

Prepared. For Life.[™]

Muskogee District Scouts BSA Cardboard Boat Regatta & Water Bottle Rocket Competition Leader's Guide



Scouts BSA Leaders:

Thank you for your interest in our event at Camp Frank G. Lumpkin!

This is a recruitment event for Muskogee District Scouts BSA Troops.

Guests and friends of Scouts are encouraged to attend to see the fun Scouts BSA has to offer!

Units must pre-register with the Chattahoochee Council Office.

Event registration is FREE!

The last day to register for the event is Friday, 17-July-20

Check-in for events will open at 8:30 AM at the Administration building.

Event opening will take place at 9:00 AM.

Events will begin at 9:15 AM.

This event is for Troops, but is intended to be Patrol competition!

Multiple Patrols within a Troop are encouraged to participate!

No food is provided for the event, but units wishing to have lunch at camp may bring a picnic lunch to enjoy.

Units that wish to camp the night prior to and/or the night of the event will be subject to camp fees of \$5 per Scout per night.

Units that wish to camp must fill out a FGL Camp Reservation form and submit it, with payment, to the Chattahoochee Council office by the registration deadline. The FGL Camp Reservation form is included in this document.

Food for campouts is not provided by the event.

Have fun and be creative!

All questions should be directed to Eric Pittman at baldowl1049@gmail.com Muskogee District Key 3 will judge the events



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Cardboard Boat Regatta

Team event: Registration required

Location: FGL Waterfront

Time: July 25, 2020—9:15 am – 11:15 am

This challenges units to design, build and navigate boats made entirely of corrugated cardboard and propelled by paddles, oars, etc. The goal is to build the best boat you can and to be able to complete a 50-yard course, 25-yards down and 25-yards back, in the fastest time. You will find this both intriguing and challenging.

Awards recognize Best Construction, Best Decorated, Fastest Time, Team Spirit, and - the most coveted award - the Most Spectacular Sinking Award.

Each Patrol may submit one boat entry, and a Troop may send as many of their established Patrols as they wish. Additional items may be brought by each unit but must conform to the Rules.

Any paint used must be applied and DRY before the event begins or the boat will be disqualified.

Cardboard Regatta Rules

General Rules

- 1. Only corrugated cardboard may be used. It can be of any thickness.
- Cardboard must not be bonded to any other material, such as vinyl. Non-corrugated material may not be used, especially the kind of resin or wax type coating found in packing cases. No solid cardboard, no waxed cardboard and, no carpet roll tubes may be used. Carboard may not be lined with plastic.
- **3.** Wood, metal, Styrofoam, or other materials that would aid in flotation or make the hull ridged are prohibited. This restriction applies to the keel, transom, ribs, hull, or any other part of the boat.
- 4. No material such as Styrofoam or rubber inflation devices may be used to provide buoyancy or maintain flotation. No sandbags or similar materials may be used for ballast.
- 5. Hulls may be painted with any "one-part water based" paint. No other epoxy glues, fiberglass resins, multi-part varnishes, Flex -Seal, or paints may be used. Tar based substances, like roof coatings are not permitted.
- 6. Joints and seams may be glued and/or taped. Duct tape, contact cement, rubber cement, Liquid Nails, and water sealer like Thompson's Water Seal, may be used. No nails, metal or wood fasteners, or staples may be used in the construction of the boat.
- 7. Vessels will be inspected and may be disqualified for violations of the general rules.
- 8. Each boat must have a designated Captain plus one (1) crew member for a total of two (2) participants per boat.
- **9.** Each occupant of the vessel MUST wear a personal flotation device, and these will be provided at the Regatta. Each crew is allowed two (2) paddles, which will also be provided. No other method of propulsion is allowed.
- **10.** Each Patrol is allowed one entry only and may determine who their designated Captain and crew member is prior to boat



Getting Started

First, start with some objective in mind. Maybe you want to build the fastest boat. Perhaps you are more interested in one of the awards for design or eye appeal. Maybe you want to win the Team Spirit Award. Or just maybe you want to take home the Most Spectacular Sinking Award.

Next, start with a **design idea**, a vision of what you want your cardboard creation to look like. It can be any design you like or want to try out: submarines, aircraft carriers, PT boats, lake freighters, pirate ships, and so on.

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 get your design. You can cut it up, tape it together, and try out your design idea in small scale before working on a full-sized creation. You may have had an idea that sounded great, but it just didn't work. You can try something new using your models so you don't waste your cardboard.

If you want, you can apply 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.

Creative problem-solving is the name of the game. Whether you get your creative insights from methodical effort or from wide-ranging trial-and-error, building a cardboard boat, will be both fun and challenging.

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

1. 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.

2. To fold cardboard across the corrugations, consider scoring the line of the fold with the butt end of your utility knife.

3. Don't step on your cardboard! If you break the corrugations you can compromise the integrity of the cardboard.

4. To keep your cardboard dry, don't forget to seal the edges with duct tape. 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 you will not be able to address the issue.

Here's a few 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 3 feet are more 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 and about 23-24 inches for a canoe.
- Figure about 30 inches maximum for 1 person and 48 inches for two people.
- Duct tape shrinks when it is painted.

Keep in mind the other lessons you learn along the way. That will make building your next boat that much easier.

Have fun! Be creative!



Water Bottle Rocket Competition

Team event: Registration required

Location: FGL Activity Fields

Time: July 25, 2020—11:30 am - 12:45 pm

This challenges units to design, build and launch rockets powered by air and water. Supplies for decorating and building the rockets will be provided. Patrols must provide their own 2 liter bottle.

