Ya Gotta Regatta!

2026 Official Rules Packet

UNITED WAY
Bartholomew County

BOAT CONSTRUCTION RULES

1. Allowed Materials

All boats must be constructed entirely of the following materials:

- **Cardboard**
  - Corrugated cardboard (e.g., appliance/grocery stores)
  - Cardboard blocks (e.g., furniture stores)
  - Cardboard tubes (e.g., carpet/linoleum stores)
- **Fasteners & Adhesives**
  - Duct tape or similar tape (e.g., Gorilla tape)
  - Masking tape
  - Liquid Nails or similar adhesives
  - Rope or string
- **Coatings**
  - Latex paint
  - One-part polyurethane
  - One-part varnish

Note: Teams may use the materials supplied by the event in addition to any materials they provide themselves, as long as those materials appear on the allowed materials list above.

2. Prohibited Materials

The following may NOT be used anywhere in the construction of the boat:

- Wood, Styrofoam
- Fiberglass
- Coated or waxed cardboard (e.g., Sonotubes)
- Inflatable flotation devices
- Oil-based paints, silicone, wax, tar, rubberizing products
- Caulking compounds
- Metal or foil materials
- Wire
- Staples, clamps, screws, nails, bolts, or washers

3. Tape & Adhesive Rules

- **Allowed:**
  - Tape and adhesives to reinforce seams, joints, and stress points
- **Not allowed:**
  - Wrapping the entire boat in duct tape, plastic, shrink wrap, fiberglass, or similar waterproofing substitutes

4. Waterproofing Requirements

- Boats may be waterproofed with latex paint, varnish, or one-part polyurethane inside and out.
- Coatings must be fully dry at the time of race-day inspection.

5. Decorations

- Decorations are encouraged.
- Decorations cannot add structural strength or buoyancy unless they are made of cardboard.

6. Design Constraints

- Boats cannot tow anything for safety reasons.
- The crew compartment must remain open, allowing for safe and immediate exit.
- No sandbags or similar ballast allowed.
- Maximum size: 6 ft wide x 10 ft long.
- Must display the assigned team number on both sides of the forward half of the boat
    - Minimum size: 4" x 3.5" per number

7. Design Restrictions

- Surfboard-style designs are prohibited.
  (Feet and lower body must remain out of the water.)
- Raft-style designs are allowed.
  (Think "Huck Finn": cardboard logs, platform, etc.)

8. Build Timing

- Boats must be fully constructed prior to race day.
- A designated build area will be available for last-minute minor assembly or repairs only.

9. Inspection

- All boats will undergo a race-day inspection to ensure compliance with all construction rules.
- Judges may, if necessary, use probes (e.g., ice picks) to verify that only approved materials were used.
- If an issue is identified during inspection, teams may use the designated build/repair area to make corrections before final approval.
- Failure to comply with construction rules or inspection requirements may result in disqualification at the discretion of event officials.
- Once a boat has successfully passed inspection, it will be marked accordingly, and no further modifications or repairs may be made to the boat for the remainder of the event.

10. Team Material Kit (Optional)

- Participating teams will have the option to receive a complimentary cardboard kit provided by our in-kind sponsor, Packaging Corporation of America.
- Each kit includes:
    - Ten double-wall corrugated cardboard sheets
    - Dimensions: 4 ft x 8 ft x 3/16”
- Pickup Details:
    - Kits will be available for pickup at the UWBC Firehouse during optional Captain’s Informational Sessions:
    - Additional pickup times may be scheduled upon request.
- Safety Note:
    - The edges of corrugated cardboard may be sharp.
    - Teams are strongly encouraged to use appropriate PPE when handling materials, including:
        - Cut-resistant safety gloves (recommended minimum)
        - Long sleeves for additional protection

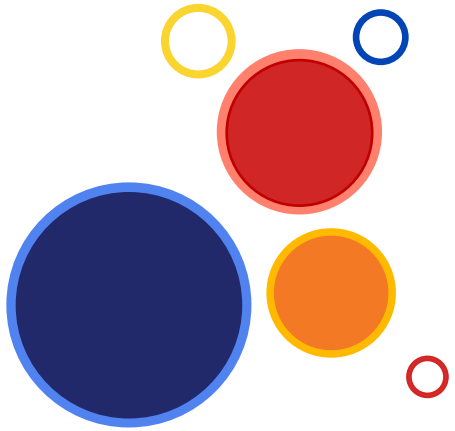
TEAM & RACE RULES

1. Team Requirements

- Each boat will have 2 crew members (1 captain + 1 crew).
- All race crew must be 18+.
- Build team members (non-racers) have no age or number restrictions.
- All race crew must sign the official waiver prior to participation.

