



PING PONG PARACHUTE B/C

Team Checklist – 2021

Rank:	_____
Tier:	_____
Final Score:	_____

Team Number: _____ School & Team Name: _____

Student Names: _____

CHECK-IN

Eye Protection & Flight Logs:

- | | | |
|---|---|--|
| T | F | 2.c. Participants properly wear eye protection at all times. Participants without proper eye protection are immediately informed and given a chance to obtain eye protection if time allows. |
| T | F | 4.a. Team presents a flight log of recorded data for each rocket design. Data includes 5 or more parameters—pressure (psi), estimated/recorded peak flight height (ft), time aloft (seconds) and at least 2 additional—for 15 or more test flights prior to the competition for each rocket. |
| T | F | 4.b. Team uses their data to justify their pressure choice. |

1. T F CRITERIA ABOVE FOR EYE PROTECTION & FLIGHT LOGS MET (IF FALSE, DO NOT LAUNCH)

ROCKET A ROCKET B ← CHECK-IN (UP TO 2 ROCKETS)

Construction Parameters:

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|---|---|---|---|--|
| T | F | T | F | 2.a. Ping pong ball is standard and unaltered. |
| T | F | T | F | 3.a. Rocket pressure vessel is made from a single 1-liter or less plastic carbonated beverage bottle with a nozzle opening internal diameter of approximately 2.2 cm (a 1/2-inch Schedule 40 PVC pipe must fit tightly inside the nozzle opening) and a standard neck height from flange to bottle's opening of under 1.6 cm. The bottle label is presented. |
| T | F | T | F | 3.b. The structural integrity of the pressure vessel is not altered. This includes, but is not limited to: physical, thermal or chemical damage (e.g., cutting, sanding, using hot or super glues, spray painting). |
| T | F | T | F | 3.c. The nose of the rocket is rounded or blunt at the tip and designed such that when a standard bottle cap (~3.1 cm diameter by 1.25 cm tall) is placed on top of the nose, no portion of the nose touches the inside top of the bottle cap. |
| T | F | T | F | 3.d. Only tape is used to attach fins and other components to the outside of the pressure vessel. Nothing is placed inside of the pressure vessel. No glues of any type are used on the pressure vessel. No metal of any type is used anywhere on the rocket or parachute payload system. |
| T | F | T | F | 3.e. Fins and other parts added to the bottle are 5 cm or higher above the level of the bottle's opening to ensure the rocket fits on the launcher. |
| T | F | T | F | 3.f. All energy imparted to the rocket/parachute payload system originates from air pressure provided by the tire pump; no water. Gases other than air, explosives, liquids including water, chemical reactions, pyrotechnics, electrical devices, elastic powered flight assists, throwing devices, remote controls, and tethers are not used at any time. |

2. T F 3. T F ROCKET MEETS ALL CONSTRUCTION PARAMETERS ABOVE (IF FALSE, THAT ROCKET CANNOT BE LAUNCHED)

1ST LAUNCH 2ND LAUNCH ← LAUNCHES (5 MINUTES FOR UP TO 2 LAUNCHES) PRESSURE CANNOT EXCEED 65 PSI

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|-------------------|--------------------|--|
| 4. A B | 10. A B | Which rocket from above was used? (Only rockets that met all parameters.) |
| 5. ____:____.____ | 11. ____:____.____ | Timer 1 ← Flight Times (minutes:seconds) |
| 6. ____:____.____ | 12. ____:____.____ | Timer 2 Begins when the rocket separates from the launcher, and stops when the parachute payload system lands or any part of the rocket or parachute payload system contacts the ceiling. If parachute payload system does not separate from the rocket, timing stops when any part of the rocket touches the ground. |
| 7. ____:____.____ | 13. ____:____.____ | Timer 3 |
| 8. T F | 14. T F | 5.f. The parachute payload system separated from the rocket. |
| 9. T F | 15. T F | 5.g. Neither the rocket nor parachute payload system contacted the ceiling. |

16. T F General Rule: The team is disqualified. (Notify the team and their coach as soon as possible.)