

## Aerospace Project Helpful Hints

### Rocketry

- Choose a design appropriate for your skill level. For beginners, a simple model such as an Alpha or Pip Squeak is recommended.
- Make sure your rocket has **balsa wood fins!** The craftsmanship of balsa fins is an important part of the judging, and required to qualify for a blue ribbon.
- Properly sand and align your fins. Sand with the grain until smooth and round or point the leading edge. Try to make your wood fins feel as smooth as plastic fins!
- For an even smoother finish, follow up with several coats of sanding sealer. Brush on against the grain and sand lightly with the grain between coats.
- Paint your rocket by applying a number of light coats. It's okay if you don't cover it all the first time! This will help prevent runs in your paint, which can ruin a great rocket.
- After applying decals, several coats of clear spray will seal down edges of the decals and give your rocket a smooth finish.

### Kites

- Kites are a great project for anyone looking to be creative or artistic!
- Each age group has the option of building a specific type of kite as shown in the project book, a create your own class where anything goes, or both if you'd like.
- Be creative when choosing building materials, especially for sails and tails. Plastic, paper, and fabric are just a few possibilities.
- Be colorful!
- Make sure to fasten your bridle correctly. On diamond and fighter kites the bridle line should pass through the sail so the spine and cross strut support the sail material from behind.

### Model Airplanes

- Projects can be any flyable balsa and tissue style airplane such as rubber powered or R/C models.
- Beginners may want to start with a simple kit, such as Guillow's Cadet or Cloud Buster, which only have tissue covering the wing and stabilizers.
- Be sure to give yourself plenty of build time! Although they can be the most time consuming aerospace project, they can also be the most rewarding.

### Aerospace Displays

- Posters, table-top displays, and scrapbooks are among the possibilities for display projects.
- Themes can be any aerospace related subject. Historical or technological topics are a few examples.
- Displays are another great project for being creative! Make sure to include visual elements and a lot of good information.
- Stick to the size limits in the fair book so your display is state fair eligible!