearly have NOT touched or crossed the plane. Also, a boomerang that hits the throwing line on return without touching the ground in front of the line but does not cross the line is a valid score.
(viii) No catch needed.
c) Scoring
(i) Score is the longest distance travelled outward among his throws that return to or over the baseline.
(ii) The distance is measured in full meters only - no centimeters - and from the center point to the point in its flight farthest from the center point.
(iii)When two laser range finders are used, if there is a discrepancy, the score is
averaged upwards. Examples: Rangefinder 1, 100m, rangefinder 2, $99 \mathrm{~m}=100 \mathrm{~m}$ score. R1, 100m, R2 97m = 99m score.
(iv)Ties are eliminated using second highest score.
(v) To win or place in the LD tournament (or event) a thrower must participate fully in the entire event. The exception being when a thrower is injured severely enough that they must leave the field to seek medical attention. Participating fully means throwing in at least one round and spotting and/or judging in all further rounds at the discretion of the Head Judge. Simple attendance does not qualify as participation; no thrower may "sit out" on the side-lines and win or place in the event or tournament. However, it is possible for a thrower to win or place without throwing in all rounds if he participates fully, as described above, in the entire event to the satisfaction of the Head Judge.
(vi) A thrower may call no measure to save time if a valid scoring throw is thought to be well below previous scores, but it is suggested that all valid scores be measured in the event of a tie.
d) Round
(i) The event includes not more than 20 throws a day and may be divided in an arbitrary number of rounds by the organizer, for example $2 \times 5$ or $2 \times 6$ throws.
(ii) At the signal of the circle master, it becomes the next thrower's turn. He has 15 seconds to make his throw.
(iii)Placement of range spotters and orientation of throwing line is the thrower's responsibility. Concerns are directed to Line judge (circle master) who will adjust spotters and the line accordingly.
(iv)Contestants throw in groups of 5, 4, or 3. Each thrower throws in rotation with the other throwers in the group, until all throwers have completed their defined turns. Then the next group begins its round.
(v) If time allows, more than the initially scheduled rounds can be made.
e) Warm-up
(i) No practice throws once the warm-up is over.
(ii) Warm-up will be organized by the officials.
f) Re-throws
(i) Re-throws are made immediately after the protested act occurred.
g) Officials per circle
(i) May be competitors.
(ii) One circle master who watches for foot faults and measures the distance from the range coordinator to the center point.
(iii)Two baseline judges to check whether the boomerang crosses the baseline upon return.
(iv)One scorekeeper/flag operator (may be the circle master) who uses large red and green flags to advise range stewards of conditions at the throwing line, as well as using a walkie talkie. The green flag is raised when the Circle Master calls "The line is hot" to alert all on the field that a boomerang is about to be thrown. The Circle Master should call this on the walkie talkie. When the circle master sees that the field is prepared (Range Stewards are standing, and people are paying attention) the Circle Master advises the thrower "The circle is clear." Immediately upon the throw, the flag operator lowers the green flag quickly to alert all that the boomerang is in the air. Then on return of the boomerang, the red flag is waved if it is not a score, and the green flag is waved if it is a score. This information should also be communicated on walkie talkies.
(v) One range coordinator
(vi)About twelve (but at least six) range stewards to follow the flight of the boomerang with their eyes and extended arms. They direct the range coordinator to the point of greatest distance.
h) Long distance safety rules
(i) Make sure spectators are at a sufficiently safe distance!
(ii) Long Distance is the most dangerous boomerang event of all. Although the boomerangs that are used nowadays are considerably lighter than they used to be, they are still very dangerous, maybe even more so. Serious injuries may result if you are careless, because of:
a. thin material and sharp air foils
b. high speed and rotation rate
c. low return trajectory
(iii)the boomerang sometimes cannot be seen very well (paint your boomerangs in bright colors)
(iv)Even in a group of experienced boomerang throwers there should be:
(v) no simultaneous throwing of Long-Distance boomerangs. Not even with short range boomerangs.
(vi)only one Long Distance boomerang in the air at a time! The other throwers follow the boomerang with their eyes and warn if necessary.
(vii)no more throwing when a boomerang is lost, and throwers are trying to find it. Everybody should help with searching before throwing continues.
(viii)Spotters MUST stand during throw. Sitting on a stool or the ground is permitted between throws.
i) How to tell where the point of return is:

There are several range stewards on the field to determine the point of return (furthest point of the boomerang's flight path). You must be aware that if the boomerang is flying over you, it is difficult for you to judge where the projected path on the ground is. Only by spotting from a distance off to the side are you able to determine the apex of the flight path accurately. Therefore, we suggest placing a row of range stewards to the left and right of the expected throwing corridor with a 20 -meter distance between the range stewards within one row. You can also align the two rows in a staggered manner to get a better coverage. The range stewards should be spread such that all throws, including the shortest and furthest ones, can be precisely spotted. Send the furthest range steward sufficiently far out, as there may always be "lucky" throws. One of the range coordinator's duties is to ensure that the range stewards are distributed correctly. Don't use more range stewards than necessary to fulfill the task, because with too many range stewards on the field they tend to walk about and have chats! Six range stewards plus one range coordinator is the minimum. Twelve should be enough in all cases.
j) Here's what you must do as a range steward:

Follow the boomerang on its way out with your extended arm and stop when you think it
reached its furthest point. Then project that point down onto the ground by lowering your arm vertically. Fix the point on the ground with your eyes and direct the range coordinator to that point. At least one other range stewards will do the same, so the range coordinator will have to position himself such that the closest 2-4 range stewards are happy with the result. The final decision about the furthest point is made by the range coordinator. Often, there is a little conversation about the furthest point, but that's the interesting part of spotting: talk until there is an agreement! The range stewards that could not see the apex of the flight path perfectly should not interfere! The maximum distance of the boomerang is now defined as the distance from the range coordinator to the center of the throwing circle. If you have a Laser Rangefinder (e.g., a Bushnell) you can measure the distance immediately, otherwise you must place a marker in the ground and measure the distance at the end of the round with a steel tape. We estimate the accuracy of the measurement with this spotting method is 2 m in the best case, 5 m on average, and worse if the range stewards are not placed very well or if they are not paying attention. It is helpful to distribute thin wooden sticks (about 2 m long) to the range stewards, with the help of which it is much easier to follow the flying boomerang to its furthest point and then drop them to the ground.

