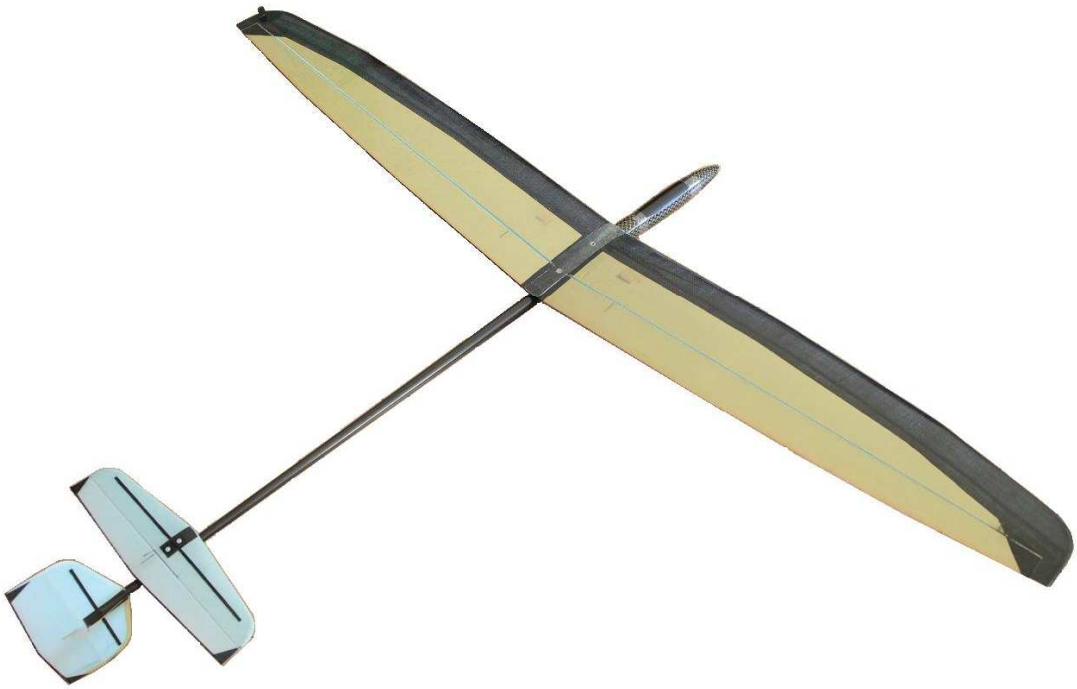
Super TopSky 2.0 DLG

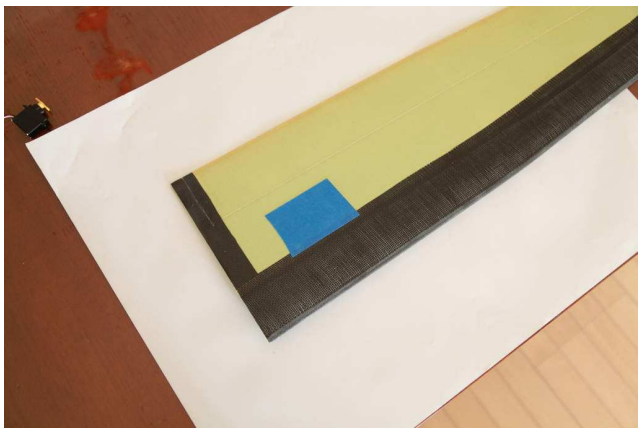
Installation Manual



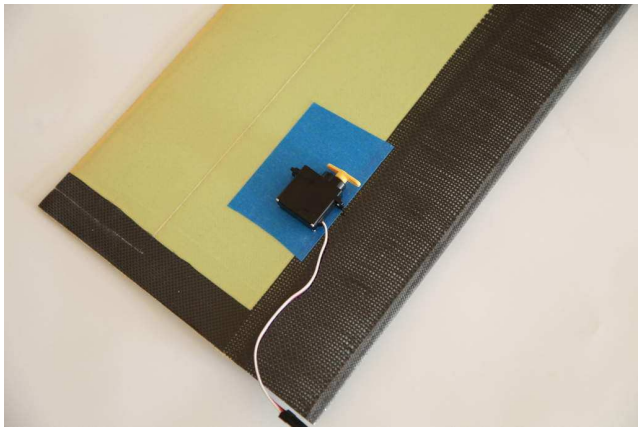
Super TopSky 2.0

Topsoaring New Technology Co.,LTD

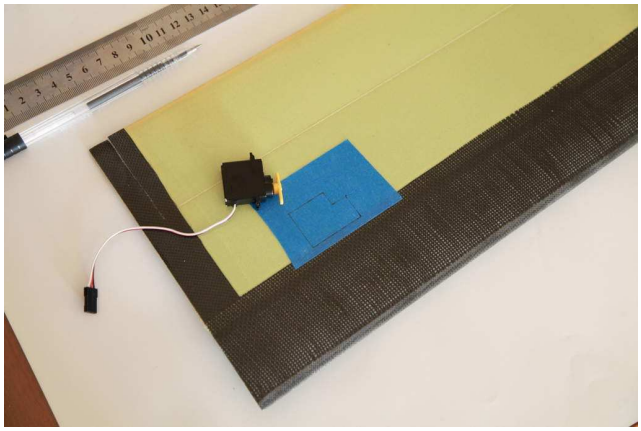
www.topsoaring.com



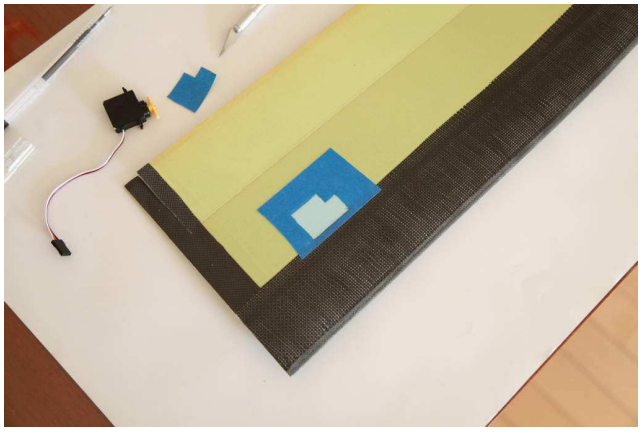
1. Locate servo position, we don't recommend installing the servos under the carbon front, that'll result in weakling the wing, you can find a carbon thread tow was embedded as spar



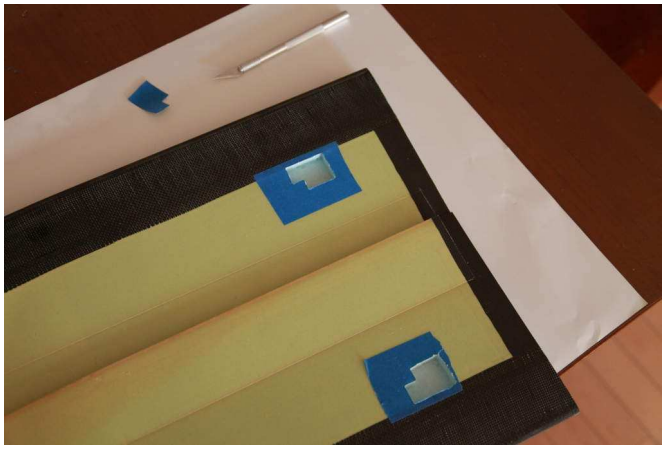
2. Place servo for marking, here you can see we use D60 for ailerons



