

ENG Judging Scoring Matrix

Rating Response:	WOW		Good Work		Mediocre		Sub Par		Altogether Absent	
Points Awarded:	10	9	8	7	6	5	4	3	2	1
Design Judges examine the shape and design of the vehicle, its ergonomics, control mechanisms, drivetrains and attention to safety...	Robust, beautiful engineering throughout. Excellent ergonomics: seats, visibility, machine controls, Pilot and mechanical access. All controls within easy reach. Hand grabs for lifting and pushing.		Good engineering. Ergonomics are above average, with a couple of areas which could be improved. The machine looks easy enough to control.		Missing minor ergonomic features. The design appears to strain the materials used. Gear ratios appear to be sufficient. Safety appears to be an afterthought.		Poorly designed, lacks desirable ergonomics, most of the vehicle is not optimized for land, sand or water. Control is difficult to establish and maintain.		The machine is entirely off-the-shelf	
Craftsmanship Judges talk to the team about the methods and materials used while looking at the machine...	Excellent fit and finish. Components look professionally fabricated. Materials optimized for weight, size, strength and corrosion resistance.		Good assembly. All parts secured tightly with close fit-up. Fit and finish is approaching professional grade.		Most parts are tight if they are supposed to be tight and loose if they are supposed to be loose. The welds or bolts will hold together for the duration of the race.		Too many wobbly components and temporary fasteners. Poor fit and finish throughout.		Dirty machine. Structural rust is clearly visible under the duct tape.	
Transition Design Judges talk to the team about the machine's water and sand transitions...	An engineering marvel of zero-transition kinetic glory. Any adjustments are seamlessly applied during Continuous Forward Motion (CFM)		Seamless for either water or sand (but not both), or requires mere moments to reconfigure.		Requires installation of floats or traction aids, gearing is manually changed.		Task requires participation of pilots and pit crew and major structural changes to the vehicle.		Sand transition doesn't work or exist. Water transition: if you brought a long snorkel, could you ride along the bottom?	
Mobility Judges observe the machine traverse the course...	Amazing speed and handling along the entire course.		-Performs well across land, sand and water: 8 -Struggles on one terrain but performs admirably on others: 7		Struggles on two terrains		Flounders in the water and is a drag in the sand		Machine is as agile as a penguin on land, a camel in the water and a clam on the beach.	
Engineering of Art Judges examine the engineering and mechanics of the sculpture's kinetic art...	Integrated into the structure. Excellent construction and functionality of the art frame. Wide variety of materials & mechanisms.		Clever mechanisms driving the kinetics. The art employs an advanced construction technique.		Simple mechanical kinetic art; it's a good effort but appears hastily fabricated, flimsy, or fragile.		Basic vehicle functions have been highlighted.		No engineering of art here.	
Gee Whiz Judges study the creativity of engineering	Knocks your socks off. So freakin' awesome that Hobart would be blown away by the innovation.		Engineering features that make this machine stand out in a crowd.		Machine has some engineering features that deserve credit.		Engineering only a mother could love.		Nothing notable.	