## E. Glossary of Terms

| Term | Definition |
| :---: | :--- |
| Body trap | The boomerang may be trapped against the thrower (thrower's body) for <br> any catch for which a clean catch is not required. [see Catch, legal] |
| Boomerang | Number of arms is unrestricted. To be a boomerang, a stick must tend to <br> return because of gyroscopic precession caused by asymmetric lift. The <br> lift is created because of a throw that gives the object rotation and linear <br> motion. <br> Holes: No limit on number and size but cannot be used to aid in <br> catching. <br> Slots: No limit on number and size but cannot be used to aid in <br> catching. <br> Flaps: No limit on number and size but cannot be used to aid in <br> catching. <br> Adhesive: Nothing allowed which could aid catching. <br> Materials: Any non-metal material. Metal may be embedded or taped on <br> but may not have exposed sharp edges. <br> Other: No launching, propulsion, or catching aids may be incorporated <br> into the boomerang. <br> If a thrower wants to change boomerangs during a timed event, including <br> Super Catch, the one being replaced or a substantial part of it must be <br> returned to the bull's-eye by the competitor before any more valid throws <br> can be made. |


| Bull's-eye circle | Area inside the 2 -meter radius circle from which throws are made (4meter radius for the event Team Relay). The marked line is outside of the bull's-eye. If a thrower touches the line during the throw - before the boomerang is released - no points are scored for the throw or catch. This area is designated 10 points in Accuracy and Australian Round. |
| :---: | :---: |
| Captain, team | Person designated by a team to represent the team when vote or action is required. Each team may send an alternate representative to meetings, but each team has only one vote on any issue that requires a vote of team captains. A person can be captain of only one team. |
| C atch, behind-theback | Legal catch during which the boomerang passes behind the competitor's back or the catching hand is behind the competitor's back and withdraws the boomerang. (Catches on the side are allowed if the catching hand crosses behind the thrower's back and withdraws the boomerang from behind the thrower's back.) |
| C atch, broken boomerang | A legal catch of any part of a broken boomerang is considered a legal catch if all other requirements are met. |
| Catch, clean | Before the boomerang is caught, "popping", "bobbling" and touching is allowed only with the hand/hands/foot/feet required to do the catch. The catching hand reaches from the fingertips until before the elbow begins. The elbow is not part of the catching hand. The catching feet reach from the tips of the toes until before the knees begin. The knees are not part of the catching feet. Only during a catch under the leg or behind the back, all parts of the body except the non-catching hand, the feet, and head (safety reasons) may be touched by the boomerang before the catch. A boomerang therefore may touch the throwers shoulder before a legal catch under the leg. |


| Catch, eagle | One-hand clean catch during which the catching hand approaches the <br> boomerang from the top of the boomerang. The boomerang must be <br> caught upon first contact, no bobbling. |
| :--- | :--- |
| Catch, foot/ <br> leg | Legal catch during which the boomerang is caught with the feet or lower <br> leg. The boomerang may not touch any part of the thrower's knees, or <br> anywhere above his knees. The competitor's feet may touch the ground <br> during the catch, however the boomerang cannot touch the ground |
| C a t c h , | Legal catch after the boomerang has been returned into the air after <br> striking the foot or lower leg. Boomerang may not touch any part of the <br> thrower's knees or anywhere above his knees during the hacky portion of <br> the catch. Either or both feet/lower legs may be used. The thrower <br> attempts to kick or 'hacky' the boomerang off the foot or lower leg, and <br> then catch it prior to ground contact. After the boomerang has been <br> kicked, it may be caught with any legal catch. |


| Catch, legal | Act of stopping and obtaining full control of a flying boomerang after a <br> legal throw provided the boomerang has not touched the ground during <br> the flight or catch and provided its range is sufficient. Full control must <br> be obtained before the boomerang is allowed to touch the ground. The <br> boomerang may be trapped against the thrower on any catch for which a <br> clean catch is not specified. A boomerang may be "popped" or "bobbled" <br> but must not be allowed to touch the ground. Anything that protrudes <br> beyond the planes of the top or bottom surfaces of the boomerang may <br> not be used to assist in catching. Holes, whether open or closed, may also <br> not be used to assist in catching. In any case, the boomerang must be <br> trapped with at least 2 fingers of the same hand, both hands or both feet. <br> Simply sticking a finger, hand, or foot through e.g., a hole is not a catch. <br> No devices, mechanized or otherwise, may be used to aid in catching a <br> boomerang. |
| :--- | :--- |
| Catch, one | Legal catch with the additional requirement that during the catch the <br> boomerang may not touch the competitor except on the hand or forearm <br> of the specified side (left or right). The boomerang may not touch the <br> thrower's elbow. |
| hand clean |  |
| Catch, one- |  |
| hand behind- |  |
| the-back | One-hand clean catch that satisfies the requirements of behind-the-back <br> catch. Exception: the boomerang may touch the back or buttocks or back <br> of the legs during the catch but trapping the boomerang (either flat or on <br> edge) against any part of the body to obtain control, is not allowed. If the <br> boomerang is withdrawn after control is obtained it may touch the body <br> (even forcibly) as long as control is maintained. If control is lost, it must <br> be regained by the catching hand without trapping. |