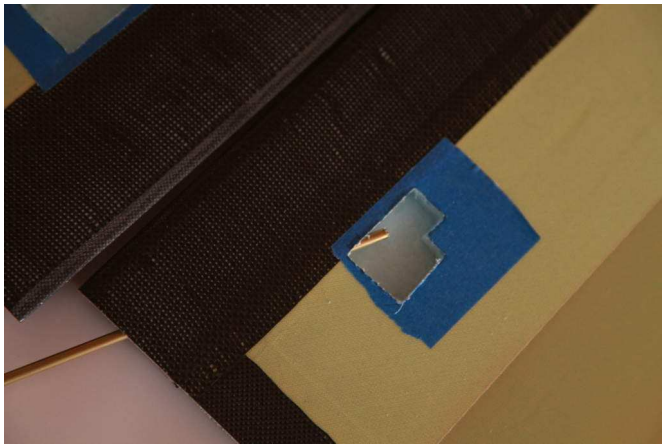
3. Draw the outline of the servo



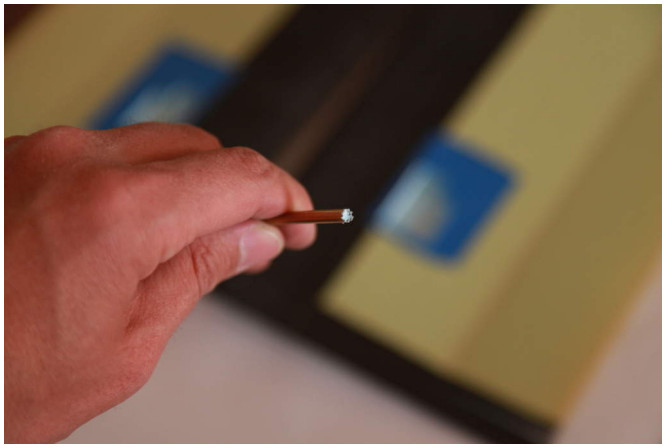
4. Remove the cover of servo



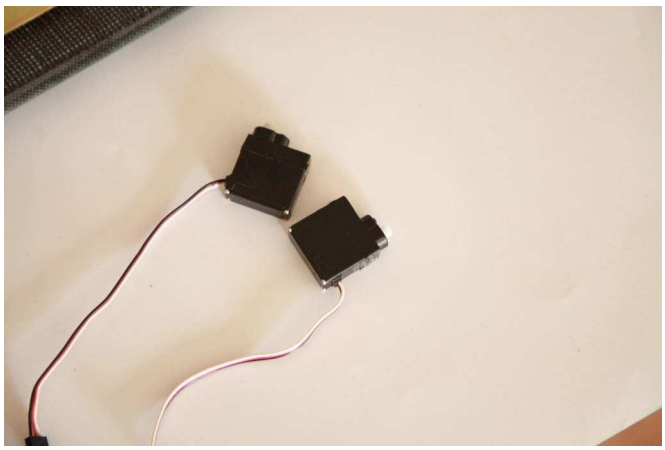
5. Remove foam to accept servos



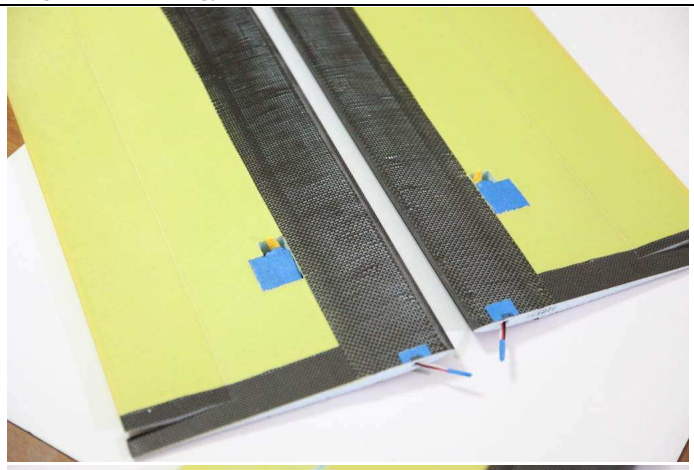
6. Drill slot for servo wire



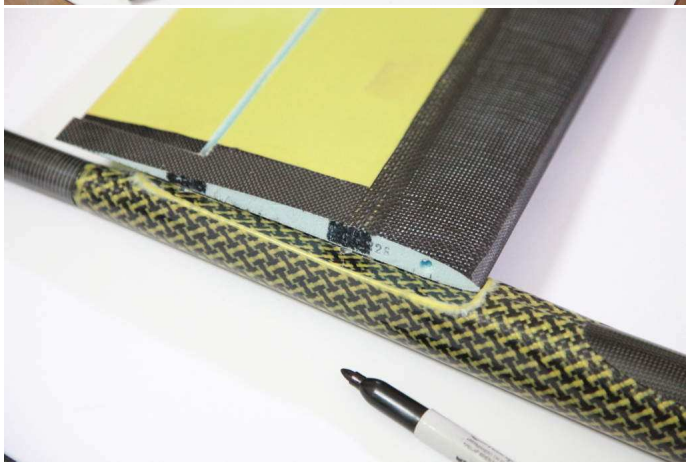
7. use 4mm brass tube as a drilling tool, file the top as the picture shown



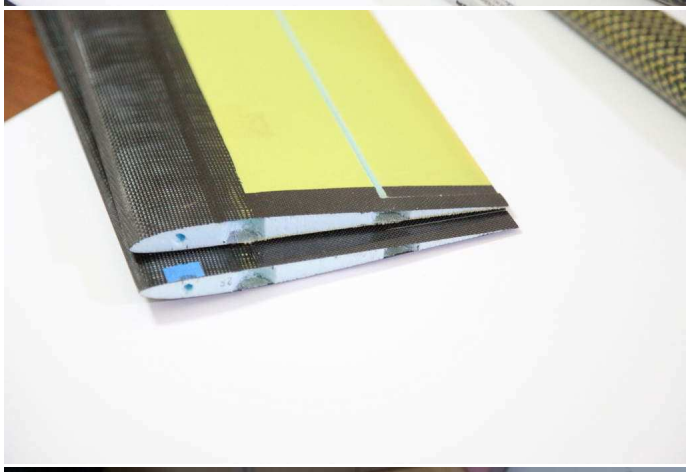
8. Trim the servos and cover it using masking tape, remove the connectors



