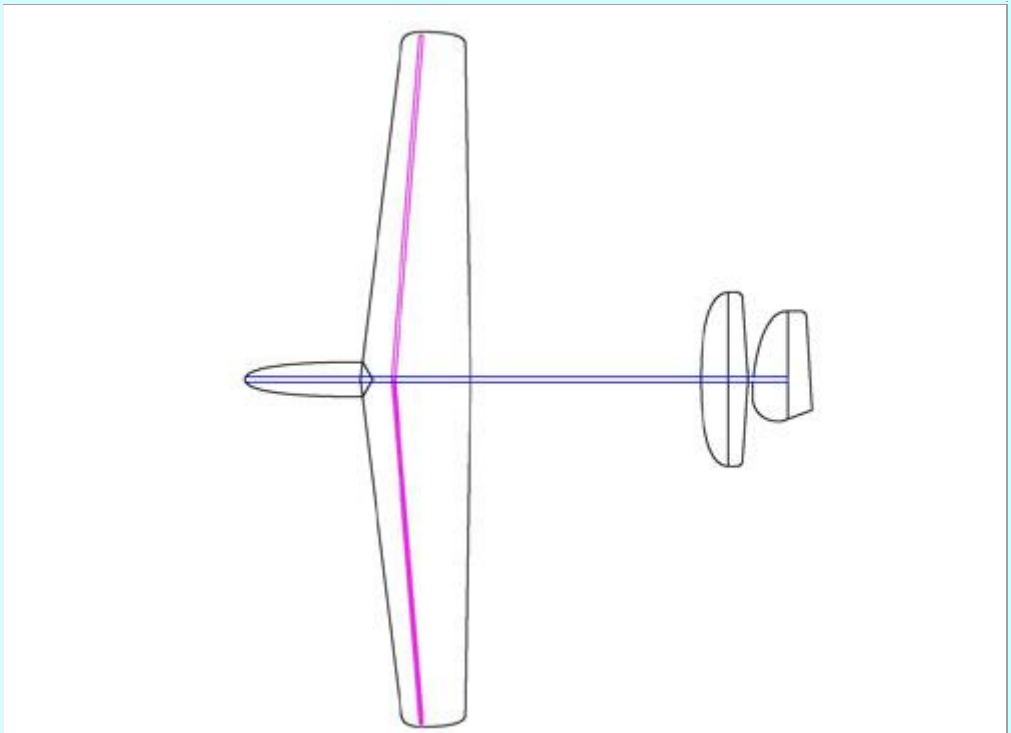
Micro Monkey 600mm

http://home.t07.itscom.net/kajie/microsal.htm

The hand launch gliders I have are "Holiday", "Elf", and a semi-made "Chibi Blaster". Of these, the one that appears the most is the Chibi Blaster. I don't know why, but it must be easy to fly. The body is also small, and it may be suitable for physical strength. I wanted to make a little smaller one, so I decided to make a hand lunch with a wingspan of about 60cm. The shape was made like a small elf, and I drew a drawing appropriately. (16/01/24)

