UAV Flight #2 Hot Report

Time & Environment

- **Time:** 11:30 PM
- **Lighting:** Near-total darkness
- **Location:** Snow-covered football turf adjacent to tennis courts
- **Conditions:** Cold, snow on ground, limited visual reference

Crew

- **Pilot:** Kieran
- **Launcher:** Laurent

Configuration & Changes from Previous Flight

- Launch performed with a **running start**, overhead release, **no initial pitch angle**
- **Full throttle applied prior to release**, then reduced after launch
- **Slight default upward aileron trim** configured

Flight Results

- Achieved **semi-controlled but sustained flight**
- Aircraft demonstrated **very high airspeed**
- Control authority generally present during early flight

Anomalies & Issues

- **Crash landing** occurred at extended distance (~100 m)
- Possible **receiver or power-connection issues** observed near maximum range
  - Receiver was already suspect pre-flight, requiring bent pins to maintain power
  - Loss of control may also be attributable to:
    - Difficulty visually tracking aircraft in darkness
    - Transmitter sensitivity set too high, making fine control difficult
- **Canopy/lid not taped or secured**
  - Lid detached after a sharp pitch-up maneuver
  - All internal electronics were ejected from the fuselage

Post-Crash Assessment

- All electronics were expelled into snow but appeared **fully disconnected**
- No immediate evidence of catastrophic electrical damage
- Components are currently **drying in rice** to attempt full recovery

Preliminary Takeaways

- High-speed flight suggests **adequate thrust and aerodynamic performance**
- Launch technique improvements appear beneficial
- Night operations significantly degraded:
  - Situational awareness
  - Visual tracking
  - Effective control at distance
- Airframe securing (canopy/lid) is a **critical pre-flight checklist item**
- Receiver power integrity must be resolved before further flight
- Do not fly in the city again. So many potential issues.