9. Servos dry fit and mark the exit of the wire



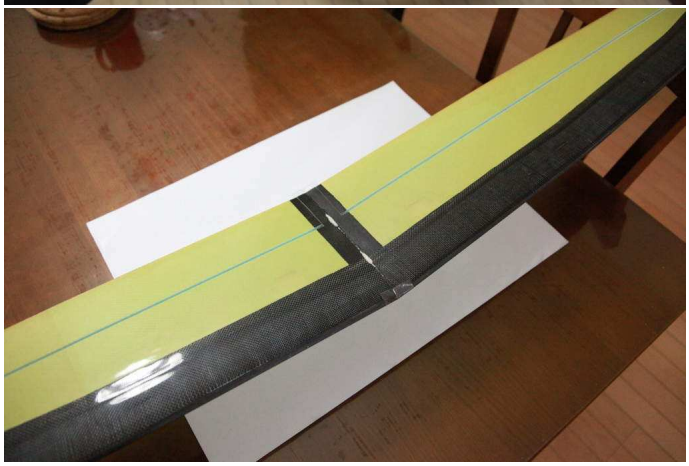
10. Mark the place of the screws connecting the wing and fuselage, and mark the foam in 30mm wide.



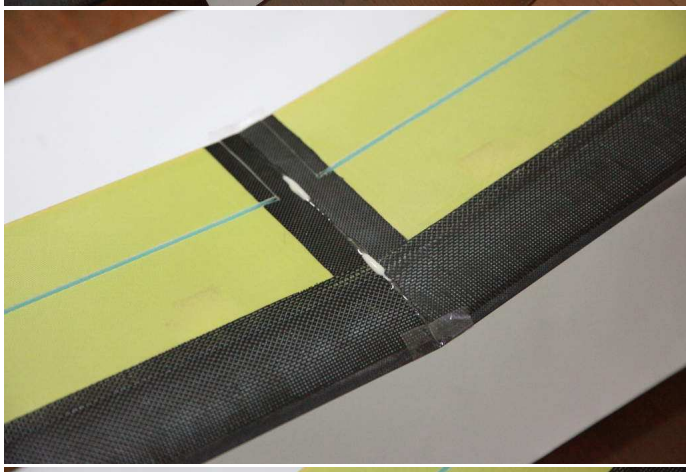
11. Remove the form with mark to form a space for epoxy and micro balloon

12. Mix 30min epoxy with micro balloon and fill all the space with sufficient blending, use a knife to drill the root foam.

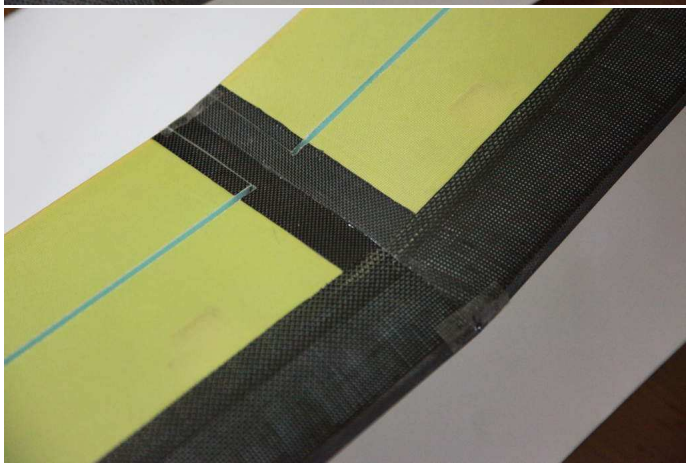
13. Apply 30min epoxy on the root of the wing, use a pice of tape on the bottom side to connect 2 panels together



14. Connect 2 panels and place the wing tips on 2 chairs, the weight help 2 panels join together



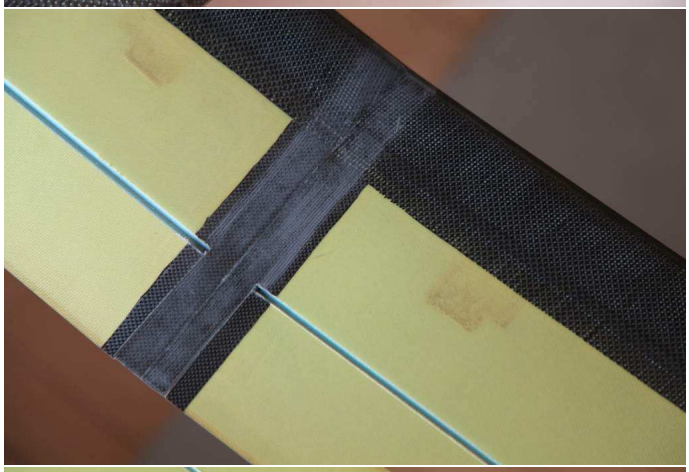
15. Carefully make 2 panels in correct position, we recommend using 6.5 degree dihedral, it's about 168mm high measure from one tip while laying other panel on the desk.