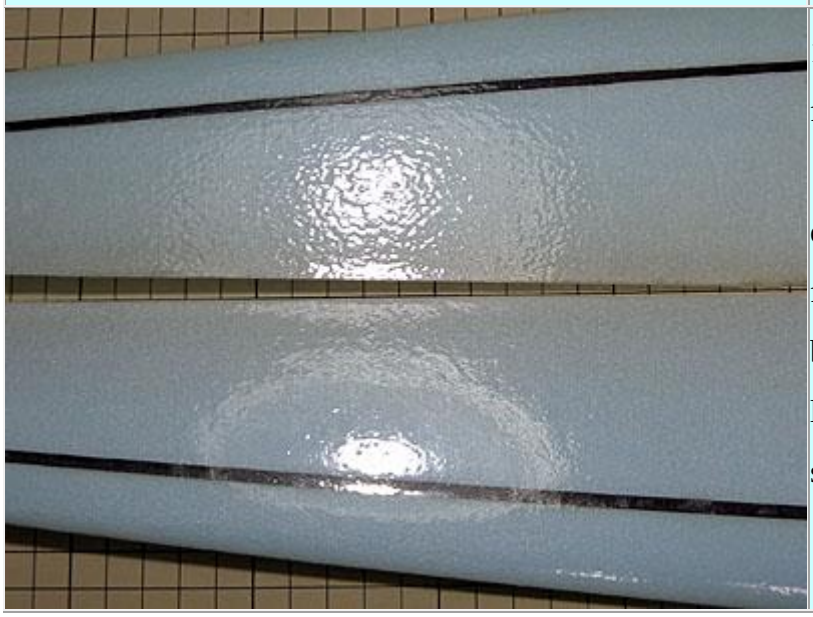


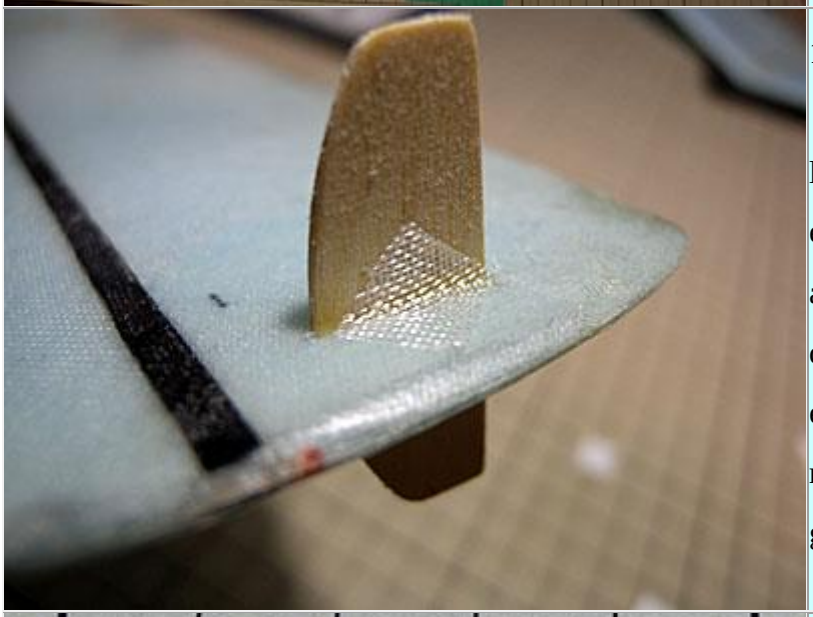
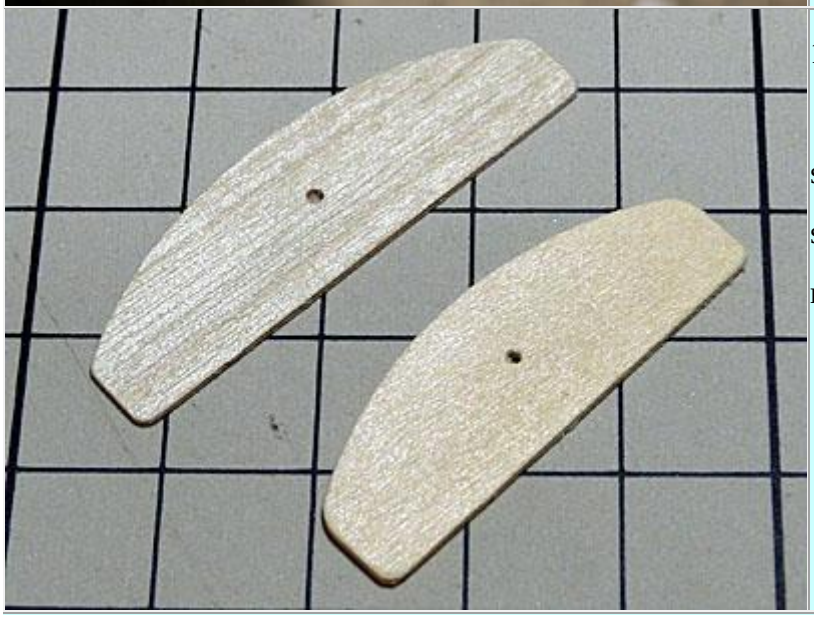
Wing width: 600mm Overall length: 495mm Wing area: 4.46dm ^{2}

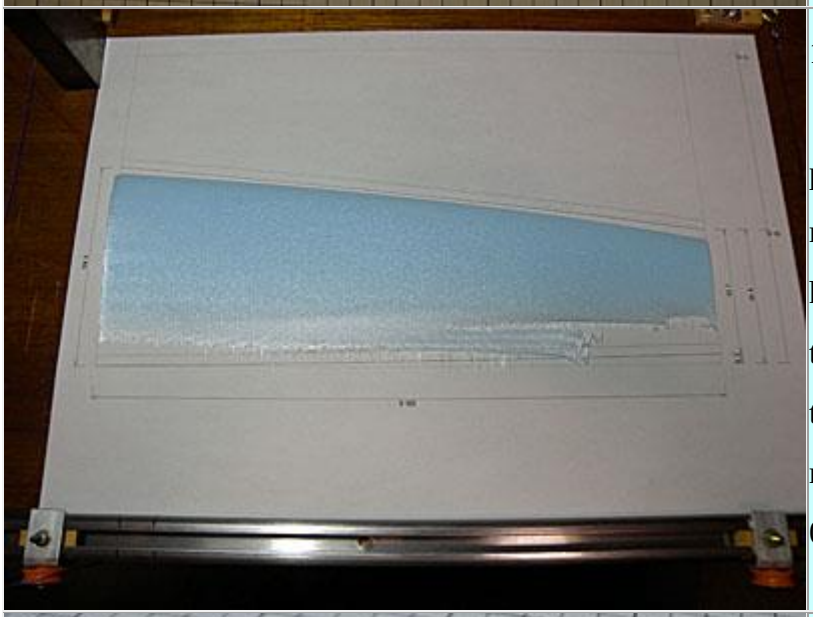
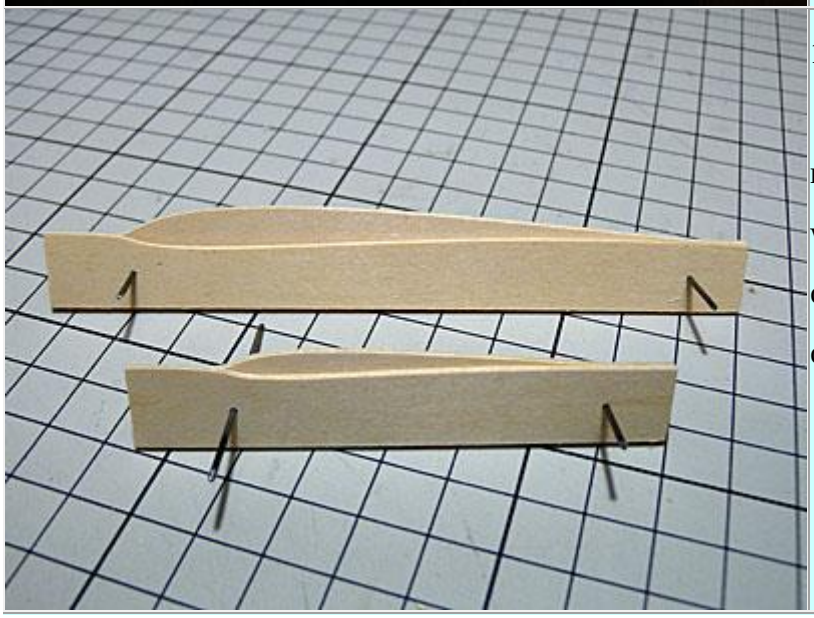
First flight today. Contrary to expectations, it was slightly forward weighted. Attach a weight of 0.2g to the horizontal tail and fly. It's still in the process of being adjusted, so I can't say anything about it, but I don't think there's much difference in performance with the current "Chibi Blaster". (16/05/01)

