# MTMA Flight Card Instructions

You must fill out a Flight Card for each flight of each rocket. These cards tell the Range Safety Officer (RSO) what type of motor you plan to use in your rocket, what type of recovery method will be employed, and other important safety information about your rocket/motor combination. They are also used in pad assignments and to tell the Launch Control Officer (LCO) whose name to announce when it's time to fire a particular pad. We will keep these cards for the section archives after each flight.

The light gray box on the Flight Card is required only for Class1—Model Rockets weighing over one pound and Class 2—High-Power Rockets. Class 1—Model Rockets are defined by the Federal Aviation Administration (FAA) in section 101.22 of Federal Aviation Regulations Part 101, as rockets that use no more than 125 grams (4.4 ounces) of propellant and weigh no more than 1,500 grams (53 ounces). Class 2—High-Power Rockets exceed the limits of Class 1—Model Rockets and are propelled by motors having a combined total impulse of 40,960 Newton-seconds or less (type O motor).

**PRIOR TO CHECK-IN WITH THE RSO:**

Fill out one Flight Card for each flight.

Please print clearly. **DO NOT WRITE IN THE DARK GRAY BOX**.

***Rocket Name/Mfg.*** – Write the kit name and manufacturer. Check whether this is a "Kit", kit "Bash", "Clone" of a kit, "Upscale" of a kit, or "Scratch" built.

***Color(s), Length, Diameter*** – Indicate the size and appearance of your rocket.

***Motor(s)*** – Check whether the rocket uses a single motor or multiple (clustered or staged) motors. List the impulse, average thrust, delay, and propellant code for each motor.

***Weight, Anticipated altitude, Waiver Table, Sim, Prior altimeter-equipped flight*** – **THIS LIGHT GRAY BOX SHALL BE COMPLETED FOR THE FLIGHT OF ANY ROCKET WEIGHING OVER ONE POUND**. It is not needed for others. Indicate the total loaded weight of your rocket and the anticipated maximum altitude. Check a box to indicate the source used to determine the anticipated maximum altitude: the Waiver Table; a flight simulation such as AltMark, RockSim, or wRASP; or a prior altimeter-equipped flight. Please have a printout from AltMark, RockSim, wRASP, or other flight simulation information available if the rocket is scratch-built, you are deviating from the manufacturer's original design and recommended motors for the rocket, or if your rocket's anticipated maximum altitude exceeds 1,000 feet AGL.

***Have you flown this rocket before?*** – Circle Yes or No.

***Rocket/motor combination flown before?*** – Circle Yes or No.

***Recovery system*** – Indicate the number and size of parachutes, length of streamers, glider recovery, helicopter recovery, etc., and whether deployment is controlled by motor ejection or by electronics.

***Launch rod diameter*** – Circle the required launch rod size.

***Comments/Features*** – List any special features, such as "*first launch*", "*has gliders*", "*has paratroopers*", "*certification flight*", etc. for the LCO to tell the spectators to watch for. For rockets with marginal stability or first launches of scratch built rockets, mark here as a "*HEADS-UP LAUNCH*".

For Night Launches, additional information pertinent to night-time launching shall be added to the ***Comments/Features*** section of the Flight Card. Describe the illumination system and indicate whether the rocket has been flown during daylight hours with that illumination system and the listed motor(s).

**AT THE RSO TABLE:**

Present the completed Flight Card, computer simulation printout (if required), and rocket ready to fly with motor(s) installed. For rockets using composite propellant or hybrid motors, or rockets using electronics for staging or deployment, the igniter(s) shall not be installed, electronics shall be switched OFF, and all charges shall be shunted.

**AT THE LCO TABLE:**

Once the range is clear, hand your Flight Card to the LCO. Walk to the pad assigned by the RSO or LCO.

**AT THE PAD:**

1) Be sure to use the assigned pad and appropriate launch rod size.
2) Adjust launch angle USING GOOD JUDGEMENT. **DO NOT FLY OVER THE CROWD, PARKING AREAS, OR NEARBY ROADS**.
3) Check to make sure the igniter clips are securely fastened to the igniter, are not touching each other and are not touching the blast deflector plate or other metallic material.
4) Switch rocket-based electronics ON (if applicable).
5) Test igniter continuity and arm the pad (if applicable).
6) Walk back to the LCO table or spectator area.
7) If any rocket does not launch when its pad is fired, wait until the remaining rockets on the rack have been fired, the safety key has been removed from the launch controller, and at least 60 seconds have passed after the last launch attempt before approaching the rocket.

# MTMA Flight Card

Name: _____ Date: _____

Rocket Name/Mfg.: _____ ☐ Kit ☐ Bash ☐ Clone ☐ Upscale ☐ Scratch

Color(s): _____ Length: _____ Diameter: _____

Motor(s): ☐ Single _____ ☐ Staged _____

☐ Cluster _____

***This section required only for rockets weighing over one pound.***

Weight: _____ Anticipated altitude:_____ From: ☐ Waiver Table ☐ Sim ☐ Prior altimeter-equipped flight

Have you flown this rocket before? Yes No Rocket/motor combination flown before? Yes No

Recovery system: _____ ☐ Motor ejection ☐ Electronics

Launch rod diameter: 1/8" 3/16" 1/4" 3/8" 1/2" 3/4" 1" Rail Other: _____

Comments/Features: _____

_____

***This section for RSO and LCO use only.*** For rockets over one pound check one: □ Waiver Table □ Printed Sim

Safety Check _____ Pad # _____ Flight # _____ Recovered _____


# MTMA Flight Card

Name: _____ Date: _____

Rocket Name/Mfg.: _____ ☐ Kit ☐ Bash ☐ Clone ☐ Upscale ☐ Scratch

Color(s): _____ Length: _____ Diameter: _____

Motor(s): ☐ Single _____ ☐ Staged _____

☐ Cluster _____

***This section required only for rockets weighing over one pound.***

Weight: _____ Anticipated altitude:_____ From: ☐ Waiver Table ☐ Sim ☐ Prior altimeter-equipped flight

Have you flown this rocket before? Yes No Rocket/motor combination flown before? Yes No

Recovery system: _____ ☐ Motor ejection ☐ Electronics

Launch rod diameter: 1/8" 3/16" 1/4" 3/8" 1/2" 3/4" 1" Rail Other: _____

Comments/Features: _____

_____

***This section for RSO and LCO use only.*** For rockets over one pound check one: □ Waiver Table □ Printed Sim

Safety Check _____ Pad # _____ Flight # _____ Recovered _____