

Beginners Information

Club Recommended Beginners Helicopters.

After much deliberation, the committee have decided to suggest a specification for a suitable model for learning to fly.

Please be aware that this recommendation comes from many years experience in teaching people to fly, and is specifically designed to get you flying as quickly and easily as possible. The model suggested may not be the prettiest, or the cheapest, but it will save you money and time in the long run, so put that need for an Airwolf model on hold just for a while and read on. (If you have the money please go ahead and buy the Airwolf model, we just recommend you put it somewhere safe and resist the urge to fly it before you are ready!)

As always these recommendations are our opinion only and we cannot and will not be held responsible, if in any doubt please speak to a member of the committee before making any purchase.

Cost is probably going to be your main concern when choosing your helicopter, but generally speaking the larger the helicopter is, the easier it is to learn to fly. Discounting the co-axial or counter rotating helicopters, learning to fly with a smaller helicopter, even a 450 sized electric helicopter, although possible, isn't going to be as easy as with something a bit bigger.

Anyway, the recommendation is as follows -

A 'generic' .30 sized IC or 550 size electric helicopter paying close attention to the following points -

- 0.39 sized IC engine or suitable Electric equivalent
- Pod and boom configuration
- Heading lock gyro and matched rudder servo
- Skid style undercarriage
- Training set
- Engine run in balls (IC only, used instead of blades for motor break in)

It is also highly recommended that you take the plunge and go straight for a 2.4Ghz 7-channel transmitter system, such as the Spektrum DX7 or Futaba 7EX/2.4 (although both systems are equally good, the majority of BMAC club members use Spektrum/JR radios so it is easier to find someone able to help with the programming if you go for that option), it will be much simpler with regards to frequency control and will save you money in the long run, by you not having to replace your 35Mhz radio gear at a later date.

If you have any questions about what is suitable, again, please speak with a committee member before committing to anything.

Checklist for Model Helicopters

(Primarily for newcomers or flyers with limited experience).

This has been developed to save us and you time. Please carry out this checklist before taking your model to the pits/flying patch as incorrectly built models take a lot of time to correct at the field and therefore cost valuable flying time (which in this country is at a premium).

We are there to help and advise you, not to carry out work that should have been done in the correct environment. It is far easier to carry out checks/maintenance in the comfort of a workshop or at home rather than on an open field with limited tools at hand.

Wherever possible take your model along to one of the club nights as there are plenty of people to advise on what needs doing before that very important first flight.

It is best to check the model from the front and then working backwards to the rear. At this point the blades should not be attached.

1. Ensure your blades are evenly balanced, using small amounts of insulation tape on the lighter blade to add weight. Add the tape near the tip end of the blade, as this will mean smaller amounts of tape will be required.
2. Ensure the swash plate is level and parallel to the ground and that all the mixing levers, link rods are positioned and the correct lengths as per the manufacturers' instructions.
3. Most helicopters have a soft or sport set up, use these settings not the 3D ones. When setting the blade pitch you may find the manufacturer lists only 3 positions, low, middle and high, where as your transmitter may have 5 positions. Use positions 1, 3 and 5 as these points, simply averaging 2 and 4 out to make a smooth curve. **If doing this with an electric helicopter, unplug the motor to avoid it spinning up.**
4. Ensure that the engine is securely mounted by physically attempting to pull it.
5. Ensure parts requiring thread lock or grease have been appropriately treated.
6. Check that the training undercarriage is securely attached. Remember that this takes a real beating when taking off/landing and if loose will fail when you least want it to. Do not be afraid to test it by moving it in all directions.
7. Are all the servos screwed down with their anti-vibration rubber grommets fitted underneath the servo mounts? (The brass ferrule fits from underneath the mount and not from the top) And are the servo arm securing screws fitted and tight?
8. With the transmitter throttle stick in the middle position the servo arms should be at right angles (90 degrees) to the servos. Don't forget to check this with the radio and receiver turned on and with the trims set to centre. If not there will be differential movement built into the system. **If doing this with an electric helicopter, unplug the motor to avoid it spinning up.**
9. Are the control links fully closed over the servo arms and horns? A good way of ensuring that these do not un-pop (especially with plastic links) is to fit a 5mm approx. length of fuel tubing over them thus ensuring they stay fully closed.
10. Make sure that that the receiver is wrapped in foam and is very tightly tied or wedged into an appropriate area ensuring that it does not foul against any moving servo rod etc. Note: – Before wrapping in foam ensure that the servo leads etc. are fully inserted and the crystal cannot fall out.

11. Ensure that the battery pack is securely held and cannot move about. If the battery is able to move then this will alter the C of G thus altering it's flying characteristics and should the model encounter a hard landing, the battery will shoot forwards causing more damage than is necessary. For additional safety it is wise to tape the battery lead to the switch connector harness at the point where they connect.
12. Do you have a battery indicator fitted? If not, are the batteries holding sufficient charge for the sessions flying? Don't forget the transmitter (Tx) batteries also need to be charged.

Please ensure that you also turn up with at least a basic toolkit.

This should, as a minimum consist of: -

- Medium sized cross head screwdriver
- Small sized cross head screwdriver
- Medium flat blade screwdriver
- Small flat blade screwdriver
- Allen keys that fit all of the screws that you have fitted within the aircraft
- Cutters
- Large/medium pliers
- Small pliers (possibly long nose).
- Plug wrench
- Insulation tape
- Assortment of small washers and screws etc (to replace any that get removed and lost)
- Sharp knife/scalpel
- Length of spare fuel tubing
- Kitchen roll/old rags/Wet wipes
- Pitch gauge
- Thread lock and Grease
- Glow plug lead
- Spare glow plugs

Do you have a power panel or starter motor etc and if so, is the 12volt battery charged to power them?

This is not a full list but carrying out these points will show your keenness in doing well in the hobby and will put you in a good light with your trainer.