

Date: 02/24/2016
To: Aerospace Senior Design Class
From: Class TAs
Subject: Safety Contract

Due to the nature of the aerospace senior design class, a significant portion of construction is carried out by students without direct supervision. You have access to the workspace in Stinson-Remick 217 during business hours and office hours for space to work and use of the small machines (drill press, small tabletop band saw, and laser cutter).

Below are a number of conditions that apply to construction. Please read each carefully and initial by each signifying your understanding and acceptance of each. Then, sign and date the bottom of the form. Failure to follow these rules and abide by the lab safety contract will lead to loss of privileges.

You may contact the TAs at anytime with questions or concerns about lab safety. Contact information can be found on the website. Please remember, no amount of prevention or safety measures taken after an accident, no matter how minor, will make up for that accident.

Safety Contract

_____ All lab safety rules (typically posted on walls) for any workspace in Fitzpatrick or Stinson-Remick are in full effect always. First aid kits are available in all labs.

_____ In particular, lab safety glasses / gloves should be used when appropriate and long hair / sleeves need to be pulled back securely.

_____ Most importantly, you may not perform construction of any kind alone. This is critical for using anything with an "on" switch, but also applies to general construction due to the chance of chemical spills, cuts from hobby knives (whether in use or due to one breaking), and other incidents.

_____ The only machines that may be used without special requests include drill press, tabletop band saw, and laser cutter. Particular concerns for each are given following:

Drill Press: drill bit must be fully secured using key, part must be fully secured by clamps, use a scrap piece of wood below or double-check that table is aligned so as not to cut anything unintentionally

Small Tabletop Band Saw: ensure saw is properly secured, do not attempt to cut very thick stock or move too quickly

Laser Cutter: only to be used with one of the TAs supervising, ensure vacuum system and backup air are always on when cutting, and do not use a higher power setting than necessary

_____ The flight batteries used in this class are Lithium-Polymer (LiPo) batteries and require special attention to safety. In order to limit damage from potential fires, all flight batteries will be stored in fireproof containers and charged exclusively by the class TAs. After each flight, groups should return flight batteries to the TAs for inspection. Following any flight attempt during which there was a potential for battery damage, a TA must accompany the group to retrieve the plane and extreme caution should be used. Any battery that is puffy in appearance or hot in temperature should immediately be isolated and placed in a fireproof container if possible. Additional safety information can be found online:

<http://www.hobbico.com/ama-lipo-warning.html>

_____ All propellers should be tightened by each group prior to each flight test. This check should be performed before connecting the safety plug.

_____ Finally, at the field, the safety plug is always the last component connected and the first component disconnected. You may only connect the safety plug if your plane is connected to a radio, you have pilot approval, and you have visually confirmed that no one is near the propeller.

Signature _____

Date: _____

Print Name _____