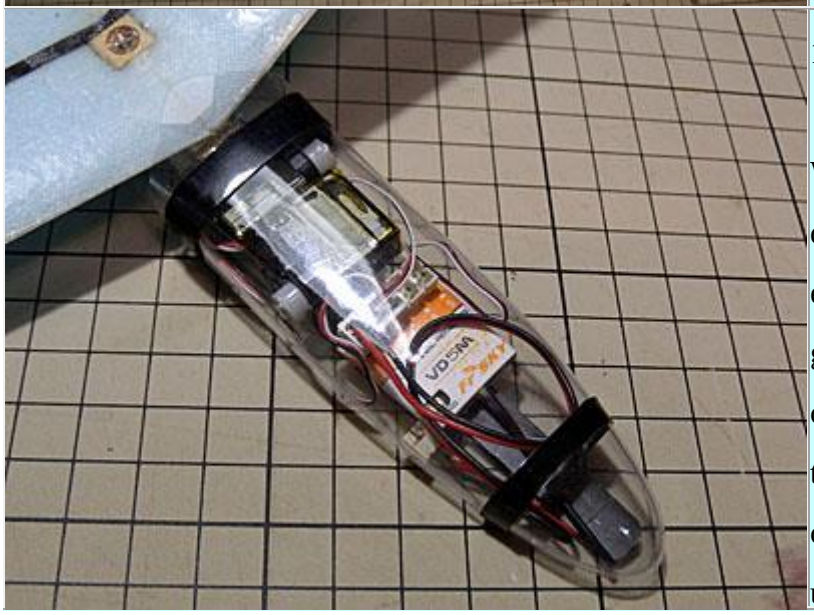
I changed the main wing from AG03 to AG12 and flew it. It was necessary to increase the mounting angle for the thrusting posture and attach a weight to the rear side because the front side is heavy. In the case of this machine, I felt that the performance of AG12 was clearly better than that of AG03. (16/05/29)

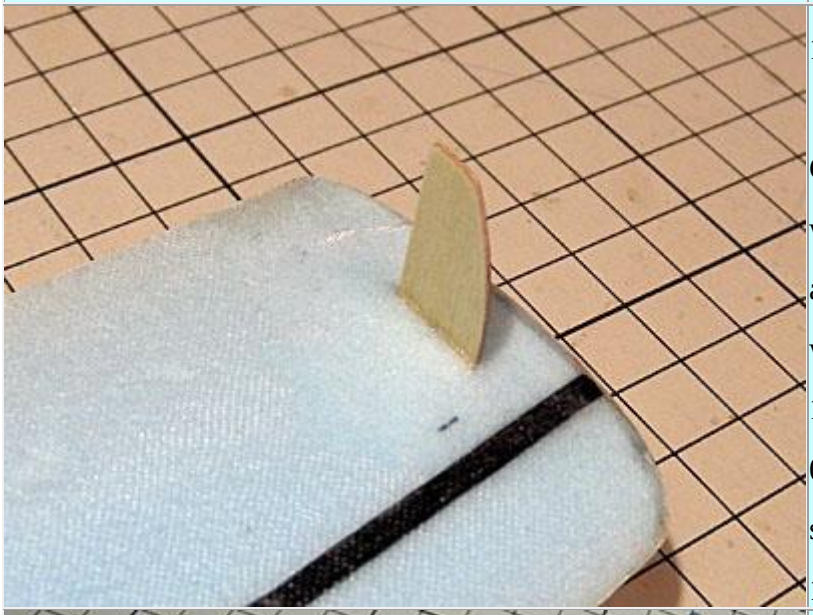
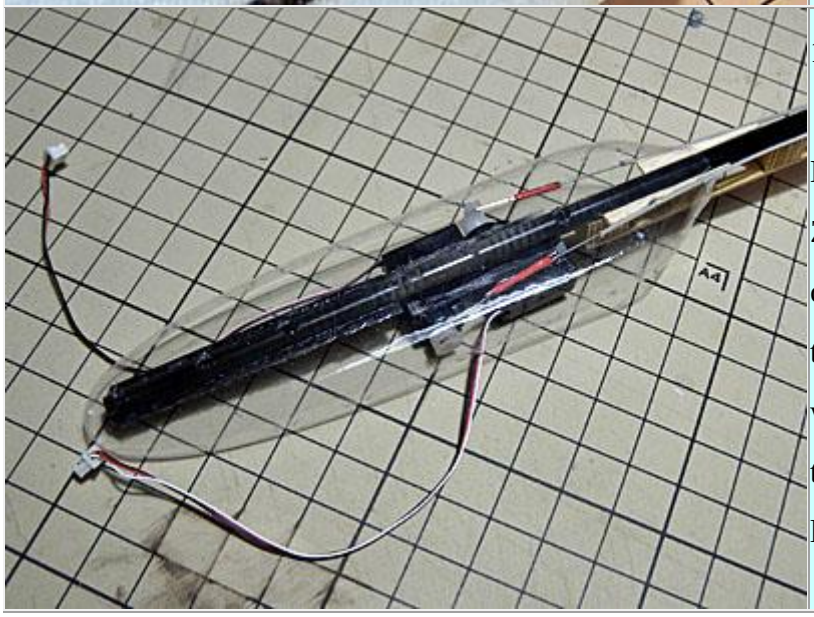
	16/06/11: Center of Gravity Determination The current center of gravity is at about 41% of MAC. Gross weight 37.9g (battery 1S150mA).
	16/06/11: nose repair Since it is not always possible to catch it by hand, the nose part has been crushed. Repair from the inside instantly with microballoons. Maybe a softer glue would be better.

