

Range Officer Duties

-Positions may be combined depending on type of launch operations anticipated

Range Safety Officer (RSO)

The RSO will insure the following:

- Insure Safety Check-in officers are assigned for all flying periods. Sign in sheet will be provided
- FAA Waiver or Notice Filed and Activated
 - NOTAM filed as applicable
- Special provisions of the waiver are observed
- Safety Equipmentin place
 - High pressure water fire extinguisher
 - Cell Phone,
 - First aid kit
 - PA system for special events and large crowds
 - Bull Horn
 - Means to determine wind direction and speed
- Launch controllers Checked
 - Compatible with low current igniters
 - Include a 'return to off' launch switch,
 - Wiring connectors secured from possible shorts.
- Barriers In place
 - Keep spectators out of launch area
 - Verify proper distance between pads and public areas.
(see charts in Appendix - NAR Safety Codes)
- Launch pads..... Blast deflectors installed
 - Install Pad Checklists as needed
 - Insure pad numbers match launch controller
- Launch rods/rails.....Check
 - Clean, unbent, and securely fastened to pad.
 - 10 foot rail required for Class 2rockets
- Igniter clips..... clean and leads are secured to pad.
- No flammable materials near launch pads
- Establish wind and cloud base monitoring.
Set altitude limits for current conditions
 - Consider early 'weather flight' to determine upper winds.
 - Consult pie charts on back for general guideline.
- RSO must maintain active communications with LCO at all times
- Suspend operations if lightening is detected within 3 miles (seconds X 5)
- RSO has the authority to open and close range to any or all personnel

Critical Event Response

For any injury, fire, close call, or rocket leaving the field boundaries - Insure the problem is corrected before further launches.

Safety Check-in Officer (SCO)

- Use approved checklist to check each flight.
- Remind flier to install HPR igniters at pad

Pad Manager (PM)

- Assign pad numbers for flight
- Utilize Pad Checklist before each flight

Launch Control Officer (LCO)

- Back up RSO and SCO for all safety rules
- Utilize launch Checklist (next page) before each flight

RSO PA briefing for all fliers / spectators

- Before first flight and repeat as new people show up
- Include, but not limited to:**
 - Field setup and parking
 - Safety check in procedures
 - Winds, Altitude limits
 - Suggested launch angles / Boundary considerations
- Incident response and fire fighting should only be done by qualified range personnel
- General:**
 - Never try to catch a rocket in flight
 - Leave other's rockets where they land.
 - Use of sun block
 - Drink plenty of water
 - Any dangerous animals or insects
 - Other
- Insure that everyone knows that a "Heads Up" means to look up, **spot the rocket**, and **point at it** so others can find it. Also to egress to a safe location.
- Remind parents to **keep close track of their children**, especially during HPR launches

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- Feb. 2011