

NOARLUNGA MODEL AERO SPORTS Inc.

Flying field and club rooms.

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NMAS - Pilots Recommended Safety Procedures – Electric

MOP NUMBER 14.2

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PURPOSE

To inform all members regarding electric model safety procedures when in the NMAS pits area and when on the field.

2. DEFINITIONS

- "Armed" The motor will start if the throttle stick is advanced.
- The use of a "Safety System" Means that a model can be "un-armed" and will not start if the throttle stick is advanced.

3. POLICY

The following documents will be available to all club members for reference.

4. RESPONSIBILITY

It is the responsibility of the Chief Flying Instructor and all members to apply these recommended procedures, in the interest of safety.

SAFETY PROCEDURES

- ARRIVAL AT FIELD GO TO PIT AREA
 - Go to Shed and get a safety fork or provide strap to restrain model in pit area.
 - Assemble plane in pit area.
 - Set up flight box (battery charger, tool kit etc).
 - Comply with battery charging guidelines (refer separate document), charging of LiPo batteries is only allowed in the pits and the designated charging area.
 - o Carry out pre-flight checks (below).
- PRE-FLIGHT CHECKS IN PIT AREA (new trainee models are to be checked with Instructor)

- Ensure that the model is properly restrained (with fork) & stand behind the propeller for safety.
- Check receiver (Rx) battery (if installed separately) and/or install charged flight battery.
- Check correct model selected on Tx.
- Switch on Tx first then connect flight battery (from behind prop for safety)
 and turn on Rx. Once battery is connected the electronic speed control (ESC),
 motor and prop are considered armed and dangerous.
- Tx fail safe setup test With Rx turned on and the throttle off (down), turn Tx off to test that the ESC does not start the motor. Servos should remain in last best position. Once tested turn Tx back on.
- Carry out range check (with transmitter in low power mode take a walk, 30 meters with motor running).
- o Check Centre of Gravity (C of G) is correct as per model instruction manual.
- Check Linkages and screws are tight, aileron, elevator, rudder and throttle operation.
- Check Setup of flight-box is safe (ie; battery connections are protected etc)
- Check Amp draw on motor is within limits of motor, esc and battery specifications.
- Set timer to required flight time.
- An approved safety system is to be used to lockout the motor for safety until you reach the flight line, refer to; "When arming the model ready for flight".

WHEN ARMING THE MODEL READY FOR FLIGHT:

- Always keep clear of the prop when the battery is connected.
- At least one of the following "safety systems" shall be installed on the model;
 - 1. Green tag system.
 - 2. Safety Disconnect Plug installed on side of model.
 - 3. Transmitter Safety Switch.
 - 4. Model mounted electronic safety switch (grounding signal).
- The installed "safety system" is to be in use from the pits to the flight line.
- Models must only be "armed" on the flight line, or in the pits, with special attention to "keeping clear of the prop" when "testing" or "setting up" the model.

• WHEN SETTING UP AN ELECTRIC MODEL IN THE PIT AREA:

Always remove the prop before connecting the battery to setup the model.

WHEN TESTING A MODEL IN THE PIT AREA (THRUST)

- The model must be secured with a yoke or other suitable means.
- Always keep clear of the prop when the battery is connected.

INSTRUCTOR AND STUDENT SAFETY

• The Instructor shall always carry the master transmitter and never give the transmitter to the Student.

READY TO FLY

- When spot on flight line is available take plane and Tx to field. Trainees must be with instructor. A buddy box may be used to assist the instructor and trainee. Hook Tx to neck strap (your preference).
 - 1. Check direction of aileron, elevator, rudder and throttle operation.

- 2. Check wind sock for direction of take-off, call "ON THE FIELD" to alert other flyers and LOOK to see if any planes are landing.
- 3. Start timer.
- o Take off have a good flight and call "LANDING" on final approach.
- On landing; taxi back, immediately disconnect flight battery, turn off Rx, then turn off Tx

• STORAGE OF MODELS

 Models can be stored in the open shed with the main power batteries (LiPo) removed. Motors must not be run in the open shed.