

Cardboard Boat Regatta Rules

2017

Saturday, July 1st • 5pm • Lakeside Park
Check-in/Inspection at 4:30pm



Awards sponsored in part by:



EXCHANGE

ARMY & AIR FORCE EXCHANGE SERVICE

1st Place: \$150 AAFES Gift Card

2nd Place: \$100 AAFES Gift Card

3rd Place: \$60 AAFES Gift Card

gift cards will be split based on the size of your team

“Pride of the Regatta” (best design): \$50 MWR Bucks

“Team Spirit Award” (best spirit!): \$50 MWR Bucks

“Titanic Award” (best sinking): \$50 MWR Bucks



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MWR Cardboard Boat Regatta 2017

July 1st, 5:00 PM at Lakeside Park

(Check –in/inspection) at 4:30 PM at Lakeside Park

Sign up at the Tickets and Travel Office (817-782-6121) by Wednesday, June 28th

(Need a minimum of 6 boats to have the Regatta)

Design and build a person-powered corrugated cardboard

Boat capable of racing a 200-yard course.

Boats made entirely of corrugated cardboard, including decorations, and propelled only by canoe paddles, oars or kayak paddles. Life jackets are required for all participants in the boats. No drinking of Alcohol allowed prior to or during the race.

The Awards

First, second and third place, sponsored in part by AAFES — For fastest boats

1st - \$150 AAFES gift card

2nd - \$100 AAFES gift card

3rd - \$60 AAFES gift card

cards will be split into increments based on number of team members on the team

\$50 MWR Bucks for the following:

Pride of the Regatta — Most creative design and best use of corrugated cardboard

Team Spirit Award — For the team that has the most fun participating... dress up, incorporate a theme, etc.

Titanic Award — Most spectacular sinking

RULES FOR ALL BOATS

1. The boat captain must pre-register at the Tickets and Travel Office by Wednesday, June 28th.
2. The entire hull, superstructure and seating of all boats must be made entirely of corrugated cardboard.
3. Only corrugated cardboard is allowed. Any thickness is permitted. If it's not corrugated, don't use it! This includes carpet tubes or barrels.
4. The hull may not be wrapped in plastic, duct tape, shrink wrap or anything else.
5. Only seams and joints may be taped, not the whole boat.
6. Items used as fasteners (nuts, bolts, washers, staples, glues) as well as the oars may be of material other than cardboard.

7. Your boat must be free of sharp edges, pointy objects or anything else that could cause injuries.
8. The boat's passenger area must not be permanently enclosed above the occupants' shoulders. Each person must be visible while the boat is in the water.
9. Absolutely NO use of the following items: Tar-based substances, two-part varnishes, fiberglass resin, epoxy glue, any other two-part substances, or corrugated cardboard that's bonded to any material.
10. To qualify as a finisher in any heat, you must be IN your boat, not towing it in your teeth or between your legs.
11. No more than six humans allowed in any boat. All crews must consist only of friendly and reasonably warm-blooded characters.
12. No children under the age of 12 are allowed in the boat.
13. All boat occupants must wear a properly fastened life jacket while in the boat or water.
14. If you've been drinking alcohol (or using other substances that may impair you), you WILL be banned from racing.
15. If you don't want to take your boat home after the race, you MUST put it in one of the Waste Dumpsters. DO NOT leave it on the grass.
16. All boats are subject to a technical inspection for compliance with these rules. A boat must pass inspection to be eligible for any award or prize. You will have a chance to fix a violation and be re-inspected. Inspection will be held at the Marina at 4:30 PM prior to the race at 5 PM.

Building a cardboard boat is all about trying to meet

"The Challenge"

First things first . . . start with some objective in mind. Whether you want to win first, last, team spirit, or the "Titanic" award, start with an objective!

Next . . . start with a **design idea**, a vision of what you want your cardboard creation to look like. But consider this first -- it doesn't have to be a boat at all! It can be any design you like or want to try out. We've seen jeeps, exotic cars, full-scale pickup trucks, school busses, fire trucks, and other vehicles. We've seen space shuttles, Elvis on his guitar, beds, foldout soft drink cans, personal computers (with a mouse that trailed in the water), a raft with a trailing shark fin, a floating outhouse, a taco, a bratwurst, a giant Tootsie Roll, Tessie the Loch Ness Monster, Deidra the Dragonfly, the Statue of Liberty hand (from "Planet of the Apes"), and so much more. Oh, sure, we've had lots of boats too: submarines, aircraft carriers, PT boats, lake freighters, pirate ships, the Exxon Valdez (with simulated oil slick), and so on.