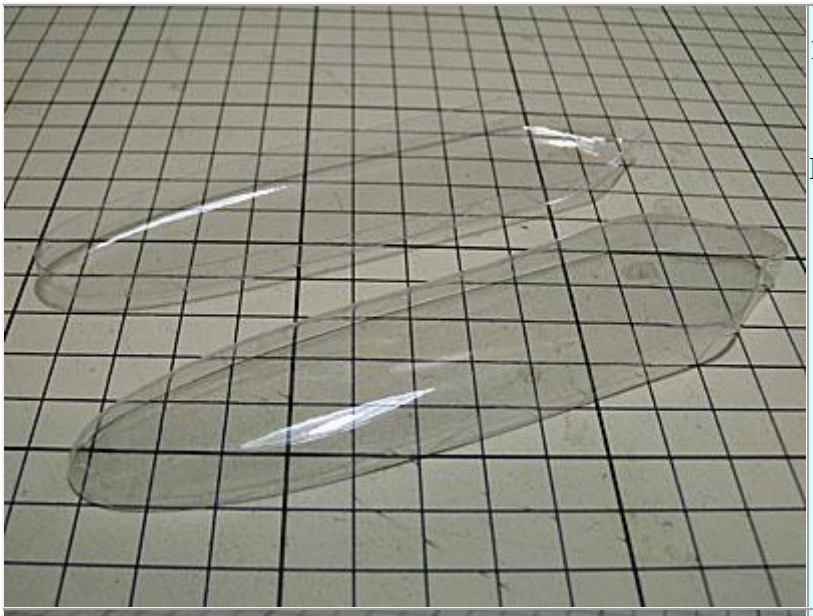
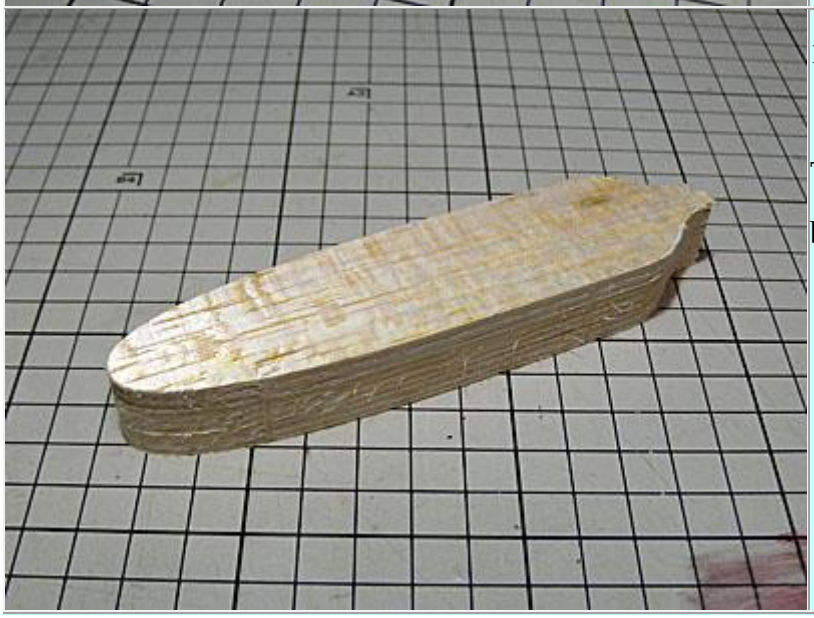
	16/06/08: Move the main wing forward In order to remove the tail weight, the main wing was moved forward about 8mm. The back side of the leading edge of the main wing that interferes with the servo was slightly cut. In addition, the central saddle strut where the main wing screw hits was shaved.
	16/05/28: Effect of polyester film AG03 whose upper side does not use polyester film. AG12 on the bottom. You can see from the lighting that the AG12 used is smoother.

