

ENGINEERING & TECHNOLOGY

Dept. RO

4-H members must be currently enrolled in the Kansas 4-H STEM project to exhibit in this department. Exhibits must have been completed during the current 4-H year.

Each exhibitor may enter one exhibit per class.

ROCKETRY-AEROSPACE

The Kansas 4-H STEM Rocketry program is designed to allow 4-H members to explore aerospace through rockets of various sizes. Kansas 4-H has adopted the National Association of Rocketry's rules, regulations, and safety guidelines.

Exhibit Information for ALL rocketry categories:

1. Consultation/interview judging will be held Thursday.
2. All revisions of all forms previously released for the STEM division, either undated or dated prior to the current year are void for use and new forms must be obtained and used that are dated by the State 4-H Office for the current year. Use of old forms will result in the loss of one ribbon placing for exhibits.
3. Relevant documents & State Fair guidelines may be obtained from County Extension Offices or <http://rocketry.engtech4ks.com>.
4. NAR refers to the National Association of Rocketry and its governing board.
5. Tripoli refers to the Tripoli Rocketry Association and governing board.
6. All NAR documents, with the exception of the "pink book," referenced herein can be found at <http://www.nar.org>.
7. If a fire burn ban is in effect for any county in Kansas, exhibitors in any Kansas County are not required to launch their rocket(s). All requirements for the launching of rockets for the state fair and the documenting of the launching are suspended for the duration of the ban.

Exhibit Definitions for ALL rocketry categories:

1. 4-H members enrolled in Rocketry for updated County and State Fair definitions please contact the extension office or <http://rocketry.engtech4ks.com>.

Exhibit Rules for ALL rocketry categories:

Purpose: These rules apply to how rockets are to be displayed at the fair and what those displays should and should not contain. These rules apply to all rockets displayed in the STEM division.

1. 4-H members enrolled in Rocketry for updated County and State Fair exhibit rules please contact the extension office or <http://rocketry.engtech4ks.com>.

Construction Rules for All Rockets

Purpose: These rules apply to the construction of all rockets displayed in the STEM division.

1. 4-H members enrolled in Rocketry for updated County and State Fair guidelines for construction rules please contact the extension office or <http://rocketry.engtech4ks.com>.

Model Rocketry Guidelines (ages 9 and up):

Purpose: Model rockets are generally small-to-medium sized rockets that can be purchased at hobby stores that an individual(s) builds from parts similar to those found in model rocket kits.

1. 4-H members enrolled in Rocketry for updated County and State Fair guidelines for ages 9 and up please contact the extension office or <http://rocketry.engtech4ks.com>.

Original Design Rocket Guidelines (ages 11 and up):

Purpose: To allow for youth to develop their own rockets (model, mid and high powered) in a safe manner that displays maximum craftsmanship.

1. 4-H members enrolled in Rocketry for updated County and State Fair guidelines for ages 11 and up please contact the extension office or <http://rocketry.engtech4ks.com>.

Division JR - Exhibitors 7 and 8 years old

2601 - Rockets made from a kit, **without** pre-assembled fin units. Include plans.

2602 - Rocket made from "beginner's kit." Include plans. Rockets in this class may have pre-assembled fin units. (This class is for first and second year 4-H members to explore the rocketry project.)

Division A - Exhibitors 9 through 13 years old

5520 - Rocket made from kit. Include plans.

5537 - Scale Model Rocket made from kit. Include plans.

Division B - Exhibitors 11 through 13 years old (9-10-year-old may not enter in this class)

5521 - Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans.

5538 - Scale Model Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans and stability testing.

Division C - Exhibitors 14 years and older

5525 - Rocket made from kit. Include plans.

5526 - Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans.

5539 - Scale Model Rocket made from kit. Include plans.

5540 - Scale Model Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans and stability testing.

Division D - Exhibitors 11 years and older

This class is designed to encourage teamwork among individuals and clubs to work on a rocket from the initial design to the finished product.

5530 - Rocket designed by 2 or more exhibitors: not merely a modification of an existing kit. Include original plans.

Mid or High-power Rocketry (2x'D' to 'G') Engine Guidelines:

Purpose: To allow for improved safety and judging of rockets that meet the requirements of 4-H mid-power rockets.

1. 4-H members enrolled in Rocketry for updated County and State Fair guidelines for Mid or High-power Engines please contact the extension office or <http://rocketry.engtech4ks.com>.

Division E—Exhibitors 14 years and older

5536 - Mid or high-power rocket made from kit or original design.

A Grand and Reserve Grand Champion will be selected from all Engineering & Technology Class Champions and Reserve Champions.