$\left.$| C a t c h,, | Legal catch in which the boomerang passes under a leg while both feet <br> remain in contact with the ground. Lower legs or knees may touch the <br> ground. During the catch, if the thrower's catching hand/arm is under a <br> leg, but the boomerang has not yet passed under the leg, the boomerang <br> must be withdrawn under the leg to complete the catch. Control by the <br> catching hand must be maintained until the catch/withdrawal is <br> completed. |
| :--- | :--- |
| Catch, Two- | Legal catch using both hands. The boomerang may not touch any part of <br> the body except the hands/forearms. It may not touch the thrower's <br> elbows. |
| Catch, under- <br> the-leg | Legal catch in which the boomerang passes under a leg. During the <br> catch, if the thrower's catching hand/arm is under a leg, but the <br> boomerang has not yet passed under the leg, the boomerang must be <br> withdrawn under the leg to complete the catch. Control by the catching <br> hand must be maintained until the catch/withdrawal is completed. |
| C a t h, |  |
| Unofficial | Catch which does not meet all the requirements of a legal catch. Not <br> counted as a catch. <br> Catch, under- <br> the-leg, one- <br> handed | | One-hand clean catch that satisfies all the requirements of under-the-leg |
| :--- |
| catch. Exception: the boomerang may touch the leg, body, or buttocks |
| during the catch, but trapping the boomerang (either flat or on edge) |
| against the leg or body to obtain control is not allowed. When the |
| boomerang is withdrawn, after control is obtained, it may touch the body |
| (even forcibly) as long as control is maintained. If control is lost, it must |
| be regained by the catching hand without trapping. | \right\rvert\,


| Catching Aid | Any characteristic of a boomerang, hand, or other object that provides a <br> catching advantage and is therefore prohibited. Some examples are: <br> a) Chemical or mechanical (Velcro) adhesives applied to the boomerang, <br> the thrower, or his clothing <br> b) Any extension to the thrower's hand, arm, leg, etc. <br> c) Any item used to intercept a boomerang. |
| :--- | :--- |
| Center point | Point at center of bull's-eye from which the radius of all accuracy and <br> range circles are measured. |
| Circle Master | Makes sure the field is prepared for the event. <br> Person responsible for fair conduct of events at each circle included in <br> the tournament. This includes interpreting the rules, organizing other <br> officials and stewards, and recording scores. |
| Competition | Area where tournament is to be held. Limits to be specified before the <br> start of the contest. <br> a) Area specifically reserved for the boomerang competition and <br> specifically authorized for use prior to the start of the event. Parking and <br> spectator areas, adjacent in-use sports fields, streets, and any other areas <br> designated as off limits, before the start of the competition, are not part <br> of the competition field. Adjacent land is not considered to be part of the <br> competition field. <br> b) Competition circles' area on which an event is held. Made up of a <br> series of concentric circles ranging from 2m to 10 m radius (every 2 m <br> for accuracy) and 20 m to 50 m radius (every 10 m for range of flight). |


| Countdown | Verbal announcement by circle master or official person to a thrower that indicates the 15 seconds the thrower must make his throw. Countdown should be made like this: "15" - "10" - "5" - "4" - "3" - "2" - "1" - "Out!" <br> If the thrower fails to throw in time, the turn is scored 0 . <br> The circle master may begin the 15 -second countdown when the circle is clear, and the next competitor enters the 8 -points circle. No competitor should delay entering the 8 -point circle or the circle master can begin the 15 seconds before the competitor enters the 8-point circle. |
| :---: | :---: |
| Disqualified <br> f $\begin{array}{llll} & \mathrm{o} & \mathrm{m}\end{array}$ competition | Disqualified throwers may not throw, coach, or act as his teams' designated judge for an event. He is to remain off the competition field for the duration of the disqualification. |
| Duration <br> Boomerang | The MTA in Team Super Catch. Any boomerang may be used as duration (MTA) boomerang. |
| Flight range | see Range of Flight |
| Foot fault | Occurs when during his throw, the thrower's foot touches the line that defines the bull's-eye for the event. The thrower's foot touches the line of the bull's-eye before or while releasing his boomerang. The throwing movement must stop clearly without a foot touching the line of the bull'seye before the thrower leaves the 2 -meter circle to perform a catch. In Long Distance the thrower may at no time touch or cross the line of the 2-meter circle and the 40 -meter baseline. |
| Gate | Start/finish area on the 20-meter or 30-meter line in a relay event. <br> The start, finish, and all tags must take place within a team's gate. |


| Ground | As used in the legal catch definition, point where the Earth or its <br> coverings is firm enough to noticeably affect the linear or rotational <br> motion of a boomerang in flight or during a catch. |
| :--- | :--- |
| He/His | Reference to the male gender, includes the female gender. |
| Head judges | Group of 2-3 people taking final decisions during the tournament and <br> organizing the team events (e.g., Preparing the material for the event, <br> assigning the judges). |
| In dividual | After the general warm-up and before the turn of each competitor there <br> may be Individual Warm-up. According to the different events, <br> "Individual "means thrower (e.g., in Fast Catch), pair of throwers (e.g., <br> Trick Catch/Doubling), group of throwers (e.g., in Individual Accuracy <br> 100) or group of pairs of throwers (e.g., in Team Australian Round). <br> Individual Warm-up time is defined in the event rules. <br> The timed warm-up starts as soon as the circle master signals the circle is <br> clear. The thrower may start his round before his allowed warm-up is <br> over if he desires - provided he has announced that his warm-up is over, <br> and he has been given "circle is clear" or "timers are ready" as <br> appropriate. |