2. Safety Requirements

- Each boat will receive 2 paddles (only allowed method of propulsion).
- Each crew member will be provided a U.S. Coast Guard–approved life vest, which must be worn for the entire race.
- Crew must wear close-toed shoes (e.g. water shoes) and appropriate water wear.
- Pre-Race Safety Meeting: Attendance is mandatory for all competitors.



3. Launch & Handling

- Race crew must be able to carry, move, and launch their boat without assistance.
- Competitors must remain inside their boat at all times during the race, except when entering at the start or exiting at the finish within the designated Mount/Dismount Zone (designated by buoys).

4. Race Conduct

- Competitors must race in a sportsmanlike manner.
- Aggressive or unsafe behavior may result in disqualification at the sole discretion of event organizers.
  Examples include:
    - Intentionally obstructing another boat
    - Causing damage or bodily harm
    - Use of profane language toward competitors or spectators
- Teams may not bring alcohol onto the event site.
- Race participants may not consume alcohol until after completing their race heat.

5. Racecourse

- The course is approximately 200 yards, out-and-back.
    - Course turnaround will be marked by buoy
- The race will start on land; launching the boat is part of the challenge.
- The race ends when the team and the entire boat cross the finish line (same as starting line).

6. Clean-Up Requirements

- All boats, debris, and materials must be removed from the pond and disposed of in the designated waste area.
- Teams that leave debris may be:
    - Disqualified from awards
    - Barred from future events

7. Judge Authority

- Judges have final say in all matters of:
    - Rule enforcement
    - Safety concerns
    - Disqualifications **
    - Inspection outcomes

***** Teams disqualified from the event are not eligible for a refund.***

BOAT DESIGN CONSIDERATIONS

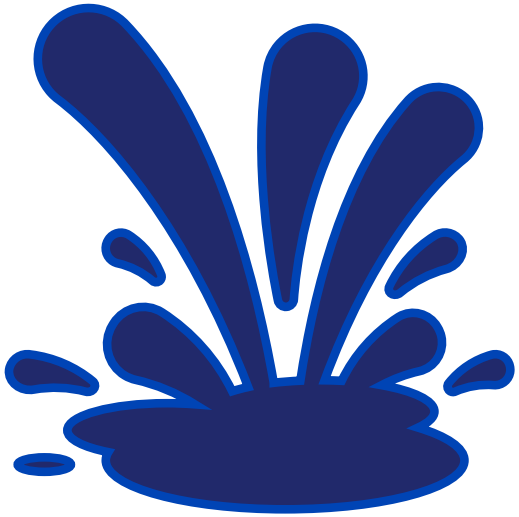
The following suggestions are not rules, but recommended considerations to help teams build safe, stable, and competitive boats.

1. Planning & Logistics

- Ensure the boat is large enough for the crew but still manageable to transport, carry, and launch.
- Boats will need to be carried from the drop-off location to the registration and staging area. Plan size, weight, and team help accordingly.
- Remember: wider boats are more stable but may be harder to paddle and maneuver.
- Consider the total weight of materials when waterlogged. Heavier boats become harder to carry and slower to paddle.
- Set a design goal: Fun, Speed, Appearance...or all three.
- Start with a sketch of your design.
- Build a small-scale model from manila paper to visualize structure before committing to full-size construction.
- Estimate the materials needed, or plan around what you already have.
- Think through which construction techniques you intend to use.

2. Safety Considerations

- Avoid pointed edges, sharp corners, or anything that could injure crew or competitors.
  Sand down, round off, or tape any potentially sharp areas.
- Ensure structural elements do not create snags or hazards during carrying, launching, or racing.