16. Sweep away all extra epoxy

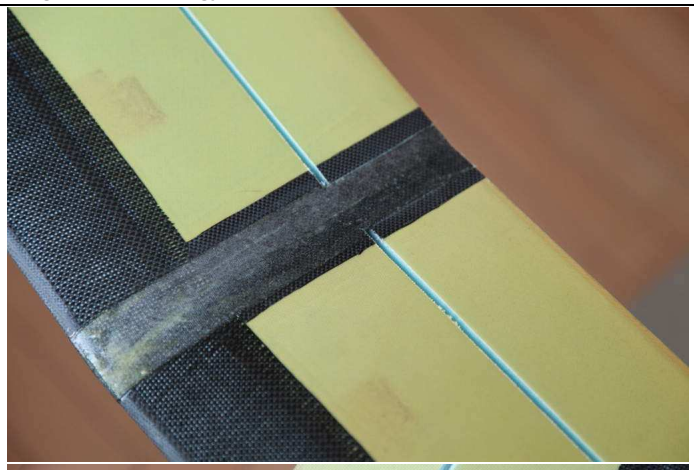
17. Lay enough time for curing

18. Drill hole for wire going through

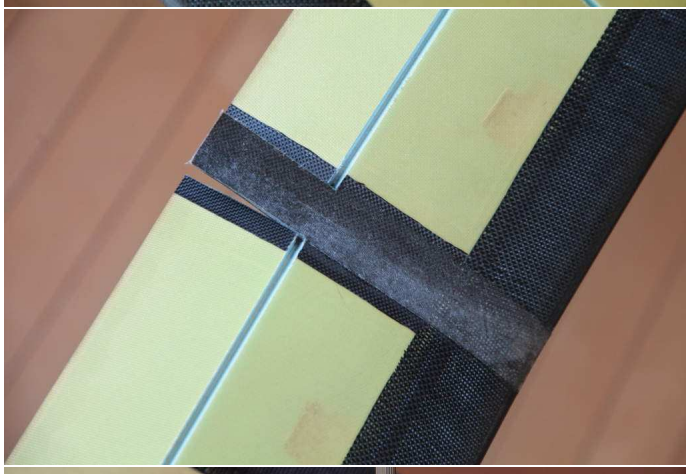


19. Lightly sand the joining area

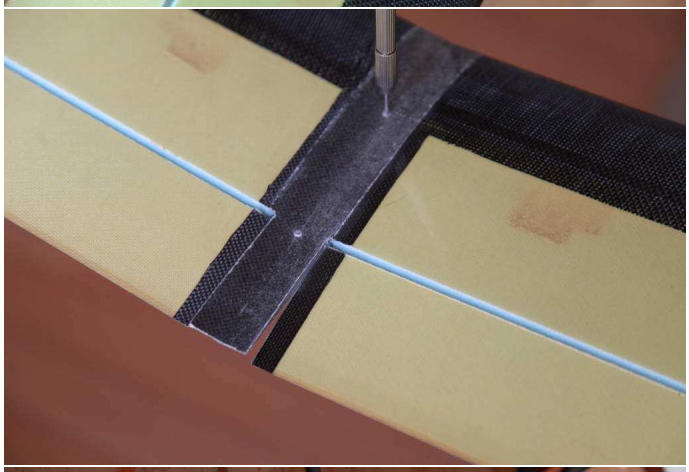
20. Cut out a 35mm wide FG tape, lightly spray with 3M77 and stick to the sanded area