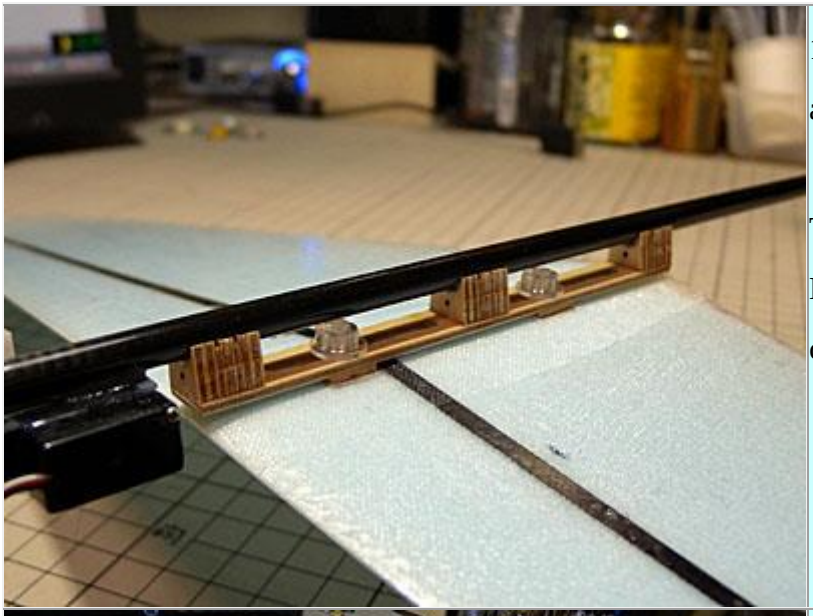
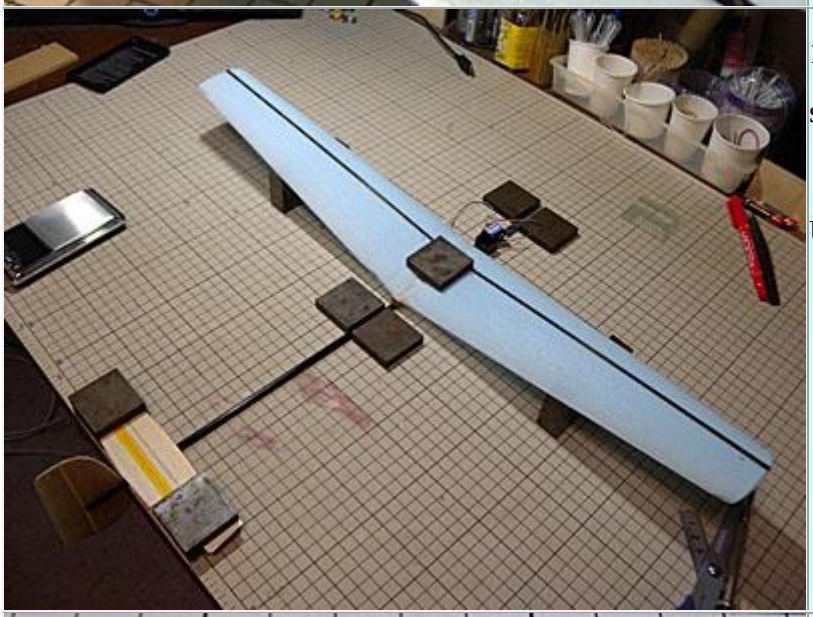
	16/05/28: Completion of AG12 AG03 on the top and AG12 on the bottom. The weight of AG03 is 13.9g. AG12 is almost the same as 13.3g.
	16/05/28: peg reinforcement The wing tip thickness is less than 3mm, and if excessive force is applied, the adhesive surface will be destroyed. I don't know if it's effective, but I reinforce the roots with four places of glass. The glue is instant.
	16/05/28: Peg rework The last peg was a little big, so I made it a little smaller. The material used 1 mm of syna veneer.

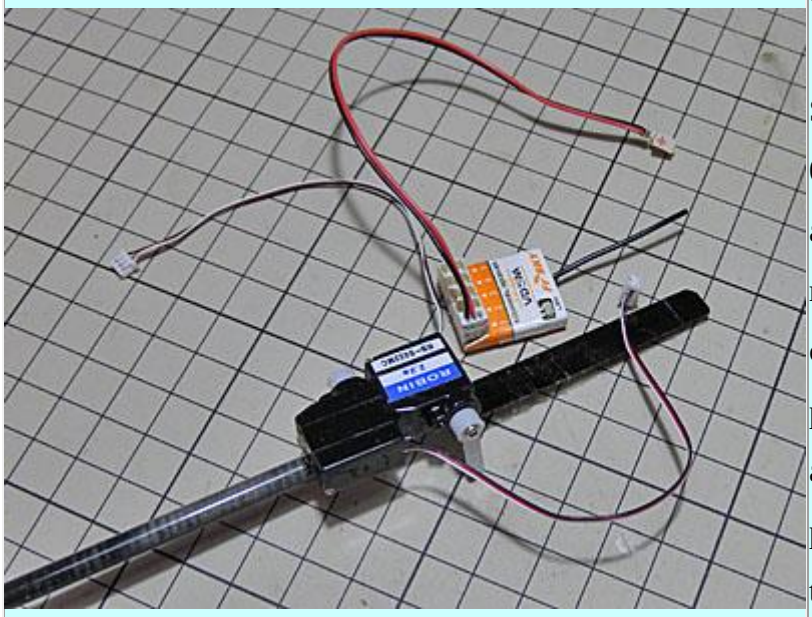
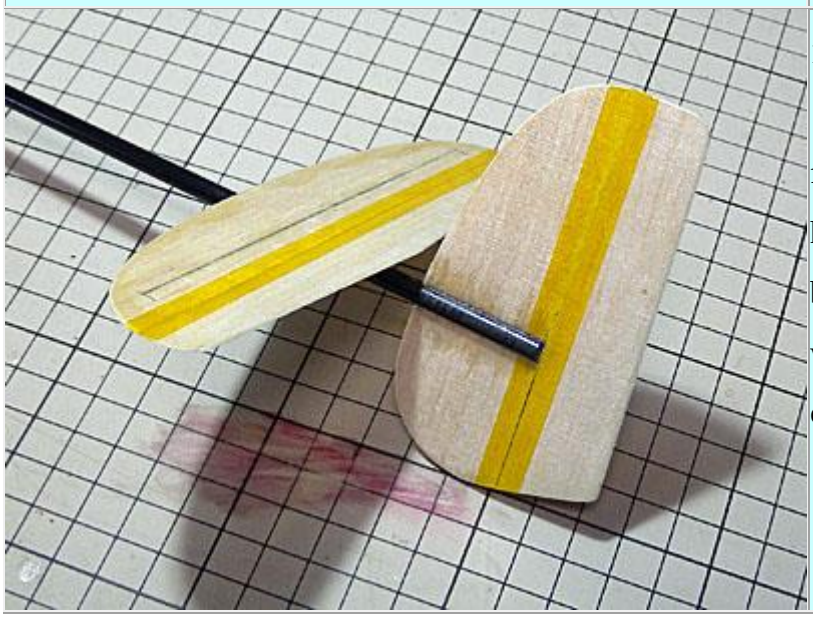
	16/05/23: Bagging AG12 This time, I covered the flower shop film with a 0.1mm polyester film, so the surface was fairly smooth. The trailing edge is slightly thicker than AG03.
	16/05/22: AG12 cutting state Trailing edge too thin. In particular, the wing tip side melts because the speed of the heat rays is slow. The template was changed to raise the upper side by 0.5mm and raise the wingtip side by 0.5mm.
	16/05/22: Challenge AG12 The AG03 can fly reasonably well, but I thought what would happen if I changed the wing shape, so I chose the AG12.