$\left.\begin{array}{|l|l|}\hline \text { Interference } & \begin{array}{l}\text { Situation in which the flight of a boomerang is altered by contact with } \\ \text { another person's boomerang in flight, a person, animal, or pre-designated } \\ \text { obstruction. Interference occurs if a boomerang is caught or deflected by } \\ \text { someone other than its thrower. Interference can be called if a thrower is } \\ \text { prevented from getting to his boomerang for a catch by a person or } \\ \text { animal. } \\ \text { Interference may not be called if the boomerang hits the ground before } \\ \text { the alleged interference. Re-throw policy is defined in each event's rules. } \\ \text { Any contact between teammates or their boomerangs is not considered } \\ \text { interference. }\end{array} \\ \hline \text { Judge } & \begin{array}{l}\text { Person responsible for fair conduct of the events included in the } \\ \text { tournament. } \\ \text { This includes interpreting the rules, organizing other officials and } \\ \text { stewards, and recording of scores. The judge may be the circle master, } \\ \text { the head judge, or an event judge designated by the tournament director } \\ \text { or head judge. A judge may have more than one task at a time if he can } \\ \text { perform these tasks properly. }\end{array} \\ \hline \text { Official } & \begin{array}{l}\text { E.g., tournament director, head judge, circle master, or the referee or } \\ \text { person designated to officiate in an event. Officials may be competitors } \\ \text { or non-competitors. An official may have more than one task at a time as } \\ \text { long as he can perform these tasks properly. }\end{array} \\ \hline \text { Meter circles } & \begin{array}{l}\text { Lines marked the specified distance from the center point on the field. }\end{array} \\ \text { event. Not counted as a catch. } \\ \text { made after a throw or flight which did not meet the requirements of the }\end{array}\right\}$

| Officiating <br> Assignments | Duties an individual must perform when designated by the tournament <br> director, head judge, circle master or the referee or other person to <br> officiate in an event. Officials may be competitors or non-competitors. |
| :--- | :--- |
| Po int of <br> contact | Area of the body which touches the ground. For example, the entire <br> bottom of a foot or the tip of a toe could be one point - whatever is <br> touching the ground. Two feet on the ground is one point. |
| R a nge of <br> flight | Outermost meter circle over which the boomerang flies in outward flight <br> (towards the wind) - between when it is thrown from the bull's-eye and <br> when it returns toward the thrower. |
| R a n g e | Judge who oversees checking the distance of a flight of a boomerang. <br> One of the range stewards may be or act as a range coordinator who is <br> the only one who may yell "short", if a boomerang fails to cross the <br> minimum distance. He should be specified before the round - typically <br> the last in the row of the spotters. The yell "short" should be uttered <br> before the catch. |
| Red card | Second penalty or intentional interference assessed to team or individual. <br> Results in disqualification. See Penalties in General Rules. |
| Re-throw | Throw taken to obtain a new score instead of the score lost due to <br> interference and/or protest on a throw during a previous turn. May also <br> be ordered by judge if original throw could not be properly scored. Re- <br> throws are conducted and scored to ensure the fairness of the official <br> scores. The score of the re-throw substitutes the previous score (in case it <br> existed). <br> On when a re-throw will be conducted, see rules for each event and <br> General Rules > Timing. |


| Round | A sequence in an event in which each thrower (all throwers) has an opportunity to have a specified number of turns. Turns may be in rotation with throwers from other teams, consecutively, or simultaneously per event rules. |
| :---: | :---: |
| ShortHanded Throwing | A team throws short-handed when it uses less than 4 throwing members. This may be because of a penalty. |
| Stopwatch | Every thrower and judge must have a working stopwatch that times to $1 / 100$ of a second and has a lap timer. Stopwatches must be the handheld type, not the wristwatch type. Stopwatches are required to register for the team tournament and for the individual tournament. <br> Always use lap timers on stopwatch. <br> Devices having a stopwatch only as an additional function and not as primary function, such as mobile phones, are not allowed. |
| $\text { T a } 1 \quad 1 \quad y$ <br> Boomerang | The Fast Catch in Team Super Catch. Any boomerang may be used as tally (Fast Catch) boomerang. |
| Tandem Throwing | 2 throwers throw simultaneously within a specified time. The second thrower in a pair must throw within a specified time of the first thrower. If the circle master rules that more than the specified time has elapsed between throws, both throws are scored 0 . |


| Tag | Touch of one thrower, whose turn is ending, to his teammate, whose turn <br> is starting, in a relay event. The thrower whose turn is starting must have <br> both feet on the ground within the gate area and outside the designated <br> line (20 meter or 30 meter) until he is tagged. When he is tagged, his turn <br> begins, and he may start running (standing start). Contact must be made <br> between the hands of the thrower finishing his turn and the thrower <br> starting his turn. This contact must take place outside the range line at the <br> gate (behind the team's starting line). |
| :--- | :--- |
| Throw, legal | Throw of a boomerang from inside the bull's-eye or other designated <br> area that satisfies any range requirements of the event. |
| Throw on | Boomerangs must be thrown upon verbal command of event judge. <br> Release may take place at any time from the moment the command is <br> made until two seconds after. If delay is longer, thrower loses his turn. <br> For an event in which the throw does not have to be on command, see <br> Countdown. |
| Tomnel catch | See Catch, two-feet-on-ground under-the-leg (Tunnel) |
| Tournament | See Official <br> Tirector |
| See Body Trap |  |
| also General Rules > Responsibilities of Officials) |  |


