

Winter Aircraft Storage

From the St. Paul Model Radio Controllers, Inc., St. Paul, Minnesota

Since the snow will be falling very soon, many AMA members may not be flying for quite some time. For those who don't intend to fly on skis, the following suggestions may help to preserve your model over the winter months and allow you to get back in operation quickly when the snow disappears next season.

Aircraft

Be sure to give the entire aircraft a thorough cleaning to remove all traces of exhaust residue. Check the covering to be sure that fuel is not creeping under the seams around the firewall and areas around the exhaust outlet, soaking the balsa. If so, make the repairs during the off season while you have some extra time. Check the fuselage and flying surfaces closely for cracks or other damage. Check the servo arms, control horns, clevises, pushrods, and/or control cables for excessive wear or damage.

The aircraft can be stored indoors or outdoors in the garage; the constant cold temperatures can be tough on batteries, but otherwise don't seem to cause any problems. The only problem that could occur would be if you stored it in, for example, a workshop that is heated occasionally and then allowed to cool down after use. This could result in damage to the engine because of condensation and probably to the balsa or covering material from temperature changes.

If you store the airplane on a wall, it should not be supported on the nose because this could damage the engine bearings. Support it by the tail structure or similar means. If the wing is removed, do not stand it on end. Support it similar to the way it is normally mounted on the fuselage. Do not leave the weight of the airplane resting on the tires if you don't store it vertically.

Engine

The major concern regarding engine storage is to remove all the glow fuel from the inside of the crankcase and cylinder to prevent rust formation on the bearings, crankshaft, etc. The best advice is to remove the engine from the airplane, remove the glow plug and backplate, and flush the inside out with a solvent such as kerosene.

While the backplate is off, check it over for signs of rust, bearing failure, etc. After cleaning, generously oil the bearings and the cylinder with lubricant such as one of the after-run oils or Marvel Mystery Oil. After it is well oiled, reinstall the backplate and plug and place it in a sealed plastic bag along with the mounting hardware until next season.

If you decide not to remove the engine, at least remove the glow plug, pour some oil into the carburetor, and spin the engine over clockwise to distribute the oil through the bearings. Add some oil through the glow plug hole, turn the engine over slowly a few more times and reinstall the glow plug. Remove the propeller if it is made of wood. Put a plastic bag over the engine to keep dust and dirt out.

Batteries

Ideally you should cycle the transmitter and receiver batteries and record their capacity for reference next season. It is best to leave them on a trickle charger to maintain a charge during the off season. If this is not practical, try to charge them at least every one to two months. When ready to fly again next spring, cycle the batteries first to be sure they have adequate capacity.

Transmitter/Receiver/Servos

Don't forget to check over the servo wiring and connectors. If there is any sign of corrosion on the connectors, then get them replaced. Also check the output shaft for looseness.

Check the receiver antenna for damage. If there are any doubts, get it fixed or replaced. Extend the transmitter antenna and clean it with alcohol. Collapse the antenna and repeat the cleaning several times. (There are contact fingers inside each antenna section that may become coated with oil, preventing the proper contact between sections, greatly reducing the transmitting range.)

Fuel

If you have fuel left, be sure it is capped tightly and store it in a cool place out of sunlight. Some recommend against storing fuel in very cold temperatures, but I have not had any problems doing this in the past.

Starter Battery

If you have an electric starter hookup, remove the 12-volt lead acid battery, clean the terminals and check the electrolyte level. Add water if necessary. This battery must be charged if stored outdoors during the winter. A monthly charging will keep the battery from freezing and also extend its life.

Miscellaneous

If you have a handful of used rubber bands as I do, throw them out and plan to buy a new box next season. This would be a good time to check your supply of spare glow plugs, propellers, etc., and make up a parts list to replace those used during the summer. If, during your inspection, you run into problems or there is something you are not sure about, call another club member for some advice or suggestions. Make the repairs during the winter and save the warm weather for flying! ☐