

## LUNAR'clips 2013

Livermore Unit of the National Association of Rocketry

Range Head

David Raimondi, President, LUNAR #1221, NAR #82676

Spring has finally arrived and so has the less stable weather of the seasonal change. If you attended the last launch you got to wait around for the fog to lift and once it did, the wind started to pick up. We had to stop the launch early because of the wind and all of the rockets that were drifting down the airfield. We already had the launch rods tipped into the wind 30 degrees off vertical, the maximum angle allowed per the NAR Safety code.

So what can you do to help keep the launch going? The answer is simple: use smaller motors; reef your parachute a little; cut a spill hole in the top of the parachute; and consider not flying the bigger rockets. Everyone was told it was time to cut down on the altitude more than once. You should always be prepared with smaller motors to fly. Be prepared for the next time.

Safety starts with you. Next time you are preparing your rockets for flight, take a moment and check the following items: Are the fins about to fall off? Does the motor hook still hold the motor securely in the rocket? Is the shock cord and shock cord anchor still in good condition? Is the launch lug still securely glued to the airframe? Do I have enough flame retardant wadding? (DO NOT USE toilet paper or paper towels, it will burn!) Is it time to replace the melted parachute or streamer? All of these items are usually forgotten on launch day, but they all play an important part in a safe flight.

I saw a lot of parawads (parachutes that don't open) at the last launch. To mitigate this problem, consider storing your parachutes out of the rocket and hanging on a hook. If you are using the plastic parachutes that come with Estes and Quest, lay them flat on a table and put a very light coating of talcum powder on both sides. The talcum powder will make the surface slippery, which helps the parachutes open up. Then fold the parachute when you are ready to fly. Alternately, you can get a nylon parachute from TopFlight. I think the smallest parachute is 8 inches, and the standard sizes are available.

Let's fly smart and safely. Up fast, down slow.

David

## Building a BIG Rocket?

If you're working on a REALLY BIG rocket then you might want to check out the special cameras available at www.lomography.com. They make wide-angle cameras that expose your image over several frames of 35mm or 120 film. You won't have to lose any of the detail in your next project!



Three frames of 35mm film to capture this rocket? No problem! But how many frames would you need for a Mean Machine?