## Propsnappers Training Guide for Solo

- 1. Preflight Instruction
  - a. Discuss scheduling of flying sessions with assigned instructor.
  - b. Go over basic aerodynamics and control/buddy box functions.
  - c. Review basic AMA and club rules/restrictions!
    - i. All flights are line of sight no FPV without safety observer.
    - ii. No flying outside 2000 feet horizontal and 400 feet altitude.
    - iii. Maximum number of flyers at one time of three.
    - iv. No flying over pit area.
    - v. Procedure to contact FAA tower if a fly away occurs. Number on board at club house.
  - d. Inspect student aircraft for airworthiness and three batteries minimum, if electric.
- 2. Use of Gyro Technology
  - a. Most E-Flite aircraft have SAFE technology that allows for three flight modes. 1. Beginner, 2. Intermediate, 3. Advanced.
  - b. Beginner flight mode could be appropriate for some students first starting training. Aircraft returns to level flight when you release the stick.
  - c. Since students are on a buddy box instructors should work to get students to the "Intermediate" mode as soon as possible. This Flight Mode allows limited bank and pitch, but no gyro input flight in between the extremes. In the beginner mode students are fighting the gyro to keep the aircraft from returning to level flight.
  - d. The goal should be to get the student to no gyro use during the training program. The SAFE is always there in an emergency after the student Solos without using it.
- 3. First Flights (this may require several flights depending on individual)
  - a. Master level turns in both directions.
  - b. Be able to fly down the runway centerline in both directions.
  - c. Trim exercise... Instructor puts buddy box slightly out of trim in one axis at a time and lets student reset proper trim.

- 4. Ground reference maneuvers (may require several sessions)
  - a. Figure eight maneuver varying bank angle to compensate for wind while maintaining consistent ground path and altitude.
  - b. Traffic pattern maintaining consistent ground track.
    - i. Traffic pattern terminology. -Downwind, -Base, Final, Cross Wind.
  - c. Use power to control decent for low approach, approx. 25 feet AGL.
  - d. Proper use of power to control rate of decent and pitch to control airspeed.
- 5. Traffic Pattern
  - a. Takeoff....
    - i. Proper use of full power and rudder to center aircraft
    - ii. Use of elevator to keep nose wheel from sticking in grass.
  - b. Landing...
    - i. Use of rudder to align aircraft with runway, particularly with a cross wind. Introduction of wing low with rudder to keep aircraft from drifting while using rudder in cross wind conditions.
- 6. Prior to Solo
  - a. Three Takeoffs and landings in each direction. Both directions may not be practical depending on wind conditions. (Instructors discretion)
  - b. Unusual attitudes... Instructor gives the student the aircraft in an unusual attitude after discussing recovery techniques.
  - c. Simulated "dead stick" pattern and landing... demo and performance. This applies to both Nitro/Gas and Electric since you can have a low battery cut off situation.
- 7. Solo complete... Have fun and don't hit the Solar Pannels... 😊

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