Try this to **save time** . . . **build a model** using a manila folder or other heavy paper or lightweight cardboard. That way, you can fold, re-fold, and fold again to your heart's content. You can cut it up, glue it together, and try out your design idea in small scale before working on a full-sized creation. Or you can throw out an idea that sounded great, but just won't work, then try something else before you have wasted any cardboard.

How about a **little science**? If you want, you can toss in a little physics or other sciences. Maybe you will choose to calculate the **displacement** of your design idea so that you will have some certainty about the buoyancy of your design. Here's the basic number: a cubic foot of water weighs about 62 pounds. That means that a 180-pound man will float in a boat that is 1 foot by 1 foot by 3 feet -- of course, that could be a bit uncomfortable! But at least you would know just how much boat you will need for you (and your crew) so you don't overdesign it and add unnecessary weight.

Then again, **how about some art**? Perhaps you have a really creative idea, maybe something that nobody has done before. Unless you get your kicks from putting in lots of hours and making discoveries along the way -- hey, sometimes that can be great fun -- you may want to at least try out that unique or innovative idea in model form. If you want to put a palm tree in the middle of your "desert island," be sure you won't make the whole thing top-heavy -- unless, of course, you are trying for the Titanic Award.

Now, go full-scale . . . but first, think about this: make sure your creation will be able to get out the door of wherever you choose to build it. We have many tales of woe about boats that had to be dismantled -- or even trashed and rebuilt -- just because no one thought about the size of the boat and the size of the door.

Hmmm, where to get cardboard? Get it while it lasts at our MWR maintenance facility! Call the Tickets and Travel Office for more info at (817) 782-6121. Also, you can get cardboard from appliance stores. The shipping boxes for refrigerators and big freezers can be good possibilities. Maybe you can get boxes for TVs, bedding, bookcases, or other furniture. Of course, you can also use smaller sheets and glue them or fasten them together.

Creative problem-solving is the name of the game. Whether you get your creative insights from methodical effort or from wide-ranging trail-and-error, building a cardboard boat can be -- no, make that, will be -- both fun and challenging.

FYI -- there are no plans, no pre-set designs, no step-by-step instructions here . . . no recipe cards, no fill-in-the-blank formats. The first ingredient in cardboard boat-building is creativity. The second important ingredient is problem-solving. Then there is cardboard, of course -- and it has to be corrugated.

Hey, maybe you are more the "**wing it**" type -- okay, get some cardboard, fold it a little, cut out any excess here and there, add a little glue or duct tape, maybe some paint or water sealant, and presto-chango, you have a boat for the Regatta.

Let's see, other materials . . . you can use glue and tape. You can use paint and water sealant and other stuff. But first, take a look at "The Rules" to find a short list of substances that are not to be used. We're not trying to make it tough on you, but we are steering you away from stuff that is toxic, either for you or for the environment. There is also a difference in the materials that are allowed in the Class II cardboard creations, so be sure to check out that section of "The Rules."

Handling cardboard -- you will find it easier and more fun if you keep in mind a few tips.

You can have strength and still keep your boat light if you laminate layers of cardboard. In fact, try placing one layer so that the corrugations run in one direction, then placing the second layer so that the corrugations run at a 90-degree angle to the first layer.

To fold cardboard across the corrugations, consider scoring the line of the fold with the butt end of your utility knife or other rounded edge of a tool.

Don't step on your cardboard! If you break the corrugations -- well, think about it.

To keep your cardboard dry, don't forget to seal the edges with caulk or silicone. If water gets into your corrugations, you can have great fun watching it get drawn through the corrugation just like in a drinking straw. That may be okay when you have time to do something about it, but if you see this happen in the middle of a race . . . !!

Here's a bunch of other items to think about.

A flat bottom is recommended. A V-shaped bottom is likely to tip over unless the V is very gentle.

The lowest center of gravity is the most stable; kneeling or standing will cause you to tip over.

Longer boats go faster, but they are harder to turn.

Boats shorter than 10 feet are difficult to steer.

For height, allow about 18 inches for you to sit and paddle effectively without the edge of your boat blocking your arms.

For width, figure about 18 inches for a kayak, about 23-24 inches for a canoe. Figure about 30 inches maximum for 1 person, 48 inches for two people.

Paint all the surfaces before gluing, caulk the edges, then glue (carpenter's glue works great).

Avoid oil-based stains, caulk, and glue because the oil soaks into the cardboard, may never dry, and this weakens the cardboard.

Duct tape shrinks when it is painted.

Clear tape melts when it is painted.

Reinforced paper tape works well over caulked edges and seams.

Forget about "glue guns" because that type of glue melts on hot days.

Hey, some of the fun is in the discovery. So that's it for tips. Now go for it! Keep in mind the other lessons you learn along the way. That will make building your next boat just that much easier.

Have fun! Be creative! If you can dream it, you can do it!