3D Printing as applied to SO Flying Events

3D printing has become increasingly common today and 3D printers can often be found in school labs and in the homes of many students and their parents. Some Science Olympiad events can have printed vehicle parts or construction tools and the flying events are beginning to see these as well. Below are examples of several categories of printed items and where to find them. Search for yourself to see the many models available!

** Caution – items printed with common PLA filament are fine for indoor use but can deform or warp outdoors or when left in a hot car

Online Sources For Print Files:
Thingiverse: https://www.thingiverse.com
MakerWorld: https://www.makerworld.com/
Printables: https://www.printables.com

Parts For Flying Events

Entire airplane design
https://www.thingiverse.com/thing:7400334

Bearings, hangers, hubs, helicopter ceiling bumper
https://www.thingiverse.com/thing:4340340
https://www.thingiverse.com/thing:6281385
https://www.thingiverse.com/thing:6949126

Tools For Flying Events

Pitch Gauges for measuring propeller angles
https://www.thingiverse.com/thing:4319685
https://www.thingiverse.com/thing:6765338

Winders for winding rubber motors
https://www.thingiverse.com/thing:6637940

Torque meter for rubber motors
https://makerworld.com/en/models/2318852-free-flight-torque-meter

Aircraft stand
https://www.thingiverse.com/thing:6158349

Tools For Building

Deflection gauge for measuring balsa stick stiffness
https://www.printables.com/model/190904-balsa-deflection-gauge

Sanding blocks
https://www.thingiverse.com/thing:7052139
https://makerworld.com/en/models/2218880-sanding-block-25x150mm

Balsa strippers for making sticks from sheets
https://www.printables.com/model/318917-balsa-stripper

Miter boxes and sanders
https://www.printables.com/model/190903-razor-blade-miter-box
https://www.thingiverse.com/thing:3875348

Templates for cutting wing or stabilizer ribs
https://www.thingiverse.com/thing:7217431

Squares for cutting balsa or aligning parts
https://makerworld.com/en/models/2099592-mini-squares