3. Basic Buoyancy Principles

- A 1' x 1' x 3' sealed cardboard box can float approximately 187 lbs.
- If your boat is big enough to hold you, it will float – the challenge is ensuring stability, efficiency, and durability.

4. Recommended Dimensions

- **Best Length:** 8–10 feet
- **Best Height:** ~18 inches (enough room to sit or kneel while paddling)
- **Best Width:**
  - 18"–30" for two-row seating
  - Minimum 48" wide for two people sitting side-by-side
- **Design Notes:**
  - Long boats: faster but harder to turn
  - Short boats (<8'): easier to spin, harder to paddle straight
  - Flat-bottom, sit-to-paddle, and canoe-style designs have historically been the most successful
  - Rudders: help maintain a straight line but add complexity and reduce maneuverability

5. Construction Techniques

- Cardboard edges and joints should be fully covered due to cardboard acting like a siphon if left exposed.
- Cardboard tubes work well for internal structural framing.
- For shaping, cut cardboard strategically to allow joining, bending, and layering.
- Use one or more layers of cardboard:
    - Stagger or overlap seams when layering
    - Apply polyurethane between layers for added strength

6. Finishing & Appearance

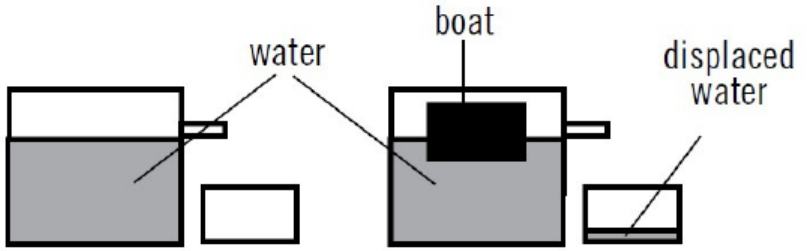
- Decorate, paint, and varnish after structural work is complete.
- Ensure all coatings are fully dry before race-day inspection.
- Remember: decorations must not add structural strength or buoyancy unless made entirely from cardboard.

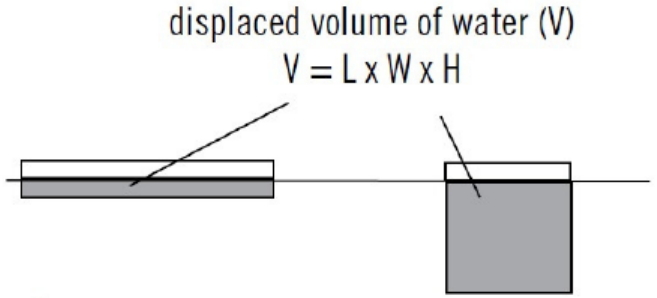
7. Reinforcement Recommendations

- Reinforce the areas where crew members will sit, kneel, or stand as these take the most stress.
- Adhesives that work well:
    - Carpenter's glue
    - Liquid Nails
- Avoid:
    - Hot-melt glue (can soften and fail in heat or direct sun)
- Tape guidelines:
    - Use duct tape only on non-painted areas that will be covered
    - Duct tape shrinks when painted
    - If painting over duct tape, apply a layer of masking tape first
    - Clear tape melts or buckles when painted
    - Masking tape works well for edges, seams, and glued joints

DISPLACEMENT

How much will you sink? - Displacement





Weight of Water =
62.4 pounds/cubic-foot

Water Diplaced (ft^3) = $\frac{\text{Weight-of-boat-\&people-lbs}}{62.4 lbs/ft^3\text{-}H2O}$