21. Wet with finishing resin

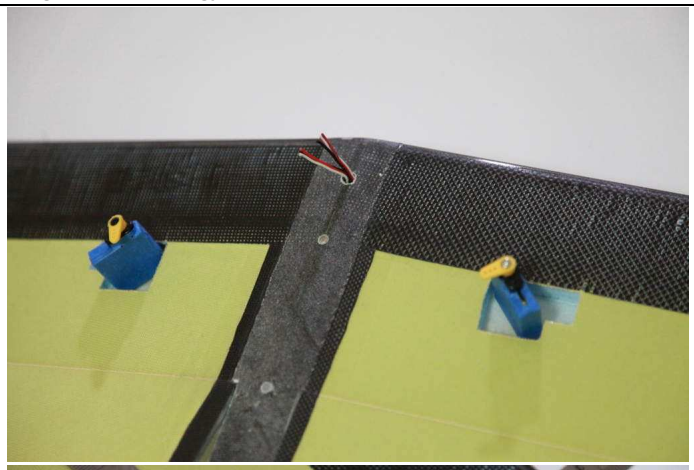


22. Sweep away extra resin with paper towel and wait for cure

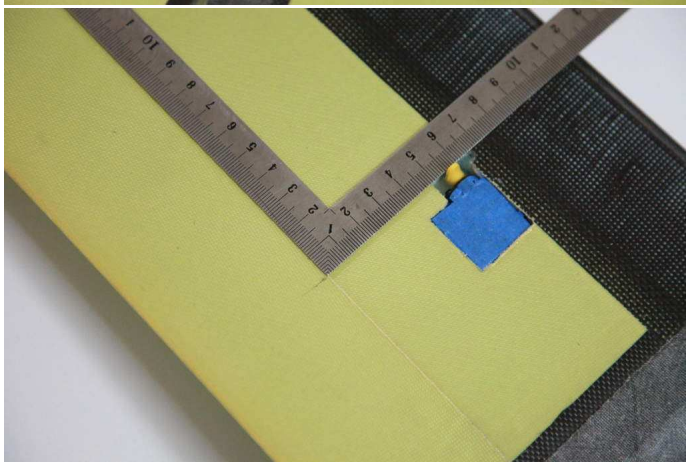


23. Drill hole for the bolt, use small size drill bit first to test the position then use M4 bit finish the hole.

24. Install and test.

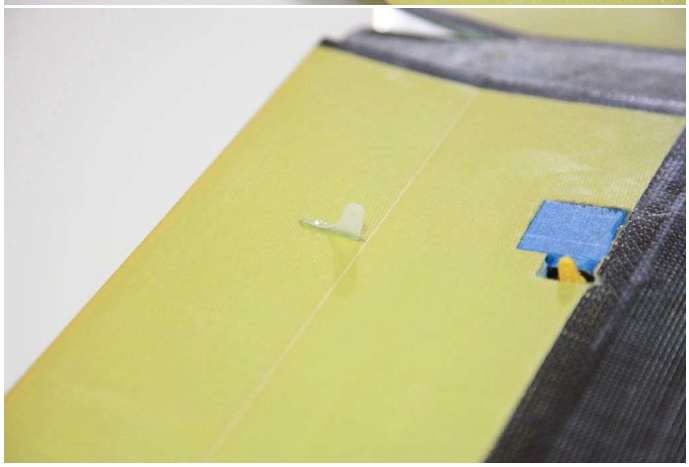


25. Begin aileron servos installation by guide the wire through the slot



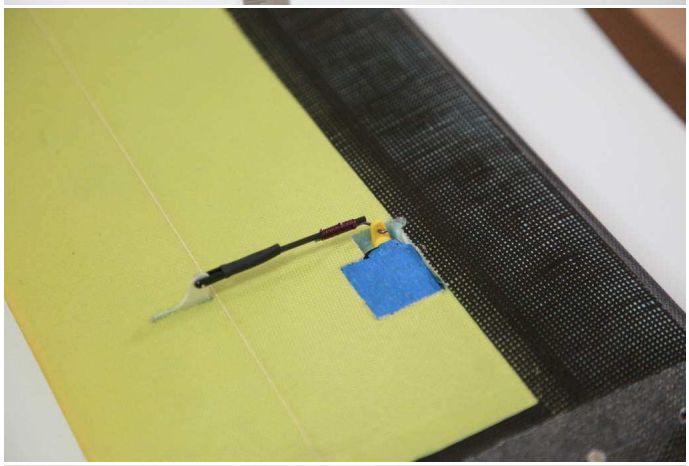
26. Mix some 5min epoxy with micro balloon to glue the servos in place, use square to find the position of the control horn

27. Cut slot for installing the horn, make sure it goes through the foam and touch the top skin



28. Glue the control horn in place

29. Cut the linkage carbon rod, sand the tip and insert to the rear end of the clevis, fix with a drop CA, bend 1mm music wire for connecting servo horn



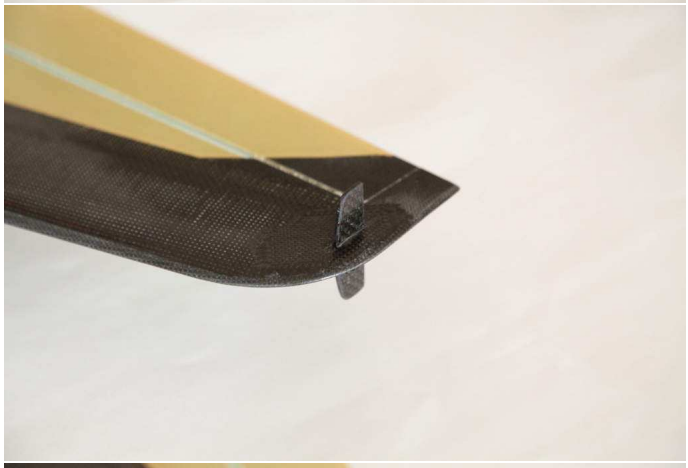
30. Fix music wire and linkage rod with thread and CA, then cover the connection with heat shrink tube.