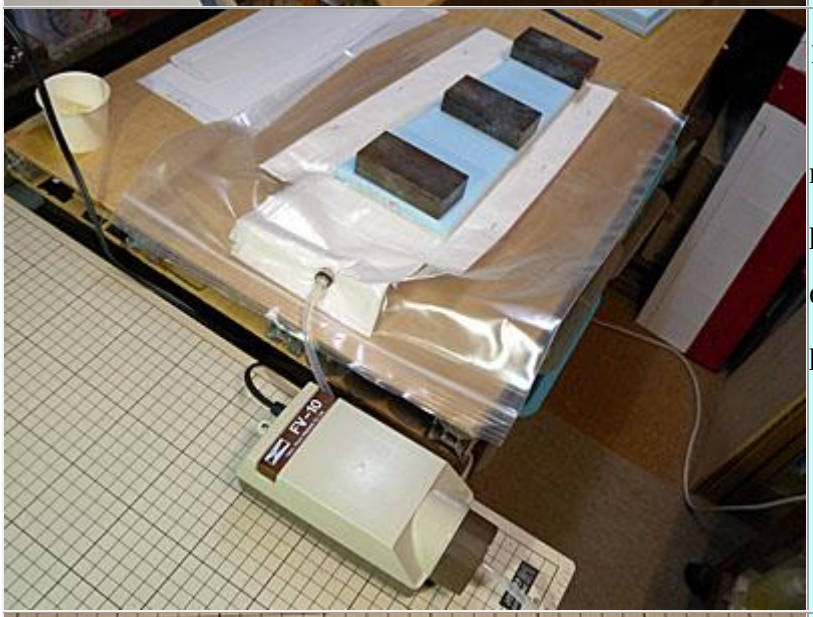
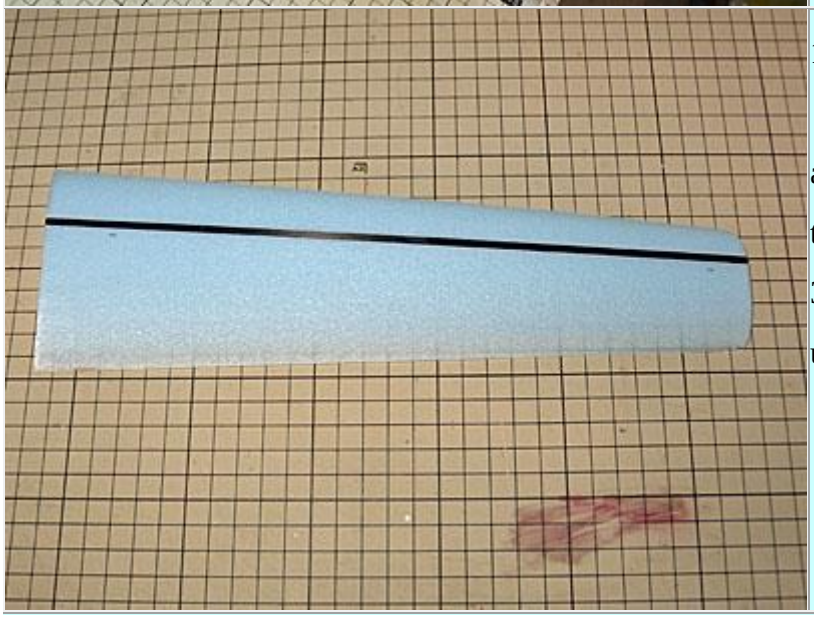
	16/05/22: Peg removed During lunch, I heard a "beep" sound and something fluttered down from the aircraft. Some reinforcement required.
	16/04/29: Completed for now I'm worried about the receiver and servos, but I'm ready to fly. Battery 1S150mAh is 4.3g, fuselage is 33.6g and gross weight is 37.9g. The wing load was 8.7g/dm ^{2} .
	16/04/29: Pod installation When I removed the servo and disassembled it, there was an epoxy-like lump in the gearbox, which might be the cause. I wrapped polyimide tape around the new servo. I can't help but move. Cover the upper pod and fix it with a

