

DEPARTMENT – BUILDING EXHIBITS

SECTION –UNCREWED AERIAL SYSTEMS (Must be enrolled in Uncrewed Aerial Projects)

SECTION - UNCREWED AERIAL SYSTEMS

Purpose: The 4-H uncrewed aerial systems or UAS project explores the world from above the trees and discovers new frontiers with UASs. UASs are commonly known as Uncrewed Aerial Vehicles (UAVs) or drones. Members explore the uses and applications of unmanned aerial systems including how UASs link to other projects such as geology, robotics, electronics, crop science and many more.

1. The 4-H members must be currently enrolled in the 4-H project to exhibit in this division.
2. Each exhibitor may enter one exhibit per class. Exhibit must have been completed during the current 4-H year.
3. The information that accompanies the UAS must be limited to the Engineering & Technology Exhibit Information Form which is affixed to a 10" x 13" envelope. This envelope should NOT be attached to the UAS. This may be downloaded from <http://uas.engtech4ks.com/>. Any UAS exhibit not including this completed envelope will receive an automatic participation ribbon. All revisions of forms previously released for the division dated prior to current year are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year.
4. Exhibitor's name, county or district, age, and years(s) in project must be tagged or labeled in a prominent location on the exhibit, educational display, notebook, and/or poster.
5. Uncrewed Aerial Systems that include or depict weaponry of any kind will be disqualified.
6. If modifications are made to the exhibit, a page should be attached noting those modifications.
7. If a safety violation is noted by the judge, superintendent, or other staff, the exhibit will receive a participation ribbon (at the judge's discretion).

Division A – Intermediate, 9-13 years old

- 5701** Uncrewed Aerial System designed and constructed by exhibitor that is operated by a remote-controlled device. The UAS must not be a mere modification of an existing kit or plan. You may not exhibit a UAS that is purchased off the shelf in this class.
- 5702** Practical application of an Uncrewed Aerial System constructed from a commercial (purchased) kit. This includes the UAS, plus one or more of the following: video, notebook, poster, display board, etc. This class is separate from educational exhibits. A tangible use would be mapping Russian olive trees, eroded soils, and bindweed in fields, etc. There are also many other non-agricultural UAS uses that would be appropriate for this class.

Division B – Senior, 14 years and older

- 5706** Uncrewed Aerial Systems designed and constructed by exhibitor that is operated by a remote-controlled device. The UAS must not be a mere modification of an existing kit or plan. You may not exhibit a UAS that is purchased off the shelf in this class.
- 5707** Practical application of an Uncrewed Aerial System constructed from a commercial (purchased) kit. This includes the UAS, plus one or more of the following: video, notebook, poster, display board, etc. This class is separate from educational exhibits. A tangible use would be mapping Russian olive trees, eroded soils, and bindweed in fields, etc. There are also many other non-agricultural UAS uses that would be appropriate for this class.

4-H STEM EDUCATIONAL EXHIBITS – POSTERS, NOTEBOOKS AND DISPLAY BOARDS

Purpose: To allow 4-Hers to have a clear link to the Engineering and Technology area of uncrewed aerial systems. All posters, notebooks and display boards are listed in this section and have been removed from the individual sections to save space.

1. For notebooks, display boards, and posters, no additional exhibit information is required; no

manila envelope is needed for these exhibits.

2.Exhibits in posters, notebooks and display boards must contain substantial supporting educational materials.

4.Educational display boards, posters and notebooks should be creative and showcase details about the knowledge learned in the project during the current 4-H year. Value is placed on youth who can demonstrate how their skills have increased while completing the project. Each exhibit will be judged on uniqueness, creativity, neatness, accuracy of material, knowledge gained, and content. An exhibit judging scoresheet available at <http://uas.engteck4hks.com>

5.Follow copyright laws, citing all sources of information in a standard notation. Sources of information must be cited on the front of your exhibit, including all posters and educational display boards.

6.Educational displays are not to exceed a standard commercial 3'x 4' tri-fold display board. Card tables for display are not required but can be used at the county only level. Care should be taken to use durable materials that will withstand Fair conditions.

7.“Construction Kits” that are part of Educational displays must be contained in cases (tackle boxes, sealable containers, etc.) that may not be larger than 1' X 2' X 2' and must have a latch which securely keeps all components contained in the “Construction Kits”. Other components are to adhere to appropriate dimensions as stated elsewhere.

8.Educational Project notebooks must be organized in a 3-ring binder.

9. Any three-dimensional display exhibits may not be thicker than 1”.

10.Exhibitor’s name, county or district, age, and year(s) in project must be tagged or labeled in a prominent location on the notebook and/or “Construction Kit.” For educational displays and/or posters, the exhibitor’s name, county, age, and year(s) in project must be tagged or labels on the back of the exhibit. Failure to label an exhibit may result in one ribbon placing deduction.

11.Exhibits should possess the following qualities (in no particular order):

- A Central theme

- What you want others to learn

- Be designed and constructed in a manner befitting the exhibit

- Be something you are interested in

- Be related to Astronomy, Computer Systems, Robotics, Rocketry, or Unmanned Aerial Systems and those characteristics described above

12. If a safety violation is noted by the judge, superintendent, or other staff, the exhibit will receive a participation ribbon (exhibit at the judge’s discretion).

Uncrewed Aerial Systems - Novice – Ages 7-8

5777 Novice Uncrewed Aerial Systems Educational Display

5779 Novice Uncrewed Aerial Systems Educational Notebook

5780 Novice Uncrewed Aerial Systems Educational Poster

Uncrewed Aerial Systems - Intermediate Division – 9-13 years old

5781 Intermediate Uncrewed Aerial Systems Educational Poster

5782 Intermediate Uncrewed Aerial Systems Display Board

5783 Intermediate Uncrewed Aerial Systems Notebook

Uncrewed Aerial Systems - Senior Division – 14 years and older

5786 Senior Uncrewed Aerial Systems Educational Poster

5787 Senior Uncrewed Aerial Systems Display Board

5788 Senior Uncrewed Aerial Systems Notebook