31. Sand the edge of the throwing peg to avoid any sharp jag hurt my finger

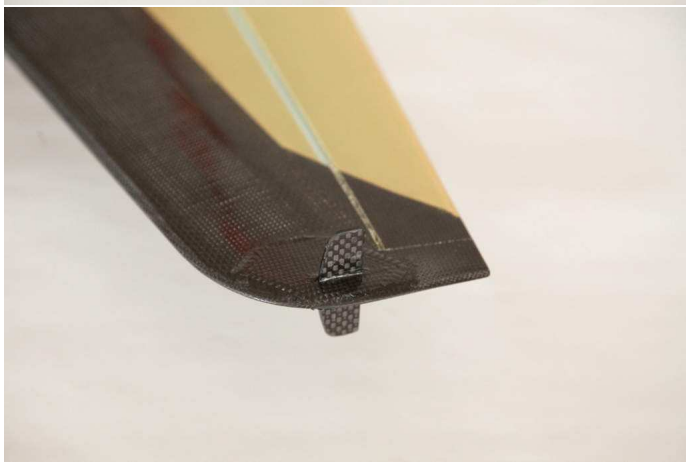
32. Mark the position of throwing peg.

33. Cut through and finish the edge

34. Glue the peg in place, reinforce the wing tip with carbon cloth on both sides



35. A Cute peg that feels good



36. Finished

37. Cut 15mm pylon, drop CA to the rear end of the pylon, then remove the foam inside

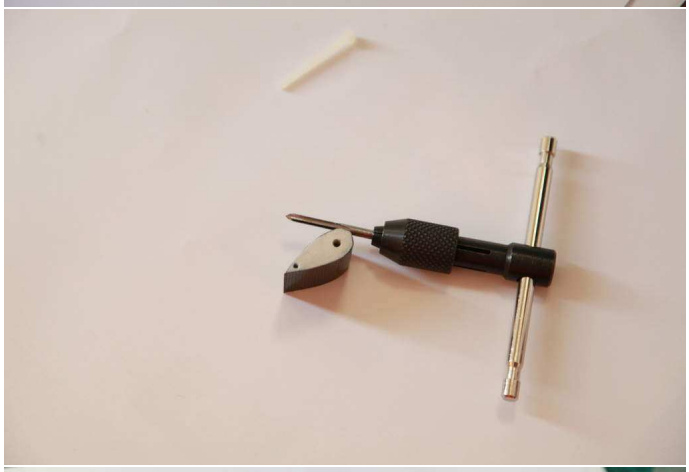
38. Mix epoxy with abundant micro balloon, fill all room inside the pylon, then put the pylon on a heating for a night now it became hard thoroughly

39. Drill a 3mm hole just in front of the spar on the stab

40. Drill a 2mm hold 15mm from the front hold

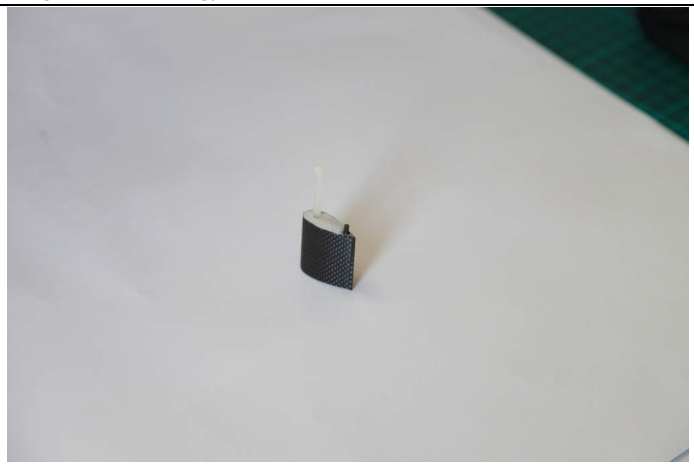
41. Remove the foam surround the hold inside the stab, fill the holds and the room surrounded with epoxy and micro balloon

42. After curing, re-drill the holes



43. Drill a M2.5 hole for holding the nylon screw and a M2 hole for alignment pin, use a M3 drill tap to cut thread, then drop CA to reinforce the thread.

