

AEROSPACE

The 4-H aerospace program provides youth with educational information about aerospace that develops project skills (i.e., principles of flight, model rocket construction, model rocket safety, FAA drone regulations) and life skills (i.e., decision-making, using science and technology, developing communications skills).

Superintendent: Charles “Buzz” Wilson

State Fair Entries: One rocket, remote control aircraft, or drone and one poster/display board will be selected from grades 3-5, 6-8 and 9-12.

All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member’s exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the manner in which references are listed.

Rocket Skill Level Requirements: (To meet 4-H State Project Guidelines, please note that 4-H’ers must start in the Parke County Division that correlates to their Estes Skill Level.)

- 4-H’ers in grades 3-5 are required to exhibit an Estes Skills Level 1 or 2
- 4-H’er in grades 6-8 are required to exhibit an Estes Skills Level 2 or 3
- 4-H’ers in grades 9-12 are required to exhibit an Estes Skills Level 3 or above

No “Ready to Fly” or E2X rockets are accepted in the 4-H Aerospace project. Rockets are judged and displayed without engines or igniters.

Remote control aircraft or drones may be constructed from a kit or purchased ready-to-fly.

Rockets may be exhibited with a base, but launch pads are not permitted. All rockets must weigh less than 3.3 pounds and considered an amateur rocket according to FAA regulations.

DIVISION I

First year members will build a beginner rocket purchased from the club. You may paint your rocket any color you choose, however, the decals provided must be used. Rockets purchased from the Extension Office will be a Skill Level I Rocket.

Remote control aircraft or drone of your choice that is age/grade appropriate and compliant with FAA regulations, federal and state laws, and local ordinances. This exhibit choice is to include a notebook or poster including how the aircraft/drone was used and aerospace skills learned. Displaying the aircraft or drone is optional.

DIVISION II

Second year members will build a rocket purchased from the club. The members may paint their rocket any color and don’t have to use the decals provided. (Division I and II members shall not alter the construction of their rockets other than what is indicated above.) Rockets purchased from the Extension Office will be a Skill Level II Rocket.

Remote control aircraft or drone of your choice that is age/grade appropriate and compliant with FAA regulations, federal and state laws, and local ordinances. This exhibit choice is to include a notebook or poster including how the aircraft/drone was used and aerospace skills learned. Displaying the aircraft or drone is optional.

DIVISION III

Third year members may build any rocket they choose as long as it is a single stage (1 engine only) and no larger than a “C” size engine. They may paint and alter the rocket any way they choose so long as it is safely built. Division III

members may buy a Division II rocket from the club if they are unable to obtain their own. Members in this division in grades 5-8 are not permitted to exhibit a rocket with a cluster engine. Fifth graders in this division can not exhibit a rocket that exceeds a Skill Level II.

Remote control aircraft or drone of your choice that is age/grade appropriate and compliant with FAA regulations, federal and state laws, and local ordinances. This exhibit choice is to include a notebook or poster including how the aircraft/drone was used and aerospace skills learned. Displaying the aircraft or drone is optional.

DIVISION IV AND ABOVE

Fourth year members and above may build any rocket of their choice. Multi-stage and "D" larger engines are allowed, but may not exceed a "G" size engine. This division must supply their own engine. Members in grades 6-8 in this division are not allowed to exhibit a rocket above an Estes Skill Level 3 or a cluster engine rocket.

Remote control aircraft or drone of your choice that is age/grade appropriate and compliant with FAA regulations, federal and state laws, and local ordinances. This exhibit choice is to include a notebook or poster including how the aircraft/drone was used and aerospace skills learned. Displaying the aircraft or drone is optional.

OPTIONAL ACTIVITY

4-H Aerospace members may participate in the 4-H Rocket Launch at the County Fair. Refer to the posted Fair Schedule for time and location.