| Turn | Thrower's opportunity to perform in an event. The sequence of turns for <br> each competitor is set in all events before the start of the tournament. <br> A turn begins when the previous thrower's turn has been scored or any <br> time thereafter when the event judge indicates that officials are ready. <br> The thrower must make his throw within 15 seconds of the start of his <br> turn unless otherwise advertised or announced before the start of the <br> tournament. Extensions may be allowed by judges if done fairly and <br> consistently. |
| :--- | :--- |
| U n s c o re d | Round in which an official score could not be recorded because of <br> interference, or because the judge could not properly score the round. <br> May result in a re-throw. If no re-throw is made (for example, due to an <br> injury), the judges determine the score so that no thrower receives an <br> advantage or disadvantage. |
| Warm-up | There is general warm-up in designated areas on the competition field <br> before the start of each event. Warm-up time is defined in the event rules. |
| Yellow card | First level penalty assessed to team or individual. See Penalties in <br> General Rules. |

## F. Organizing the Tournament

Topics in this section are part of a Tournament Handbook (not yet written) that contains information for tournament directors, organizers, and teams. This information is needed for running the tournament but is not needed in the rule book for the field events. However, there is information available online about "How to run a boomerang world cup" http:// www.ifbaonline.org//wp-content/uploads/WBC_BehindTheScene_v04.pdf

## 1. Order of Throwing

a) The order of throwing must be determined before throwers arrive at the tournament.
b) Charts will be made for each team test day and for each individual test day.
c) Copies of these lists will be given to throwers before the first event and to team captains before the captains' meeting.
d) These sheets are to be posted.
e) Any possible problems should be brought to the tournament officials' attention before the tournament starts. Tournament directors can set a deadline for requesting changes.

## 2. Announcements

a) Before the start of the first event all throwers will be told the following as soon as possible:
(i) Names of tournament officials, judges, referees, and safety officers, and alternates.
(ii) Order in which competitors throw. Order must be arbitrary. It must be set and announced for all events before the first event begins.
(iii)General rules and ground rules that pertain to all events.
(iv)These announcements can be made at the captains' meeting.

## 3. Organization of Events

a) For the start of each tournament day, check the timetable.
b) Before the competition begins, the order of the events of each day is posted at the tournament website and on the field.
c) Throwing orders, circle assignments, and officiating assignments are available before each event and are announced or posted on the field.
d) Team events: scheduling
(i) There will be 3-4 team match days plus a weather day, if needed, during the days of the championships.

Competitive events are thrown at most three days in a row to minimize risk of injuries raising.
(ii) Team style events are prioritized (Super Catch, Relay and Endurance Relay)
(iii)Each of the events should be contested at least 2 times with a goal of 3 times.
e) Individual Events
(i) There will be 2 individual match days during the days of the championships.

## 4. Team makeup

a) The WBC should host a mixture of teams through all throwing countries:
(i) Nationals Teams (Depending on max team contingent 1-3 per nation)
(ii) International Women Team (Depending on max team contingent 1-2 women teams)
(iii)Veteran's Team: made up of seniors ( 50 or 55 to be determined) who did not qualify for the national team or who are from a non-member nation.
(iv)International mixed teams (Depending on max team contingent 1-2 teams)

Made up of throwers from IFBA member or non-member nations which qualify for the WBC but do not have a national team to throw in.

Note: Only national teams are invited directly by the organization committee. The multinational teams must contact the organization proactive.

## 5. Use of Extras for Team Events

a) Teams may have 5 or 6 throwing members ( 4 team members throwing and 1 judging during an event).
b) Veteran's teams and the team with the tournament director can have more throwers. *
c) Teams with less than 6 throwers may add extras with the permission of the tournament officials. Extras should not bring team size to more that 6 . All extras must be approved by the tournament officials before each event.
d) Extras may compete for only 1 team during the team tournament.
e) In case of emergency or injury which brings a team to a size of 3 competitors or less, the tournament officials can approve the use of extras at that point. If a team member can re-join the team later, the team member replaces the extra that replaced him originally.

## 6. Scoring the World Championships 2024

a) Event scoring at the tournament is done according to the event rules.
b) Overall scoring will be done with the relative scoring system for both team- and individual events.
c) Scoring can be kept and analyzed on electronic devices, but a paper accounting must be kept for the record of all scores and placings.
d) Official tournament size is the number of:
(i) Team cup: Teams registered at the start of the first event. There is no minimum number of teams.
(ii) Individual cup: Throwers registered at the start of the first event. There is no minimum number of throwers.

