



Canadian Association of Rocketry
Association canadienne de fuséonautique

Flight Data Sheet

| | | |
|---|------------------|----------------------|
| Flyer's Name: | | Pad #: |
| Rail Length: | Radio Frequency: | Expected Altitude: |
| Mass: | Total Impulse: | Thrust/Weight Ratio: |
| Rocket Name: | | |
| Rocket Length: | Diameter: | |
| Kit Manufacturer: Modified? Yes <input type="checkbox"/> No <input type="checkbox"/> | Colour(s): | |
| Motors (number, type & manufacturer in each stage): | | |
| Purpose of Flight: Certification <input type="checkbox"/> Competition <input type="checkbox"/> Sport <input type="checkbox"/> | | |
| Payload, Special Recovery/Ignition Systems, etc.: | | |
| CAR/ACF #: | Launch: | Date: |
| LCO Post Flight Evaluation: Good Flight: Yes <input type="checkbox"/> No <input type="checkbox"/> | | LCO Name: |
| Comments: | | |



Canadian Association of Rocketry
Association canadienne de fuséonautique

Rocket Inspector Pre-Flight Inspection Checklist

Propulsion

Is the thrust to weight ratio high enough to assure safe flight?

Is the thrust transfer ring or equivalent adequate to transfer motor thrust to airframe?

Are all motors firmly retained to the vehicle?

Is appropriate ignition source present for multi-stage or cluster? (i.e., low current, wired in parallel) ...

If used, is motor deployment appropriate?

If multiple stage, is system fail-safe in event of catastrophic failure during boost?

If hybrid, is motor vent isolated from the deployment system, and visible from the LCO table?

If hybrid, is the LCO familiar with the required launch procedure?

Flight Estimation

Has the maximum altitude been calculated using appropriate means?

Has the maximum acceleration and velocity been calculated using appropriate means?

Does the model have an adequate stability margin? (CG/CP relationship appropriate for the design)

If multiple stages present, was stability margin calculated and shown for all stage configurations?

Was the CP calculated using an appropriate method? (e.g., RockSim)

Airframe

Is the overall airframe structure adequate to withstand the anticipated flight forces?

Are the fins secured to the airframe with adequate reinforcement?

Are adequate launch guides present? (i.e., rail buttons, or tower)

Recovery System

Is the shock cord adequate to handle the forces of high speed deployment?

Are the shock cord attachment points sufficient to handle the forces of high speed deployment?

Is the parachute or streamer structurally sound, and adequately sized for safe recovery?

Is adequate protection present to protect parachutes or streamers from ejection charges?

Are deployment charges adequately sized, installed, sealed, and ground tested when appropriate?

Are nosecone and payload sections sufficiently snug to prevent drag separation?

(If shear pins installed previously, obtain Roaming RI check of above. Signature: _____)

Is a vent-hole present to prevent in-flight separation at altitude?

Is a redundant deployment system present if loaded vehicle mass is over 5 kg?

Electronics

Are all ejections charges safed? (i.e., shunted)

Are all components adequately secured against acceleration forces? (i.e., batteries, connectors)

Is the electronic circuit armed safely? (e.g., remote switches/indicators present to protect the user) ...

If RF active control is used, is the operating frequency in the 27, 50, 53, or 72 MHz bands?

If RF active control is used, has the system been ground tested?

Does the flyer have a checklist or equivalent to arm the system prior to flight?

| | | |
|------------------|---------------|-------|
| RI Name (Print): | RI Signature: | Date: |
|------------------|---------------|-------|