

Check list

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Safety is paramount, and should be top of the list of every pilot regardless of aircraft flown. This hobby is fantastic, but be aware of the dangers associated with flying one of these potential projectiles, because ultimately you will assume the responsibility of carelessness or neglect – period!

Please bear in mind that these machines and/or aircrafts can hurt, maim, or even cause loss of life if not taken seriously, so don't be a statistic or a casualty of carelessness! Check, recheck, inspect, and make sure you have done your due diligence to the best of your ability before you send your bird into the air. And this fact is undeniable, "what goes up, will come down" (tattoo it on your arm if you need too), but how you bring your aircraft down can mean a good day of flying, or a really bad episode at the field.

So if you haven't made it a practice to check/inspect your heli, do begin before your next flying session. Below is a check list that I use and constantly go through as part of my routine, maybe it could help you out too?

Enjoy, be safe, and be careful for everyone's sake, and till next time, see you at the field – Gus.

Before heading out to the field:

- Check and charge receiver and transmitter batteries.
- Check and charge field equipment batteries, glow driver, 12 volt dry cell battery, and any other field equipment batteries.
- Have a fresh fuel supply, glow, gasoline, or if you have an electric machine, charge and check flight pack batteries.
- Make sure you have the correct tools, supplies, support equipment and/or accessories for MINOR field repairs. If it's not a simple fix that can be taken care of at the field, take it home and correct the problem properly AT HOME.
- Bring paper towels, water, snacks, and any other refreshments for a long enjoyable day of flying. If you become fatigued, wrap it up and go home.

Before the first flight:

- Unload, and organize your equipment. Knowing where everything is or within arm's reach or easy access can be invaluable in a moment of haste.
- Inspect your machine thoroughly:
 - Tug on all ball links – if one pops out, change it. If you don't have one, DON'T FLY!
 - Make sure all servo connections are secure.
 - Make sure your receiver battery is connected properly.
 - Volt check your receiver battery. If voltage is too low, DON'T FLY!
 - Visually look for any loose screws, nuts, bolts, or fittings.

- Lubricate the main shaft, and tail assembly.
- Check tightness of main blades and tail blades.
- Check correct throttle needle settings.

First flight preparations:

- Before you do anything with your transmitter, check for the following:
 - Check if frequency is free to use (if on 72 MHz)
 - If free to use frequency, mark frequency board – afterwards, I personally visit each pilot to confirm which frequency they are using in addition to marking the frequency board. If any other pilot happens to be on the same frequency, I will communicate accordingly to share frequency for no misunderstandings (you gotta love 2.4 GHz).
- If all is clear to go with frequency, proceed with the next steps of transmitter protocol.
 - Check that the throttle stick is in the low position.
 - All idle up's disengaged.
 - Throttle cut disengaged.
- If your machine has a tee fitting to spit fuel to the tank and carburetor, more than likely a fuel line cutoff clip is used. Engaged cutoff clip to prevent engine flooding – fill fuel tank.
- Turn on transmitter, and allow it to cycle through initialization.
- Turn on receiver, and don't move helicopter for 2-seconds in order for gyro to initialize.
 - Upon power-up of receiver, gyro will flash rapidly until solid light is engaged, indicating heading hold mode is ready.
- Present starter.
- Connect glow driver.
- Hold main blades firmly.
- One final transmitter visual check for throttle stick position, and that all idle up's are disengaged.
- Crank starter until engine starts.
- Adjust throttle trim for proper idle.
- Carry helicopter to flight line.
- Hover machine for a few seconds to see if everything is functioning properly.
- Enjoy the flight session.

Powering off procedures after flight session:

- Turn off receiver.
- Engage fuel line cutoff clip.
- Turn off transmitter.
- Carry helicopter back to pit area.

After flight check list:

- Let engine cool off.

- Wipe off excess oil from machine.
- Check battery voltage often!
- Inspect all ball links – tug on each one, and if one pops out, change immediately before next flight. If you don't have one. NO MORE FLYING until it's replaced!
- Check that no screw, bolts or nuts have vibrated off.
- Give yourself time to relax before next flight. Rushing from one flight to another will lead to fatigue, which could result in carelessness.

At the end of a successful day of flying, a quick wipe down at the field is not proper maintenance. Once you're home, and you've had time to rest, now it's time for a more in-depth maintenance routine. This will also be covered, so stay tuned.