



Welcome to the NASA/Houston Rocket Club. Here are directions to the launch site:

Enter the Johnson Space Center at the Saturn Lane gate (the address is 110 2nd street, Houston for you GPS folks). Present your ID and membership card to the guard (If you don't have a membership card yet, just let the guard know you're with the Rocket Club and present a photo ID. Drive past Rocket Park and turn left into the driveway immediately after the first building on your left (this is building 14). Follow the driveway around to the back of the building and continue as it turns out into the field toward the large antennae tower.



IMPORTANT: Two groups fly in the field, Radio Control Airplanes and Rockets. The R.C. fliers ask that we drive to around their flight prep area and avoid the asphalt area which they use for a runway.

You're always welcome to bring you own rockets up to 3.3 lbs using 'G' motors and below, or just come to watch and learn. On your first trip to a club launch please be sure to visit with a club officer regarding launch procedures and rules. Please see the club rules on nest page. Our main goal besides learning and having fun is of course, safety!

The club web site is <http://www.nasahoustonrocketclub.net> for further club information.

For the latest news regarding NHRC launches and model rocketry in general, see the club e-mail list server at NHRC.groups.io . Anyone can read the messages on the web site. You will have the option to receive or not receive messages as e-mail.

NHRC SPORT LAUNCH FLIGHT CARD
Before each flight, please fill out one card completely.
Bring it with your model to Safety check.

Date _____

Owner's or Team Name: _____
 Model's Name _____ Color: _____
Kit Plan Original Maiden Flight (Heads up!)
 Flight Weight: _____(oz) (g) Tube Diameter: _____ (cm) (in.)
 Engine(s) _____ Total Impulse _____ N.sec_ Reload: **Y N**
 Expected Altitude: _____ feet

Parachute Streamer Tumble Helicopter Glider
Single-Stage Multi-Stage Clustered Scale Payload

Rod Needed: 1/8" 3/16" 1/4" 3/8" 1/2" RAIL
 Comments: _____

SAFETY OFFICER OK (INITIALS) _____ PAD # _____
 FLIGHT : Nominal Non-nominal Why?: _____
 RESULTS: _____

NHRC Model Rocket Safety Checklist

Construction Check
 Motor Mount.....Secure
 Fins and Lugs.....Secure and aligned
 Nose Cone.....Proper Fit
 CG/CP.....Checked
 Special Instructions.....Check

Prep Check
 Recovery System.....Checked, attached
 Wadding.....Installed
 Motor Impulse, Delay.....Checked
 Payload Bay.....Secure

If Applicable:
 Ejection Charge(s).....Check
 Avionics.....Check
 Clusters, staggers.....Check

Flight Plan
 Thrust to Weight.....Check
 Altitude.....Check
 Flight path.....Plan

Launch Check
 Controller.....Disarm
 Pad check.....Complete
 Launch Angle.....Crosswind
NASA Emergency # 281-483-333

Local Rules for JSC Model Rocket facility

Flights are always limited to 2000', or 2500' altitude with a dual deployment system. Rockets with "H" power and above require pre-flight calculations or simulations to include: expected altitude, speed off the launch guide, and expected wind drift.

1. At least two adults including an approved Range Safety Officer must be present for all launches. RSO's shall have an ID card identifying them as so certified. RSO will insure high pressure water fire extinguisher, first aid kit, and cell phone are present.
2. All rockets must be checked using the NHRC approved checklist before each flight.
3. The NAR model rocket safety code, FAR 101, and all applicable safety codes must be followed at all times.
4. Regularly scheduled club launches at JSC will be limited to FAA Class 1 rockets. Class 2 rockets (HPR) will be flown on a limited basis for rockets using motors up to "J" Impulse.
5. Report all accidents and lost rockets or parts to the Range Safety Officer. Incidents involving property damage, personal injury, and loss of ejection charges, unspent motors, or anything lost in the vicinity of NASA buildings must be reported to the NASA Safety Officer.
6. In the event of a grass fire: call the JSC emergency number and move all launch pads and wires to the back of the parking area to facilitate fire truck access. Do not attempt to fight a fire that has gotten out of control. Fire extinguishers may be used on small grass fires that can be easily controlled.
7. Flying must only be from the asphalt or concrete area near the tower. Never park on the grass.
8. Watch and LISTEN FOR approaching aircraft. Don't launch until you determine that skies are clear or aircraft are outbound from the launch site.
9. Never climb on the antennae tower for any reason.
10. Police your area for your trash and for any other trash that is in your area. This includes igniter plugs and composite igniter wires, spent motor casings, spent reloads including o-rings and the usual trash like soda cans and empty motor packages.
12. The Range Safety Officers directions will be followed at all times. If you see someone who has forgotten these rules, please remind them. Remember it's every club member's responsibility to follow and enforce the rules.
13. Safety check-in officers will carefully check the rockets expected flight path considering wind effects on weathervaning and parachute drift. All flights must be planned to land within the JSC boundaries.

Special Rules Regarding High Power (HPR) Flights at JSC

HPR launches will be held at JSC on the third Saturday of each month.

- Impulse: "H&I" motors, "J" motors may be allowed with prior approval.
- Wind limit - 15 mph
- Altitude restriction is always 2000' or 2500' with a dual deployment system.
 - may be further restricted by winds.
- Flights must be simulated to achieve 45 fps minimum speed off the launch guide,
- Standard Launch angle will be 3-6 degree from vertical at an azimuth of 030 degrees (NNE) (Away from Rocket Park and Saturn Lane).
- Other launch angles may be required for specific wind conditions as directed by the RSO