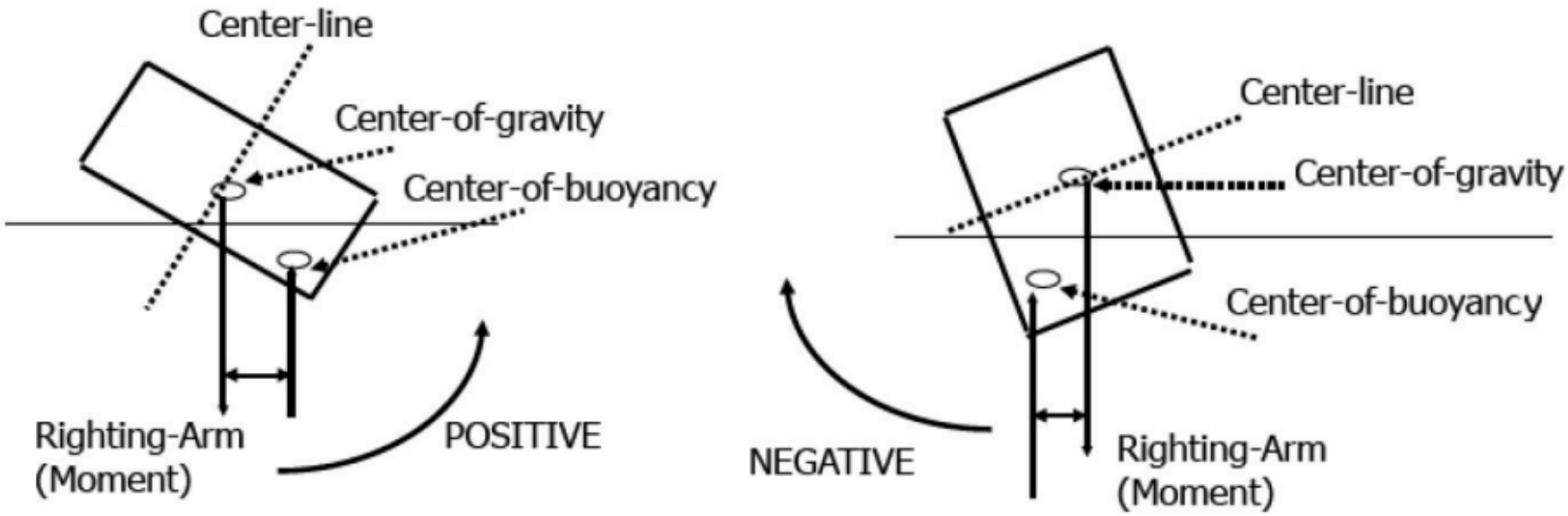
Depth (ft) boat sinks _____

EXAMPLE:

Box boat, 3ft x 6ft, 1 ft tall (high)
Boat volume= 3' x 6' x 1' = 18 ft^3
Boat displacement= 18 ft^3 x 62.4 lbs/ft^3 = 1123.2 lbs
Which equates to 93.6 lbs per inch of boat height

PHYSICS

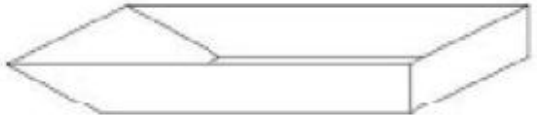
Wider is steadier— Center of Buoyancy



DESIGN

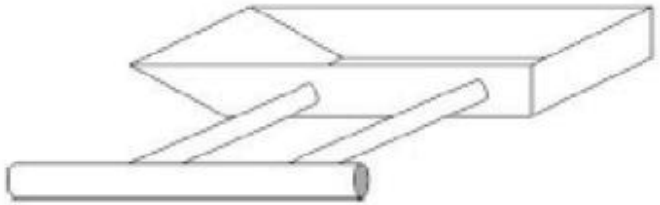
Basic boat styles

Simple Box



Slanted Box

V-Shaped Bow



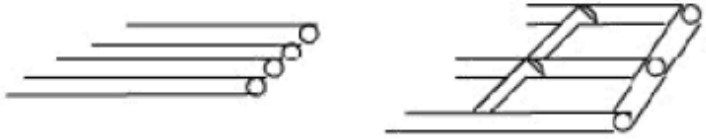
Outrigger Design

Pontoon Design

Raft Design

CONSTRUCTION

Construction Tips & Techniques:

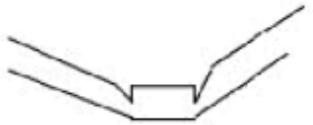


Solid Tube Frame

Center/Cross Beam Frame

FRAMES

FRAME ANGLES



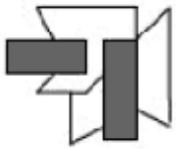
V-Shaped Cuts

Multiple Cuts for Sharper Angles

CONNECTING TUBES

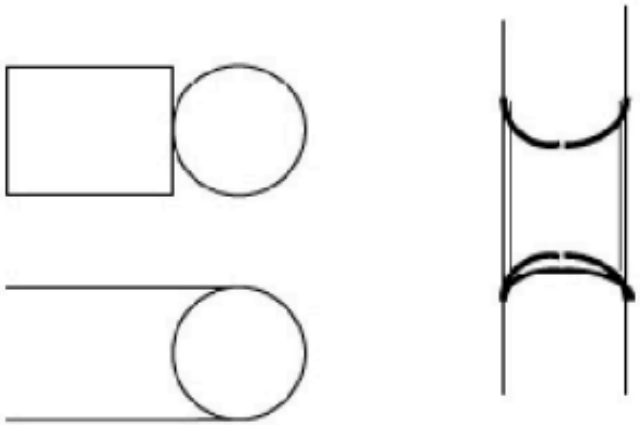
Cardboard Wrapper for Tubes End-to-End

Cardboard Wrapper for Tubes At Right-Angles

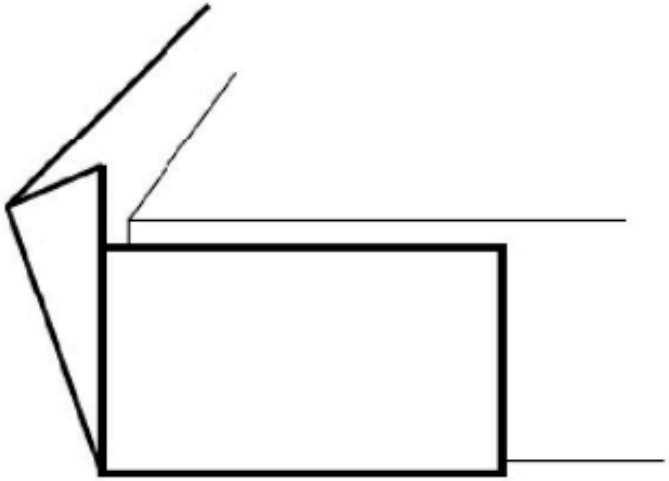


CONSRUCTION

Construction Tips & Techniques:



TUBE CUTTING TEMPLATE



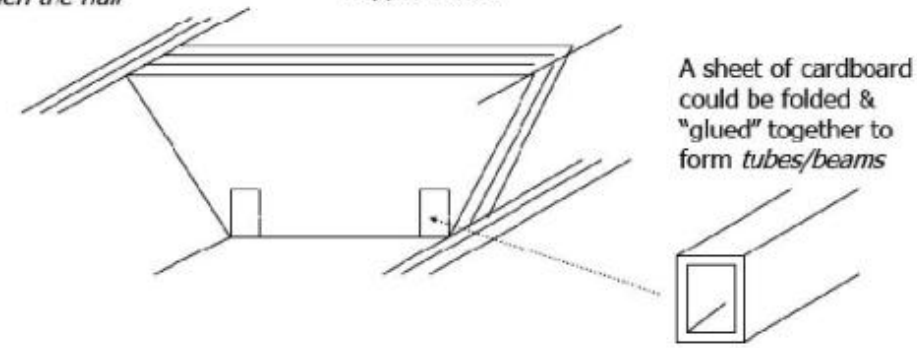
FOLD & OVERLAP CARDBOARD AROUND CORNERS

QUESTIONS & CLARIFICATION

Construction Tips & Techniques:

Multiple cardboard layers "glued" together on the sides *strengthen the hull*

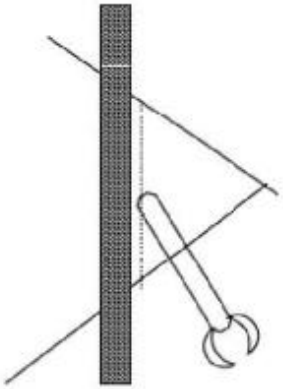
Multiple trapezoid-shaped pieces "glued" together to form a "*support block*"



A sheet of cardboard could be folded & "glued" together to form *tubes/beams*

Crease/Score a line for a nice

STRAIGHT FOLD



QUESTIONS & CLARIFICATION

UNITED WAY
Bartholomew County

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