Awards recognize Best Design, Best Decorated, Highest Flight, Team Spirit, and - the most coveted award - the Bless Your Heart award

Each Patrol may submit one rocket entry, and a Troop may send as many of their established Patrols as they wish. Additional items, for this event, may <u>NOT</u> be brought by any unit.

Rocket Rules

General Rules

- 1. A single, 2 liter bottle must be brought by Patrols to be used. Any shape bottle is allowed.
- 2. Supplies to decorate and build the rocket are provided.
- 3. Patrols will be given 10 minutes to review the provided supply, create a construction plan and requisition list, and procure supplies from stock.
- 4. Patrols must note the length of tape they wish to procure, number of sheets of construction paper, glue, foil, glitter, markers, etc...in their plan to procure items from supply.
- 5. Patrol Leaders must submit supply requisitions to designated personnel.
- 6. Patrols will be allowed a second procurement, if they underestimate their original plan.
- 7. Patrols will be given 15 minutes to build their rockets from procured supply.
- 8. Patrols will be allowed to determine how much dihydrogen monoxide fuel they use in their rocket.
- 9. Patrols shall designate one handler and one launcher to launch the rocket.
- **10.** Personal protection equipment will be provided during launch.
- 11. Highly qualified launch teams will supervise each launch and may intervene to prevent potential personal harm.

Have fun! Be creative!

Please address all questions to Eric Pittman at baldowl1049@gmail.com

Muskogee District Key 3 will judge the events



CHATTAHOOCHEE COUNCIL, BOY SCOUTS OF AMERICA CAMP FRANK G. LUMPKIN WEEKEND CAMPING RESERVATION FOR PACKS, TROOPS, CREWS, OR SHIPS

Reservation form must be submitted two weeks prior date of reservation. This form is required for Scout units to enjoy Camp FGL for unit activities. Information left blank will only delay processing as we confirm that information. "Reduced Rates" are for Chattahoochee Council Units who conduct a Family FOS Presentation and raise more then they did the previous year. All other Chattahoochee Council Units and Units not chartered to the Chattahoochee Council will be subject to "Regular Rates". Camp FGL is operated by the Chattahoochee Council, BSA use of the property is subject to the consent and approval of the council executive board.

| PLEASE COMPLET | E ALL INFORMATION | o Pack o | o Troop o Crew or Ship | Unit Number: |
|---|--|--|---|--|
| Is your unit in the Ch | attahoochee Council? c | Yes oNo | If No what council? | |
| The information below is the person who is the main contact for this reservation. | | | | |
| Name: Position In Unit: | | | | |
| Email: | | | | |
| Cell Phone #: | | Other Phone #: | | |
| Saturday or Sunday chec Arrival Date:/ Arrival Time: Departure:// Departure Time: | ier than 3 p.m. and no later than k-out is no earlier than 7:30 a.n /oFriday_oSaturday a.m. / p.m. EST oSunday_oOther a.m. / p.m. EST | n. EST | ESTIMATED ATTENDANC Fees are based on your estin you will only be charged for y Number of registered vo Number of non-registered Number of Scouts: Number of non-Scout yo Total Estimated Attendat | nated attendance however rour actual attendance. lunteer leaders: ed parents: <u>outh:</u> nce: |
| Tent with 2 cots Fort Bradshaw | Y RATES <u>Reduced Rates</u> No Charge \$5 pp/pn site(s) Requested: 1 2 3 4 5 6 7 No Charge \$5.00 pp/pn \$10 pp/pn \$15.00 pp/pn \$100 \$100 \$50 \$50 |) = \$ = \$ = \$ = \$ = \$ | TOUR / ACTIVITY PLAN & By signing this application you a plan has been completed on-line tributed the camp rules to your l aquatic activities that the approp place. Tour Activity Plan Com Signature: | re confirming that a tour activity e, that you have read and dis- eadership, and if participating in priate qualified supervision is in pleted Date: |
| AQUATICS Pool Canoes Rowboats Kayaks Sailboats Motorboat SHOOTING SPORTS Rifle Shooting \$130 + Shotgun \$130 + Archery B.B. Guns C.O.P.E. & CLIMBING | \$25 \$50 flat rate No Charge \$5 per day No Charge \$5 per day No Charge \$5 per day \$10 per day \$15per day \$15 per hr. \$25 per hr. \$\$25 pp \$130+X \$8 pp \$\$25 pt \$130+X \$11 pp \$\$75 +X \$2.50 pp/ph \$\$75+X \$2.50 pp/ph | = \$ = \$ = \$ = \$ = \$ = \$ = \$ = \$ | PAYMENT Fees are based on your estimate only be charged for your actual a due at the time of the reservation due upon arrival. Payment must Chattahoochee Council, BSA. CANCELLATION POLICY Deposit will be returned if cance of arrival. Cancellations made a rival will be forfeited by the unit. by phone by calling 706-327-260 valid if you receive a reply. PROGRAM AREAS Aquatic program areas require for for the Pool and Safety Afloat for Climbing, and Shooting Sports r | ed attendance however you will attendance. A 10% deposit is n. The balance of fees will be t be made by check payable to: llation is made within 48 hours fter 48 hours of scheduled ar- Cancellations must be made 34; e-mail cancellations are only pollowing the Safe Swim Defense r boating activities. C.O.P.E., |
| □ Climbing Tower 4 hrs □ Low C.O.P.E. 4 hrs | \$60 + x \$10 pp \$60 + x \$10 pp | = \$ = \$ | ship which will be provided for y | our unit. When requesting these tact with the qualified leadership |
| Total Estimated Fees 10% Deposit Due Legend | | = \$ = \$ | Office Use Copy to Ranger// Copy to CD/_/ | Deposit Paid:// Copy in Book// |
| Legend pp = per person pn = per night ph = per hour pb = per boat Reservation Confirmed with unit:/ by: | | | | |