## 7. Scoring Systems

a) The rank based scoring system (RBSS)
(i) Placing points in Each Event
a. $\quad 1$ st place $=1$ placing point, 2 nd place $=2$ placing points, 3 rd place $=3$ placing points, last place $=\mathrm{n}$ placing points (number of teams or individuals entered)
b. Example

- Team: If there are 20 teams, the 1 st place team in an event receives 1 placing point. 2nd place receives 2 placing points, 3 rd receives 3 placing points, last receives 20 placing points.
- Individual: If there are 100 individuals, the 1st place individual in an event receives 1 point, 2nd place receives 2 points, last receives 100 points.
c. Ascending placement system: Maximum placing points in an event equal the total number of teams or throwers in event.
d. No additional points are given for winning an event.
e. Tied teams or individuals split the placing points of the places they would have taken if they had not tied.
- Example: If 3 teams tie for 2 nd place, they would divide up the placing points for 2 nd , 3 rd , and 4 th places. The next team would receive placing points for 5th place.
f. Non-scores, failure to compete, or any team/thrower disqualified in an event or overall will receive n placing points (the worst placing points possible) in this event or overall.
g. Number of competing teams/throwers ( n ) will remain the same as if none were disqualified. Placing points for disqualified teams/throwers are not treated as if there were a tie. Disqualified teams/throwers are awarded points equal to the official tournament size (last place placing points).
- Example ( 50 competitors and 2 disqualified): 1 st place $=1$ placing point, last place but not disqualified $=\mathrm{n}-2$ placing points $(50-2=48$ placing points), 2 disqualified throwers n points ( 50 placing points) per thrower.
h. Disqualified teams/individuals receive maximum placing points for the event. They cannot win the tournament. If no other teams/individuals are disqualified, they will place last in the tournament, no matter how good their other scores were.
i. The team/individual that accumulates the least placing points in a test match is the winner of the match. Lowest placing points over 1 match is best; highest placing points over 1 match is last.
j. The World Team Champion is the team which accumulates the least placing points from all days. Lowest placing points overall is best, highest placing points overall is last.
k. The World Individual Champion is the individual who accumulates the least placing points from all days. Lowest placing points overall is best, highest placing points overall is last.
b) The relative scoring system (RSS)
(i) The Relative Scoring System converts event scores into an overall score by using a logarithmic function. This differs from the Rank Based Scoring System that converts event scores into an overall score by using placing points.
(ii) The RSS converts scores in every event into overall points from 0 to 1000 with the 1000 -point benchmark assigned to either the maximum points possible in the event or close to the current world record. This means that in some events it is possible to score more than 1000 but, keep in mind that those higher values are still "relative" to other scores so there is no added "reward" for an exceptional score in those events. See detail below.
(iii)The math:
a. The winner is the one earning the highest sum of Points.
b. For all formulas, $\lg$ is the logarithm of base $10 . \lg (10)=1, \lg (100)=2$ etc. Point values to be rounded down to the next integer number. Perfect scores or scores close to the world records define the 1000P benchmarks.
c. For events, where the largest number of points or the highest score is best, points for the overall ranking are awarded as
where MAX the 1000P benchmark. For Trick Catch/
Doubling, Accuracy, Aussie Round that's 100p.
d. For events, where the smallest score is best, points for the overall ranking are awarded as
where MIN is the 1000 P benchmark.

Timed events have a number of N tasks or rounds to be accomplished (example 5 catches in Fast Catch. Or $3 \times 10 \mathrm{p}+6 \mathrm{c} .+5 \mathrm{c} .=14$ tasks in Tapir). Additionally there may be a time limit $t_{\text {max }}$. For example $t_{\text {max }}=60 \mathrm{~s}$ in Fast Catch. If a competitor did n tasks within the time limit, his calculated score will be the expected time to accomplish all N tasks.
e. For completed rounds the score is the measured time, but not worse than tmax $\mathrm{N} /(\mathrm{N}-1)$.
f.
g. For example, if a thrower gets injured after the catch in Team relay before returning to the gate, the score is $300 * 8 / 7=342.857 \mathrm{~s}$ in Team Relay.

A zero score as awarded with 0 Points.
Note: The choice of MAX and MIN has no impact on the overall rank, except for scores very close to zero.
h. In events without a technically best possible score (Fast Catch/Tapir/ Endurance) more than 1000P can be awarded. In events with a limit/ technically best possible score (like Accuracy), 1000P is the highest number of points.
i. Competitors not showing up or not throwing at all (np) will receive -200P.
j. See appendix for tables for the events.
k. Rules of thumb

For scores greater than $10 \%$ of the 1000P benchmark (example: 2c in Fast Catch or 10P in Accuracy) the following rules of thumb can be used:

| A beats B | by factor 1.01 or <br> $1 \%$ | ex. 30 s vs 29.7 s in FC | ca. 2P difference |
| :--- | :--- | :--- | :--- |
| A beats B | by fact. 1.1 or $10 \%$ | 88 P vs 80 P in ACC | ca. 20 P diff. |


| A beats B | by fact. 1.2 or $20 \%$ | 16.67 vs 20 s in FC | ca. 39 P diff. |
| :--- | :--- | :--- | :--- |
| A beats B | by fact. 2 or $100 \%$ | 2 c vs 1 c in FC | ca. 148P diff. |
| team A beats team B | by fact. 3 or $200 \%$ | 99 c vs 33 c in Super <br> catch | ca. 230P diff. |

Contrary to position-based systems, these values do not depend on the presence of an additional thrower/team C.
c) The relative scoring system points tables - short version - individual
(i) Full tables are available in the Relative Scoring System Tables Booklet

