Event 4: Paper Boomerang

Objective: To design and build a paper boomerang that returns the greatest distance.

Rules:

a. Each team will design and build their boomerang from paper and/or manila folders (or similar material) and only 3M scotch transparent tape, ½ inch wide or similar brands.
b. The team will bring their boomerang built or partially built to the competition.
c. The boomerang must be able to fit inside an empty closed box with dimensions of 18.0 centimeters wide x 18.0 centimeters inches long x 5.0 centimeters height.
d. The boomerang can only be hand thrown, no launching device allowed.
e. The competition area may be in an all-purpose room cafeteria with gym height ceilings, a typical high school class/lab room or, weather permitting, outside in the school’s parking lot or field.

COMPETITION AND SCORING:

a. One person from the team will stand at the center of a 16.0-foot diameter circle and will throw the boomerang.
b. The boomerang must travel outside this 16.0-foot diameter circle for the throw to qualify.
c. The boomerang that travels the furthest distance from the thrower, returns to and is caught by the thrower wins.
d. When catching the returning boomerang, the thrower may not step outside a 6.0-foot circle located within the 16.0-foot diameter circle.
e. A disqualification score of twenty (20) points lower that the lowest score will be awarded for a boomerang that returns but is not caught by the thrower or travels forward less than 8.0 feet but more than 4 feet and returns to the thrower. No score less than zero.
f. The thrower may need to compensate for the length, width and height of the competition room as well as for any non-movable obstacles. If the competition takes place outside, the thrower may need to compensate for mild weather conditions.
g. The team will be allowed one (1) practice throws either just before their time to compete or while other teams are competing.
h. The better of 2 trials qualifying or not will be used to calculate the team’s score.
i. To break winning ties, the judge(s) may, among other possible rule changes, require the boomerang to travel further than 8.0 feet before returning.

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\text{SCORE} = \frac{(\text{Team distance})}{(\text{Best distance})} \times 100
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Updates to the rules and frequently asked questions with answer are available at: njaat.wildapricot.org. It is the team’s responsibility to check for changes and clarifications to the rules.