

Expanded Rocket Checklist -updated Dec. 2006

- Use Construction check after prepping avionics, recovery, and motors.
- Use Flight Check at the Safety table.

JSC Emergency: 218 483-3333



Construction Check

Hazardous Systems.....Check

- Check for any special systems or safety concerns to be aware of.

MotorCheck

- HardwareCheck
- Ejection Port.....Clear
- Closures.....Tight
- Ejection Load.....Check– see chart
- Ejection Charge.....Installed
- Upper stage motor installation.....Check
- Case (Cessaroni).....Installed

Body tubeCheck

Aft Bulkhead..... Check

Fins and Lugs.....Secure and Aligned

Recovery System.....Check

- Quick Links.....Closed
- Parachute flame protection.....Check
- Insure parachute will move freely in tube

Tracking DeviceAs Needed

Electronics (as installed).....Check

- Avionics.....Disarmed
- Bay vent ports..... Clear
- Drogue and main wiringCheck
- Hardware, Electrical connections.....Secure
- Batteries.....Charged
- Ejection Load.....Check – see chart
- Ejection charges Securely Loaded

-Check steps taken to insure drogue deployment will not cause main to deploy

Flight Check

Flier and Motor Certification.....Check

Flight Planning.....Check

- Motor impulse and delay time.....Check
- Max altitude.....Check
- Launch Guide velocity > 4 times wind speed
- Stability (CG/CP)..... .5-2.0 Calibers
- Descent rate.....Check
- Flight path.....Check
 - Analyze both normal and ballistic scenarios
 - Consider weathervaning and winds aloft

Flight must be planned so that the rocket will remain within field boundaries

Motor InstallationSecure

- Insure motor will not move fore or aft.

-If Clustering:

- Insure thrust symmetry
- All igniters must touch the propellant and have no shorts.

-Staging or Airstarts:

- Staging system.....Check
- Staging delayCheck

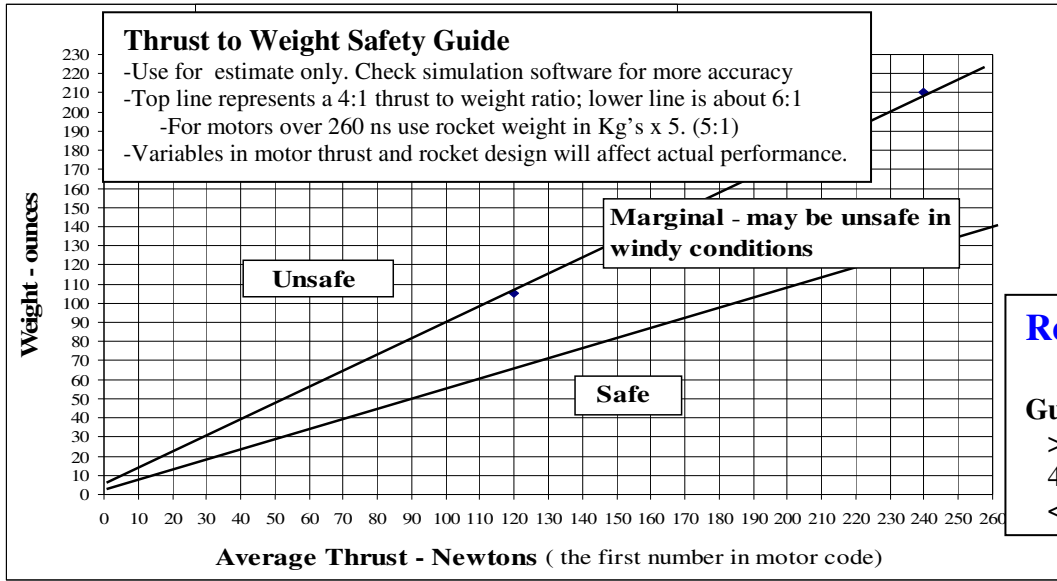
Nose Cone, Tube Couplers.....Check fit

Payload Bay.....Secure

Special Instructions.....Check

- check any other systems or safety concerns

GO! Remind flier to angle flight crosswind to the spectator area.



Grams to Pounds

453g	-	1lb
906g	-	2lbs
2.2kg	-	5lbs
4.5kg	-	10lbs
7.7kg	-	15lbs

Recommended X-wind launch angle

Guide Speed	Launch Angle
>60 mph3-5 degrees
45-60 mph 5-7 degrees
< 45 mph

