

# BOTTLE ROCKET B



Checklist – 2017

Team Number: B\_\_\_ Team Name: \_\_\_\_\_

Rank: \_\_\_\_\_

Student Names: \_\_\_\_\_

Final Score: \_\_\_\_\_

## Event and Construction Parameters (SAFETY CHECK)

	Rocket 1		Rocket 2	
2. Teams have eye protection and up to two rockets. Parts from one rocket are not used on another rocket.	Y	N	Y	N
3.a. Pressure vessel is made out of a single $\leq$ 1-liter plastic carbonated beverage bottle with a nozzle opening internal diameter of $\sim$ 2.2 cm.	Y	N	Y	N
3.a. Label for the bottle (can be removed) is presented at inspection.	Y	N	Y	N
3.b. Only tape is used to attach fins and other components to the pressure vessel. No glue of any type is used on the pressure vessel. No metal of any type or commercial model rocket parts are used on the rocket.	Y	N	Y	N
3.c. Structural integrity of the pressure vessel is not altered.	Y	N	Y	N
3.e. The nose of the rocket is rounded as described in the rules.	Y	N	Y	N
3.f. Does not use explosives, gases other than air, chemical reactions, pyrotechnics, electric devices, elastic powered flight assists, throwing devices, remote controls, or tethers at any time. All energy at launch originates from the water/air pressure combination.	Y	N	Y	N

## Does this rocket pass safety check? (If N, do not launch)

1. Y N 8. Y N

## Competition Parameters

	Rocket 1		Rocket 2	
3.g. Fins and other parts added to the bottle are $\geq$ 5cm above the level of the bottle's opening.	Y	N	Y	N
3.h. Rocket does not change shape or deploy any type of recovery system.	Y	N	Y	N
3.i. Nothing adheres to the egg.	Y	N	Y	N
4.c. Teams do not touch or approach the rocket once pressurized.	Y	N	Y	N

## Is this rocket free of all competition violations?

2. Y N 9. Y N

## Score

4.a. Did the team request another egg because they broke it before launch?	3. Y	N	10. Y	N
5. Did the egg survive? (no wet spot on a paper towel & rocket is retrievable)	4. Y	N	11. Y	N
Timer 1 (in seconds to the nearest 0.01 second)	5. _____		12. _____	
Timer 2 (in seconds to the nearest 0.01 second)	6. _____		13. _____	
Timer 3 (in seconds to the nearest 0.01 second)	7. _____		14. _____	
General Rule: Disqualified (notify the team and their coach as soon as possible)			15. Y	N

Tier 1: Launches with 2 surviving eggs

Tier 2: Launches with 1 surviving egg

Tier 3: Launches with no surviving eggs

Participation: Unable to launch both rockets due to safety

Ranking within each tier is determined by the highest combined time aloft of both rocket