

# PRELIMINARY DESIGN REPORT (PDR) QUESTIONNAIRE

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**Introduction:** All First Nations Launch teams need to provide a PDR. This report is designed to give the FNL Committee a snapshot of your teams' flight mission. This questionnaire will guide you on what the FNL committee is looking for in your PDR. The PDR is part of the overall FNL competition grade, but we ask that your team limit the PDR to no more than two pages. While writing the report please keep in mind that our focus is on having a Successful Flight Mission (SFM). In other words, your team needs to successfully fly and recover their rocket and obtain science mission deliverables with no damage.

Please check the calendar on the website for due dates: [www.uwgb.edu/wsgc/fnl](http://www.uwgb.edu/wsgc/fnl)  
Submit the document(s) to [wsgc@uwgb.edu](mailto:wsgc@uwgb.edu).

1. What size rocket will your team be launching? Diameter, length, type and how many fins? Is the nose cone conical, round, or give? Will you be using small or large launch lug buttons? What size rocket motor is your team considering using; H, I, J?
2. What is your best guess of how long it will take to reach a mile, and how close to one mile you will get.
3. What size drogue and main parachutes does your team plan to use? Using RockSim9, do the parachute sizes result in safe descent speeds to prevent rocket damage upon landing? (Remember your team must have a SFM)
4. Are you planning to use a piston or wadding for the parachute deployment(s)?
5. Are you planning on using an audible alarm or any other rocket tracking device?
6. What will your pre-launch checklist look like? Who is responsible for the following:
  - a) science payload
  - b) drogue parachute system
  - c) main parachute system
  - d) arming and programming the altimeters
  - e) launch team members
  - f) recovery team membersIf your team creates a pre-launch checklist please attach it to the PDR as an amendment.