| Points | FC |  | END | $\begin{aligned} & \text { ACC/AR/ } \\ & \text { TC } \end{aligned}$ | MTA1/5 | MTA3/5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1020 | 13.67 |  | 87 |  |  |  |
| 1000 | 15.00 |  | 80 | 100 | 50.00 | 150.00 |
| 980 | 16.47 |  | 72 | 91 | 45.55 | 136.66 |
| 960 | 18.08 |  | 66 | 83 | 41.50 | 124.50 |
| 940 | 19.84 |  | 60 | 75 | 37.80 | 113.42 |
| 920 | 21.78 |  | 55 | 68 | 34.43 | 103.30 |
| 900 | 23.92 |  | 50 | 62 | 31.36 | 94.08 |
| 880 | 26.27 |  | 45 | 57 | 28.55 | 85.67 |
| 860 | 28.85 |  | 41 | 52 | 26.00 | 78.00 |
| 840 | 31.69 |  | 37 | 47 | 23.66 | 71.00 |
| 820 | 34.82 |  | 34 | 43 | 21.54 | 64.62 |
| 800 | 38.27 |  | 31 | 39 | 19.60 | 58.80 |
| 780 | 42.06 |  | 28 | 35 | 17.83 | 53.49 |
| 760 | 46.25 |  | 25 | 32 | 16.21 | 48.65 |
| 740 | 50.86 |  | 23 | 29 | 14.74 | 44.24 |
| 720 | 55.95 |  | 21 | 26 | 13.40 | 40.21 |
| 700 | 61.58 |  | 19 | 24 | 12.18 | 36.54 |
| 680 | 67.79 |  | 17 | 22 | 11.06 | 33.19 |
| 660 | 74.65 |  | 16 | 20 | 10.04 | 30.14 |
| 640 | 4c | 659 | 14 | 18 | 9.11 | 27.35 |
| 620 | 3 c | 600 | 13 | 16 | 8.27 | 24.81 |
| 600 | 2c | 518 | 11 | 14 | 7.49 | 22.49 |
| 580 | 1c | 387 | 10 | 13 | 6.79 | 20.38 |


| 560 |  | 9 | 12 | 6.15 | 18.45 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 540 | 8 | 11 | 5.56 | 16.70 |  |
| 520 |  | 8 | 10 | 5.03 | 15.09 |
| 500 |  | 7 | 9 | 4.54 | 13.63 |

d) The relative scoring system points tables - short version - team
(i) Full tables are available in the Relative Scoring System Tables Booklet

| Points | TEAM ACC/ AR/TC | TEAM MTA relay | $\begin{aligned} & \text { T E A M } \\ & \text { END } \end{aligned}$ | TEAM super | TEAM relay | $\begin{aligned} & \text { TEAM } \\ & \text { tapir } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1020 |  |  | 65 | 109 | 127.57 | 164.02 |
| 1000 | 400 | 200.00 | 60 | 100 | 140.00 | 180.00 |
| 980 | 364 | 182.22 | 54 | 91 | 153.66 | 197.56 |
| 960 | 332 | 166.01 | 49 | 83 | 168.67 | 216.86 |
| 940 | 302 | 151.22 | 45 | 75 | 185.16 | 238.06 |
| 920 | 275 | 137.74 | 41 | 68 | 203.28 | 261.36 |
| 900 | 250 | 125.44 | 37 | 62 | 223.21 | 286.98 |
| 880 | 228 | 114.23 | 34 | 57 | 245.12 | 315.16 |
| 860 | 208 | 104.00 | 31 | 52 | 269.23 | 346.15 |
| 840 | 189 | 94.67 | 28 | 47 | 295.76 | 19p 840 |
| 820 | 172 | 86.16 | 25 | 43 | 324.96 | 15p 790 |
| 800 | 156 | 78.40 | 23 | 39 | 7 c 808 | 10p 705 |
| 780 | 142 | 71.32 | 21 | 35 | 6c 776 | 5p 563 |
| 760 | 129 | 64.87 | 19 | 32 | 5c 737 |  |
| 740 | 117 | 58.98 | 17 | 29 | 4c 691 |  |
| 720 | 107 | 53.62 | 16 | 26 | $3 \mathrm{c} / 631$ |  |
| 700 | 97 | 48.72 | 14 | 24 | 2c 549 |  |
| 680 | 88 | 44.25 | 13 | 22 | 1c 415 |  |
| 660 | 80 | 40.18 | 12 | 20 |  |  |
| 640 | 72 | 36.47 | 10 | 18 |  |  |
| 620 | 66 | 33.08 | 9 | 16 |  |  |
| 600 | 59 | 29.99 | 8 | 14 |  |  |
| 580 | 54 | 27.18 | 8 | 13 |  |  |
| 560 | 49 | 24.61 | 7 | 12 |  |  |
| 540 | 44 | 22.26 | 6 | 11 |  |  |
| 520 | 40 | 20.13 | 6 | 10 |  |  |
| 500 | 36 | 18.18 | 5 | 9 |  |  |

## 8. Cancellation of Events

a) Before the beginning of the tournament, the Tournament Director will publish the order in which events would be cancelled each day due to time reasons.
b) Advertised tournaments/events are held on schedule, regardless of weather or other occurrences unless officials decide to take a break at the scheduled starting time to cancel or postpone it.
c) In case of heavy rain, heavy wind, or other hazardous conditions, tournament officials will decide whether to continue with the event or take a break and wait for the condition to lighten up.
d) These are the weather conditions in which a competition should be cancelled, postponed, or recessed.
(i) Maximum temperature $38 \mathrm{C} / 100.5 \mathrm{~F}$
(ii) All events: maximum average winds speed of $6 \mathrm{~m} / \mathrm{s}(21.6 \mathrm{~km} / \mathrm{h}, 13.4 \mathrm{mph})$ *
(iii)Doubling: max average wind speed of $5 \mathrm{~m} / \mathrm{s}(18.0 \mathrm{~km} / \mathrm{h}, 11.1 \mathrm{mph})$ *
*Wind speed will be measured at 2 meters above ground on the playing field and monitored continuously over 10-minute intervals
e) In the case of light rain, the contest will go on.
f) If lightning is visible from the field and appears to be coming closer, tournament officials will take a break and wait for the storm to pass over.
g) If the officials decide to take a break (in case of rain, lightning, etc.), they must do so between rounds of the event if possible. The rest of the event must be contested on the same day, or the event will be considered cancelled and scoring for the event will be one of the following:
(i) If the event has rounds (such as Australian Round with each team up more than once), then the scores for the number of rounds that all teams have completed will be the event scores. Example: If every team had two throwers complete Australian Round but some teams had three throwers complete the event, the scores for the first two throwers are the team scores for the event. Any rounds not begun at the time of the interruption may be completed when the contest resumes, and the scores will be included in the official team score.
(ii) If the event is contested once by each team (such as Team Endurance) and every team has not completed their round, then no score will be recorded for the event.
(iii)When and if the tournament can restart later in the day and too much time has been lost to continue the paused event, the next event on the schedule or according to the time schedule will be contested.

