

# BARC Ballistic Impact Event – Corrective Actions

As a result of a ballistic landing near a *Rabbit Hill* residence, the following restrictions shall be immediately implemented in order to preserve BARC's launch site privileges and prevent another incident.

## NOTICE

Failure to disclose to the **RSO** that a rocket is a modified commercial kit (or scratch built); or provide accurate safety inspection information as requested by the **RSO**, shall be grounds for immediate loss of your **BARC** membership.

1. Fliers must write their rocket's expected apogee on their **BARC Flight Card** (unmodified kits using a **single A-D motor** excluded) – be prepared to support it:
    - a. Commercial kits [not significantly modified, **Note (1)**] may use the manufacture's documented altitude predictions. Otherwise,
    - b. In-hand (visual) simulation results (OR, *RockSim*, or *Thrustcurve*)
  2. All rockets must have a "launch pad" **Stability Margin  $\geq 1$** , **Note (2)**
  3. No unconventional recovery / separation methods allowed, **Note (1)**.
  4. The following rocket types will be subject to **restricted altitudes** ( $\leq 3,000$  ft.); or, not permitted, **Note (1)**:
    - a. Any rocket not previously launched at the **BARC** launch site
    - b. Highly modified commercial kits, or scratch-built rockets.
    - c. Aberrant (peculiar) flight profile rockets.
    - d. HPR Level 1 certification flights.
    - e. HPR Level 2 certification flights must be **<4,500 ft.** The applicant must have certified Level 1 with **BARC**, **and/or** demonstrated a history of HPR build, flight performance, and safety proficiency with **BARC**.
  5. Rocket flights expected  **$\geq 3,500$  ft.** must employ redundant methods to ensure airframe separation – Single altimeter deploy with motor backup, or dual isolated altimeters, **Note (3)**.
  6. Electronically activated separation charges must be proven by successful pre-flight ground testing either:
    - a. At a **BARC** launch, or
    - b. By providing a video of the separation test for **RSO** review.
- **Note (1)**: Determined by **BARC** official's peer review.
  - **Note (2)**: Unmodified commercial kits [**Note (1)**] using kit recommended motors are excluded.
  - **Note (3)**: Unmodified commercial kits not designed as dual deploy or with an integrated electronics bay whose manufacturer recommended range of motors put the rocket over 3,500 feet may be permitted [**Note (1)**] provided that the

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member has previously (and successfully) flown the rocket at a **BARC** launch to a lower altitude.

**All BARC members shall be required to sign that they have received a copy of these restrictions, and understand their responsibility to comply with them.**