FLIGHT CHECKLIST FOR PHANTOM

<u>PREFACE –</u> Firmware on all devices/aircraft are up to date with the most stable, usable version.

<u>PREFLIGHT – INSIDE/INITIAL/PRE-POWER-UP</u>

- ☐ Structural Integrity Verification – AIRCRAFT (Can be conducted post flight)
  - o Check for cracks
  - o Check for loose components (screws, Camera UV/ND filter, labels, covers, skins)
  - o Install/verify propellers are on and tightened
  - o Verify landing gear/legs are sound and clean
  - o Verify light covers are installed and not cracked/broken
- ☐ Electrical/Electronic Verification – AIRCRAFT (Can be conducted post flight)
  - o Verify VPS sensors are not damaged or blocked
  - o Verify gimbal cables are installed
  - o Verify gimbal cables are not frayed, cracked or broken
  - o Check each motor to ensure smooth rotation
  - o Visually check coils in EACH motor using flashlight to ensure no broken, burned or misshapen coils
  - o Verify wiring in aircraft legs is not frayed, broken or damaged
  - o Use low pressure air (canned air for computer devices) blow out motors and battery compartment
- ☐ Structural Integrity Verification – BATTERY(IES) (Can be conducted post flight)
  - o Check for cracks
  - o Check for loose components
  - o Ensure terminals are not bent, burnt or otherwise damage
- ☐ Electrical/Electronic Verification – BATTERY(IES) (Can be conducted post flight)
  - o Ensure batteries are fully charged
  - o Ensure no shorts exist across terminals
  - o Use low pressure air (canned air for computer devices) blow out terminals
- ☐ Structural Integrity Verification – RC/FPV Device (Phone/Tablet) (Can be conducted post flight)
  - o Check for cracks
  - o Check for loose components
  - o Verify antennae are tight and not damaged
  - o Ensure connection cable between RC and FPV device is not frayed, broken or damaged
- ☐ Electrical/Electronic Verification – REMOTE CONTROL/FPV Device (Phone/Tablet
  - o Ensure RC and device are adequately charged
- ☐ Sight Conditions – WEATHER AND PERMISSIONS
  - o Verify on sight conditions support flight
    - ▪ www.aviationweather.gov
    - ▪ www.weather.com
    - ▪ www.accuweather.com
  - o Verify on sight condition air space classification and any notices
    - ▪ NOTAMS
    - ▪ Permission
    - ▪ Unlock if required online

FLIGHT CHECKLIST FOR PHANTOM

PREFLIGHT – ON SITE/INTERMEDIATE/PRE-POWER-UP

- Sight Conditions - VISUAL
  - Weather – Visual Assessment
    - Wind
    - Rain
    - Cloudiness
  - Crowd density
  - Interference
    - Physical – Trees, Power lines
    - Magnetic/Radio
      - Cell Towers
      - WIFI Density
      - Radar (on boats/ships)
  - Unlock if required using DJI Go GEO
- Launch Location
  - > 20 meters from water, highway, detrimental location
  - Shielded/away from metal or other magnetic interference

FLIGHT CHECKLIST FOR PHANTOM

PREFLIGHT – ON SITE/INTERMEDIATE/AT POWER-UP

- ☐ Power Up RC
  - o Ensure lights and sounds are normal
  - o View **RED** LED on RC
  - o Ensure FUNCTION switch set to "P"
- ☐ Power up aircraft
  - o Install battery (if not already completed)
  - o Power aircraft
    - ▪ View 4 **GREEN LEDs** on battery
    - ▪ View **RED** LED button on battery
    - ▪ Listen for 4 distinct beeps from AIRCRAFT
    - ▪ View camera/gimbal rotate through motions and steady up facing forward
    - ▪ View AIRCRAFT safety LEDS blinking
  - o RC connection verification
    - ▪ Verify **GREEN LED** on RC
- ☐ Power FPV device/Start control application
  - o Open DJI GO
    - ▪ Verify SAFE TO FLY-GPS
      - • Note number of GPS/GLONASS satellites
    - ▪ Verify RADIO SIGNAL is adequate – No Interference
    - ▪ Verify HD and RC signal 4 bars
    - ▪ Verify battery > 95-100% and battery voltage > 4.10volts
    - ▪ Verify compass values. Calibrate compass if required
      - • Mod Values should be between 1000-2000, 1450-1550 ideally
      - • Ensure no metal objects in vicinity
    - ▪ Select P-GPS on FPV device
      - • Verify RTH
        - o Set height is higher than surroundings
      - • Loss RC signal
        - o Over open water – Hover
        - o Over land – RTH

FLIGHT CHECKLIST FOR PHANTOM

PREFLIGHT – ON SITE FINAL/POWER UP

- ☐ Perform CSC, start motors
  - o Verify FUNCTION switch set to "P"
  - o Verify FPV device/DJI Go states "Takeoff"
  - o Ensure home point recorded/updated
  - o Verify motors are at "low idle"
  - o Check battery voltage > 4.10volts
  - o Verify compass values again
    - ▪ Mod Values should be between 1000-2000, 1450-1550 ideally
    - ▪ Ensure no metal objects in vicinity

TAKEOFF – ON SITE/FINAL/TAKEOFF

- ☐ Raise altitude to above head height 6-8 ft.
  - o Verify FUNCTION switch set to "P"
  - o Verify compass values again
    - ▪ Mod values should be between 1000-2000, 1450-1550 ideally
  - o Ensure stability after ~30-45 seconds
  - o Follow preplanned launch route, execute flight