## 9. Rescheduling Events in Team Championships

a) The goal of the tournament organizers is to complete all events during the team tournament on the scheduled days. If weather or other problems reduce the total events to less than the scheduled number, a champion will still be declared. The following guidelines determine the rescheduling of events if events are rained out.
b) If first or second day is completely rained out, then the day will be contested on the rain day, using the same order of events as previously published: If the first day is rained out, the scheduled events for the second day shall be conducted for the second day and the scheduled events for the first day shall be conducted for the rain day. If the second day is rained out, the scheduled events for the second day shall be conducted for the rain day.
c) If both days are rained out, scheduled events for the 1st day are conducted on the rain day.

## 10. Rescheduling Events in Individual Championships

a) The goal of the tournament organizers is to complete all events during the individual championships on the scheduled days. If weather or other problems reduce the total events to less than the scheduled number, a champion will still be declared. The following guidelines determine the rescheduling of events if a day is rained out.
b) The Individual Championships are approved even if it continues to rain to the second day.
c) If the first day of the Individual Championships is cancelled for any reason, the scheduled events for the second day shall be conducted for the second day.
d) However, the tournament director may decide before the beginning of the tournament that the second day might be run with a revised schedule to test a variety of skills. This revised schedule can contain events from either day. The tournament director will set the revised schedule before the beginning of the tournament. A suggestion: Australian Round, Trick Catch/Doubling 100 (or just Doubling 50), Fast Catch, MTA 100.
e) If the second day is cancelled due to the bad weather, then the placing shall be determined by the first day scores or at the end of the rain day, if one.

## G. Recording World Records

This section does not belong in the Rule Book for Events. It probably belongs on the IFBA web site and in the Tournament Handbook.

1. World records
a) Scores set during Team Cup do not count toward a World Record.

## 2. IFBA Recognition

a) The IFBA will recognize a world record only, if:
(i) The event is contained in the most current IFBA rulebook or a traditional event with commonly accepted rules (example: Most Consecutive Catches).
(ii) The record was achieved in an event that was contested no more than once in a day -or- The record was achieved in first attempt of an event that was contested more than once in a day.
(iii)In any case, IFBA may (not must) vote to accept or not accept a world record.
(iv) These events are listed:
a. Accuracy 100 ( 5 sets of 2 throws)
b. Accuracy 50 ( 5 sets of 1 throw)
c. Fast Catch (2 rounds)
d. MTA $100(3,4$, or 5 throws)
e. MTA unlimited (3, 4, or 5 throws) (may be the out-of-bounds score from an MTA 100 event)
f. MTA3+ (the sum of the best three scores of five throws)
g. Australian Round (max. 100 points from 5 sets of 1 throw)
h. Trick Catch/Doubling 100 (Christchurch System)
i. Endurance (most catches from a 5 -minute period)
j. Long Distance (best score from one or two rounds of 5 sets of 1 throw)/(best score from a maximum of 20 throws a day)
k. Juggling (most catches in a row until one of the two boomerangs is not caught) (the first two throws must have the 20 m minimum).

1. Most Consecutive Catches (most catches in a row until the boomerang is not caught, 20 m pre-qualification needed, but not checked on every throw)

## 3. Conditions for Reporting Records

a) These records must be achieved during a tournament recognized by an IFBA country member. Most likely, all IFBA country members will only recognize or not recognize a tournament within their territory. In other cases - Long Distance tournament in the Sahara - the IFBA Directive Committee will decide.
b) Every country may ask to add an event to the IFBA record list (an entry in the IFBA rulebook is needed then) proposing it in the general meeting.
c) The IFBA Directive Committee has arranged all needed changes to the rule book and/ or record list until the next general meeting at the latest.
d) If a competitor achieves a perfect score in:
(i) Accuracy 100 ( 5 sets of 2 throws), he continues to throw in sets of 2 throws until at least one or both throws is not a perfect 10 (ex: 9 and 10). The total score would be 109 .
(ii) Accuracy 50 ( 5 sets of 1 throw), he continues to throw in sets of 1 throw until one throw is not a perfect 10 (ex: 9). The total score would be 59.
(iii)Australian Round (max. 100 points from 5 sets of 1 throw), he continues to throw in sets of 1 throw until one throw is not a perfect 20 (ex: 19). The total score would be 119 .
(iv)Trick Catch/Doubling 100 (Christchurch System), he continues to throw in sets of 1 throw (in doubling: 1 throw with two boomerangs) until one throw (in doubling: 1 throw with two boomerangs) is not a caught. The total score is 100 plus all the points of the catches made (in doubling: If the first boomerang is caught and the second is dropped, the points for the catch are given, but the thrower has to stop. If the first boomerang is dropped and the second is caught, no points for the catch are given and the thrower has to stop).

