

Airplane Hold Back by Russ Petersen

Here is an idea for a field "Gizmo" that I have had around for at least ten years to hold my planes while starting and running up the engine. I left mine in Silverdale, and had to make a new one for flying in Arizona. The idea is a hold back for starting and running up planes in areas where a club does not provide any or a good hold back system for flyers. This also negates the need for help in starting, which sometimes is a good thing. This holdback is made from a simple piece of plywood held to the ground with two 10" spikes at the rear. (Ten or twelve inch spikes seem to work fine. I am currently using 10 inchers for an airplane that generates 13 lbs. of thrust and it is working fine.) The rotating arm assembly is made of clear 2X2 and the uprights are made of 1" diameter hard wood dowel. A set of inexpensive butt hinges makes up the rest of the project. I have used a forstner bit to drill the 1" holes in the 2X2 and the dowels are held in place with a retaining wood screw so that I can change the size of the dowel length if necessary. I also have fastened some plumbing insulation to protect the leading edge of the horizontal stabilizer. The pictures are pretty self explanatory, but the idea is that after starting, when you are ready to commit aviation, you walk to the rear of the plane and grasp the vertical stabilizer, then the airplane is pulled a little way back and the hinged hold back is laid down (I use my toe since I have my transmitter in my left hand and am holding the airplane with my right) so that it is out of the way. Then you just push the plane forward and you are on your way. Here are some pictures that should help make the idea clearer. I have a place at home for running up engines in which I have installed threaded inserts in a piece of 2X4 that forms a boundary around our driveway and the thing is bolted to the ground there to give a very solid place for holding the plane while I tinker with the motor.

Notes: The picture of the hold back at the right shows it in starting and run up position. The one below shows the hold back retracted so that the airplane can be moved forward. The last shot in the lower right panel shows the location of the 10" nails (drift pins) that I used to hold this project. You obviously can vary the size of the platform and the length of the uprights to suit your size of airplane. *(The airplane here is a Giles 202/120 that I have been working with this winter.)* Russ Petersen