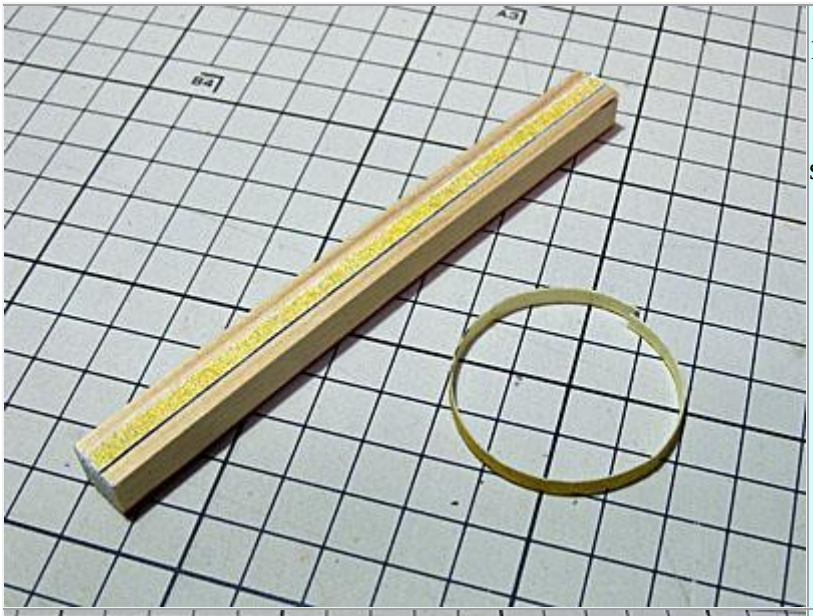
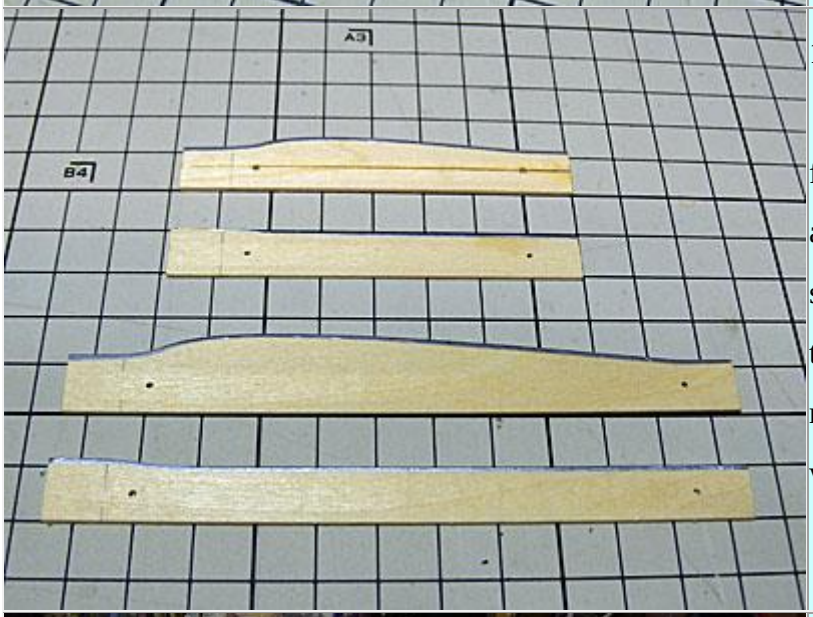
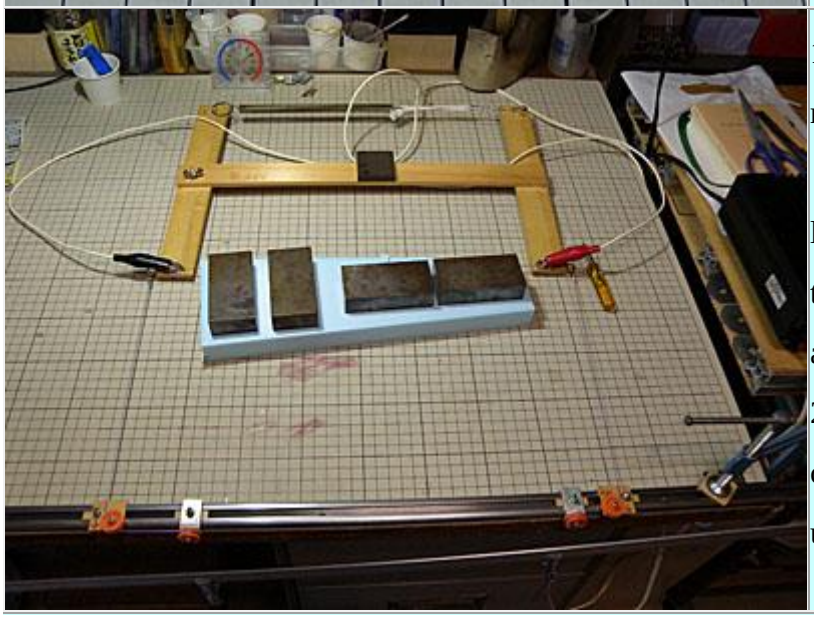
	black shrink tube.
	16/04/29: Peg Cut from 0.8mm veneer. It was reinforced with thin glass around it. The main wing weight after peg installation is 13.4g. A balance weight of 0.4 g was attached to the other side, and the total weight was 13.8 g.
	16/04/22: Pod installation Dot the boom with ZAPGOO. Just in case, connect the receiver and test the servo. Don't move! It was working during the first test. The receiver can no longer bind. why?

