Mines Rocket Club FAR Higher Launch Prep Checklist

Flyer Name	Will Swegles	Launch Date	2024-6-15
Overseer Name		Rocket Name	FAR Higher

Notes

Avionics Configuration

Computer Model		Serial Number	
Drouge Delay		Drouge Charge Size	
Main Altitude		Main Charge Size	
Callsign		Channel / Frequency	
Orientation		Baudrate	

☐ 1 Pre-Departure / Hotel Room

- 1.1 ☐ Test of all pyro charges (Pop Test, inclues test firing second stage ignitor).
- 1.2 ☐ Test fit of avionics and batteries.
- 1.3 ☐ Test recovery deployment via pull test.
- 1.4 ☐ Construct, label, and store pyro charges.
- 1.5 ☐ Ensure good fit of motor into motor mount and casing retention system.
- 1.6 ☐ Ensure presence of 2x launch rail guide system.

1.6.1 ☐ Flyaways

1.6.2 ☐ Lugs

1.6.3 ☐ Tower

1.7 ☐ Ensure appropriate paperwork

1.7.1 ☐ Club Flight Card

1.7.2 ☐ Site Flight Card

☐ 2 Departure

2.1 ☐ Ensure all rocket components are together and labelled.

2.2 ☐ Ensure that all of the rocket's recovery devices are integrated into the rocket.

2.3 ☐ Ensure the presence of the telemega in the avionics bay with a charged battery and a pyro batter and pyro battery holder.

2.4 ☐ Ensure charges are packed correctly and labelled.

2.5 ☐ Ensure presence of avionics screwdrivers.

2.6 ☐ If using flyaway rail guides, ensure presence.

☐ 3 Preflight

3.1 ☐ Ensure rail guides are installed.

3.2 ☐ Collect pyro charges from pyro box.

3.3 ☐ Install pyro charges (do not arm the flight computer).

3.4 ☐ Check continuity, avionics functionality, GPS lock, and radio signal with avionics in idle mode.

3.5 ☐ Ensure airframe is undamaged.

3.6 ☐ Ensure motor mounts & retention is undamaged.

3.7 ☐ Install motors, checking head end retention, closure secureness, and lack of wiggle in grains.

3.8 ☐ Plug in and check functionality of screamer. Return to CF tube as quickly as possible.

3.9 ☐ Notify club members of immenent launch. Begin moratorium on other club flights.

3.10 ☐ Check in with site RSO and/or Safety Officer

☐ 4 On Pad

4.1 ☐ Approach the rail.

4.2 ☐ Install rocket onto launch rail.

4.3 ☐ Orient the launch rail for launch.

4.4 ☐ Activate & arm the avionics.

4.5 ☐ Check with base station for connectivity, GPS lock, and flight state.

4.6 ☐ Retreat to the launch control area.

4.7 ☐ Before launch:

4.7.1 ☐ Double check roles of visual and telemetry tracking for both booster and sustainer.

4.7.2 ☐ Confirm search groups for each stage

4.7.3 ☐ Ensure telemetry computer has a power supply attatched

4.8 ☐ Upon launch:

4.8.1 ☐ Sustainer telemetry: communicate alittude and major events to club and RSO.

4.8.2 ☐ Booster telemetry begin tracking upon staging event.

4.8.3 ☐ Booster visual continue watching the booster until ground hit and filming if possible.

4.9 ☐ Enter GPS coordinates of sustainer into GPS and phones of sustainer search party.

4.10 ☐ Ensure that both search patries have adequate food & water.

4.11 ☐ Ensure both parties have radio communication with the base staion & depart.

☐ 5 Recovery

5.1 ☐ Take pictures of the rocket as found.

5.2 ☐ Collect all components of the rocket, as well as any waste that can be found.

5.3 ☐ If using avionics, deactivate and disarm.

5.4 ☐ Ensure the casing is still present and undamaged.

5.5 ☐ Take a visual inspection of the rocket.

5.6 ☐ Communicate to base station that the rocket has been recovered and the status of the casing and airframe.