SPARC RSO CHECKLIST (DRAFT)

ADMINISTRATIVE:

A1) Is the flier over 18? If not, no high power. Reloads and G's only with parent or guardian.
A2) Certification Level? Check current membership card or event registration card.
A3) Motors G and above should not have igniters installed.
A4) Is the motor certified? Be wary of odd brands.
A5) Is the motor or motors adequate to fly the model? Has the flier checked the manufacturer's recommended liftoff weight? Is the delay appropriate?
A6) Low current igniter (flashbulb or electric match)? Note on flight card if necessary.
A7) Is motor ejection used? Was the black powder installed? Is the tape disk secure?
A8) What is the estimated altitude of the rocket? (Near 7k an RSO committee is needed)

BASIC MODEL STRUCTURE AND RECOVERY:

B1) Nose / Payload "slip-fits": Not too loose or too tight.
B2) Launch Lugs / Rail Buttons: Secure, unobstructed, adequate?
B3) Fins: Straight, secure, appropriate material?
B4) Motor Installation: Good friction fit / secure retention device?
B5) Motor "fly-though": No forward movement!
B6) Stability: Check CG. Ahead of fins OK on most models; canards and strakes need CG even more forward.
B7) Vent Hole: On high altitude, high performance models.
B8) Is the Shock cord securely attached at each end (body & nosecone)? Is parachute or streamer properly attached to shock cord? Are there any rubber bands? (If so, why are they needed?) Are Sheer Pins required (at least two) for this rocket?

CLUSTERS:

C1) Look for open holes between motor tubes or unused tubes that are not plugged.
C2) If black powder and composite motors are mixed, are the composites first to be ignited?
C3) Are the igniters wired in parallel (not series)? Check for shorts.
C4) Are all igniters (for simultaneous ignition) the same type?

ELECTRONICS:

D1) All components (especially heavy ones) secure?
D2) Arming indicator present?
D3) Does the flier have a checklist? Unit recently checked? Batteries fresh?
D4) Are the ejection charges filled?
D5) Mercury Switches: Safety Interlock? Does the motor have a "sharp" thrust decay? Unit secured and protected?