



# COUNT DOWN CARD

## WARNING!

### (Model Rocket)

A flying model rocket is a scientifically designed educational model . . . not a toy! If misused, it can be dangerous. It is capable of attaining speeds up to 300 mph. It should be used only as instructed and treated with care and respect.

### (Model Rocket Engine)

Solid Propellant Rocket Reaction Engines are specifically designed for the sole purpose of propelling model rocket vehicles. They have been scientifically designed, produced on automatic machinery, and subjected to rigid statistical quality control tests. It is very important, however, that caution be exercised in their use. ALL INSTRUCTIONS MUST be read thoroughly first and followed completely. Model Rocket engines are designed for one purpose only. They are not toys, and their misuse must be absolutely avoided. Model rocketry has proven itself to be as safe as any other hobby when common sense codes are followed.

### Model Rockets must be electrically launched using the MPC "Lunar-Lectric" or similar launch system.

During an actual launching, the person in control of the firing switch should not stand closer than 12 feet from the rocket. Be sure everyone else is back at least 25 feet.

- T Minus 10—PRE-FLIGHT SAFETY CHECK: Engine installed tightly; nose cone and recovery system GO; fins straight and undamaged.
- T Minus 9—FIRING SYSTEM SAFETY KEY IN HAND!
- T Minus 8—Load Launcher. Model slides freely on launch rod.
- T Minus 7—Clean firing systems clips. Hook up ignitor.
- T Minus 6—Adjust launcher tilt for wind.
- T Minus 5—Clear launching area.
- T Minus 4—RANGE SAFETY CHECK: Launch area clear. No aircraft overhead.
- T Minus 3—KEY IN. Panel armed.
- T Minus 2—CONTINUITY LIGHT ON.
- T Minus 1—IGNITION SEQUENCE START.
- T Minus 0—ENGINE IGNITION—LIFT OFF.

MISFIRE PROCEDURE: Release firing switch. Remove safety key. Wait one minute. Approach launcher carefully. Keep hands and fingers from under model. Keep head, body and hands to side of model. Initiate misfire cause tests.

## MODEL ROCKETRY SAFETY CODE

1. CONSTRUCTION—My model rockets will be made of light-weight materials such as paper, wood, plastic and rubber without any metal as structural parts.
2. ENGINES—I will use only pre-loaded factory made model rocket engines in the manner recommended by the manufacturer. I will not change in any way nor attempt to reload these engines.
3. RECOVERY—I will always use a recovery system in my model rockets that will return them safely to the ground so that they may be flown again.
4. WEIGHT LIMITS—My model rocket will weigh no more than 453 grams (16 ozs.) at liftoff, and the engines will contain no more than 113 grams (4 oz.) of propellant.
5. STABILITY—I will check the stability of my model rockets before their first flight, except when launching models of already proven stability.
6. LAUNCHING SYSTEM—The system I use to launch my model rockets must be remotely controlled and electrically operated, and will contain a switch that will return to "off" when released. I will remain at least 10 feet from any rocket that is being launched.
7. LAUNCH SAFETY—I will not let anyone approach a model rocket on a launcher until I have made sure that either the safety interlock key has been removed or the battery has been disconnected from my launcher.
8. FLYING CONDITIONS—I will not launch my model rocket in high winds, near buildings, power lines, tall trees, low flying aircraft or under any conditions which might be dangerous to people or property.
9. LAUNCH AREA—My model rockets will always be launched from a cleared area, free of any easy to burn materials, and I will only use non-flammable recovery wadding in my rockets.
10. JET DEFLECTOR—My launcher will have a jet deflector device to prevent the engine exhaust from hitting the ground directly.
11. LAUNCH ROD—To prevent accidental eye injury I will always place the launcher so the end of the rod is above eye level or cap the end of the rod with my hand when approaching it. I will never place my head or body over the launching rod. When my launcher is not in use I will always store it so that the launch rod is *not* in an upright position.
12. POWER LINES—I will never attempt to recover my rocket from a power line or other dangerous places.
13. LAUNCH TARGETS AND ANGLE—I will not launch rockets so their flight path will carry them against targets on the ground, and will never use an explosive warhead nor a payload that is intended to be flammable. My launching device will always be pointed within 30 degrees of vertical.
14. PRE-LAUNCH TEST—When conducting research activities with unproven designs or methods, I will, when possible, determine their reliability through pre-launch tests. I will conduct launchings of unproven designs in complete isolation from persons not participating in the actual launching.