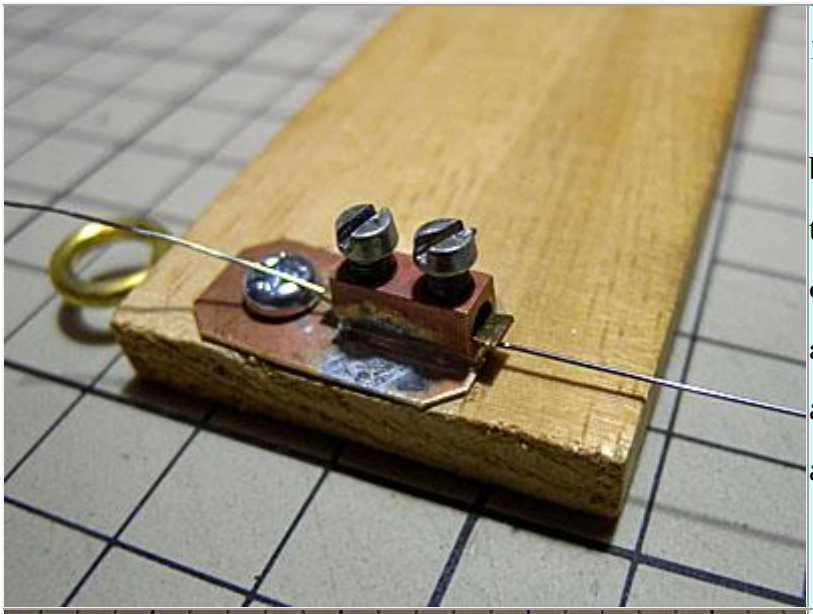
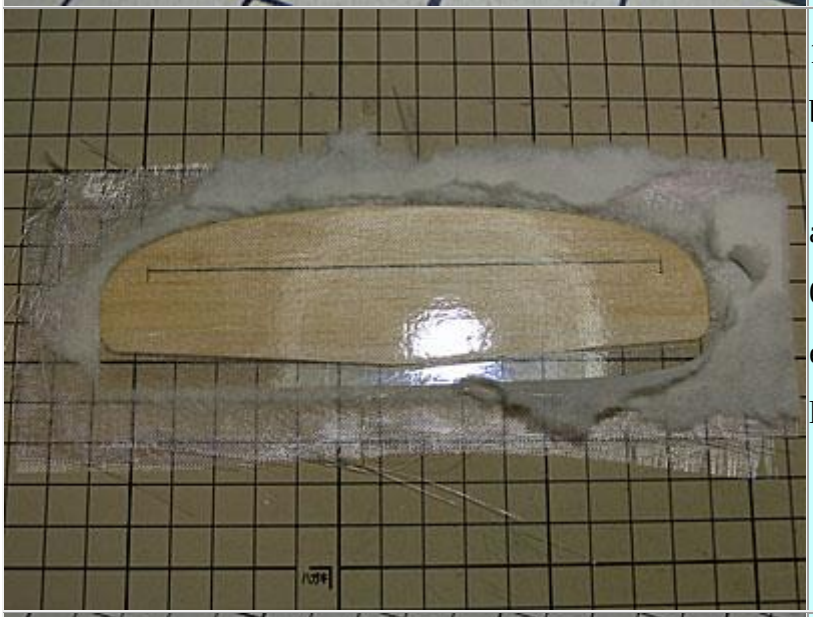
	16/04/21: Pod production (3) Molded with 0.2mm PVC.
	16/04/16: Pod production (2) Divide it into 10mm and 5mm pieces with a saw and spot them with Cemedine C. round properly. I used a planer and sandpaper.
	16/04/16: Pod production Three layers of 6mm balsa. Use Cemedine C.

	16/04/12: Main wing saddle adhesion status The main wing retainers use M3 polycarbonate countersunk screws.
	16/04/12: Glue the wing saddle to the rod Use 30 minute epoxy.
	16/04/09: Main wing saddle At this time, we do not know the optimum position of the center of gravity or the mounting angle of the main wing. It is structured so that it can be changed as needed. The material is 1.6 and 3mm plywood. Weight

	1.53g
	16/04/08: Loading servos etc. The servo uses RB-S022MC. Attached to a 0.5mm glass epoxy plate and attached to the rod. The receiver uses VD5M, but the connector part is thick, so I plan to cut the rod in half, attach a 0.2 carbon sheet, and paste it with double-sided tape. Note that there is no linkage material here.
	16/04/08: Rear wing attached Polyimide tape was used for the hinge, but it was hardened when applied from both sides, so only one side was used. The rod is φ5 carbon.

	16/04/03: main wing joint The dihedral angle is 11 degrees.
	16/03/30: Wing bagging It is sandwiched between negative shells, but positioning is difficult. Weight is about 6g per wing.
	16/06/30: Carbon Spur Cut the 0.2mm carbon sheet appropriately by grooving at the bottom and cut it into 3mm width and paste it on the upper and lower surfaces.

	16/03/30: Spur Grooving Paste 3mm wide #180 sandpaper on the cypress.
	16/03/27: Airfoil template Airfoil uses AG03. Cut out from 1mm plywood and put aluminum tape on the top surface. The uppermost wing tip upper surface template is raised by 0.5 mm because the wing tip melts with heat.
	16/03/27: Cutting out the main wing The power supply is for lipo charging. The voltage is 7 to 7.5V and the current is about 2A. The cutting time is 20 to 30 seconds, which varies considerably. 1 out of 3 can be used.

	16/03/26: hot wire closure switchboard? Manufactured by soldering a brass plate to the parts. The hot wire is φ0.35 stainless steel wire. I also tried φ30, but when I applied tension, it stretched and broke.
	16/02/08: Horizontal stabilizer bagging Weight 1.09g by cutting around. The black streak is a 0.2mm carbon sheet embedded. It seems to have little effect.
	16/01/24: Vertical stabilizer bagging result Weight 0.74g.

16/01/23: Vertical Stabilizer Bagging

The core is 1mm balsa. The glass is 25g/m2. Florist film and cooking paper are superimposed on this and suctioned. The epoxy used is 5052. The suction plug is self-made by drilling a hole in polycarbonate M5. The vacuum pump is a diaphragm type FV-10 and is very quiet.