

## **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.**

### **UNCREWED AIRCRAFT SYSTEMS**

Purpose: The 4-H unmanned aerial systems or UAS project explores the world from above the trees and discovers new frontiers with UAS's. UAS's are commonly known as Unmanned Aerial Vehicles (UAV's) or drones. Members explore uses and applications of unmanned aerial systems including how UAS's: link to other projects such as geology, robotics, electronics, crop science and many more. Each exhibitor may enter one exhibit per class.

1. 4-H members enrolled in 4-H Engineering & Tech Uncrewed Aircraft Systems for updated County and State Fair guidelines for ages 11 and up please contact the extension office or <http://uas.engtech4ks.com>.

#### **Junior Division A - 7 and 8 years old**

**5700** – Uncrewed Aircraft System “designed and constructed by exhibitor” that is operated by a remote-controlled device.

#### **Intermediate Division - 9-13 years old**

**5701** – Uncrewed Aircraft 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 Aircraft System constructed from a commercial (purchased) kit. This includes the UAS, plus one or more of the following a 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 Aircraft 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 Aircraft System constructed from a commercial (purchased) kit. This includes the UAS, plus one or more of the following a 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.

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