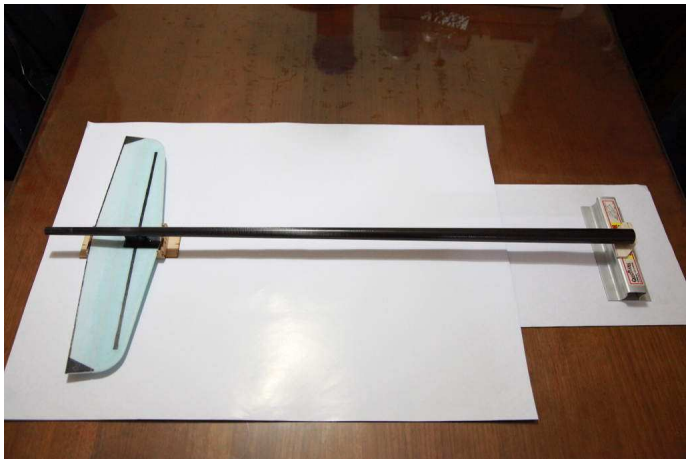
44. Test if the thread fits the screw



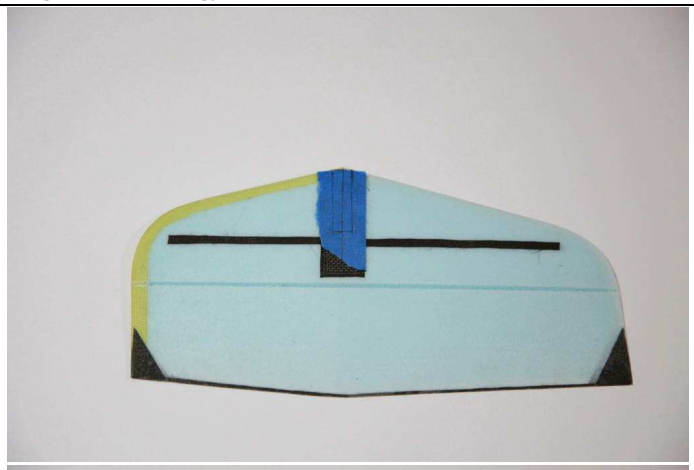
45. Glue the alignment pin in place

46. Sand the pylon to fit the boom

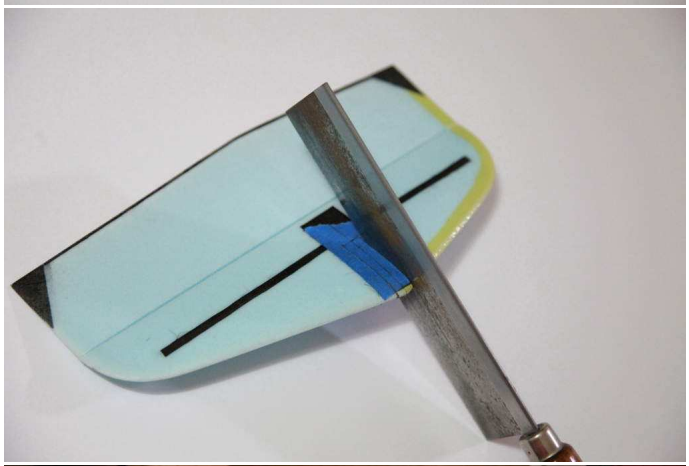
47. Slightly sand the boom for gluing the stab pylon and the vertical fin



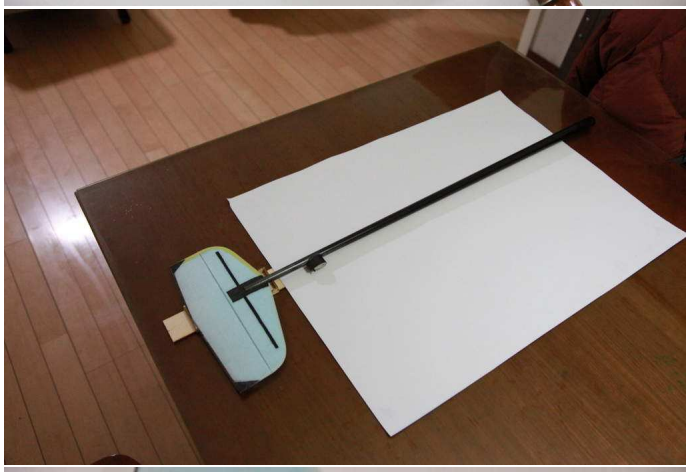
48. Glue the pylon to the boom; make sure the center of 2 ends of the boom is level. After it cured, use a piece of 2oz FG cloth to reinforce the connection, make sure the FG cloth to wrap around whole pylon include the top surface, this can help increase strength and avoid unexpected failure



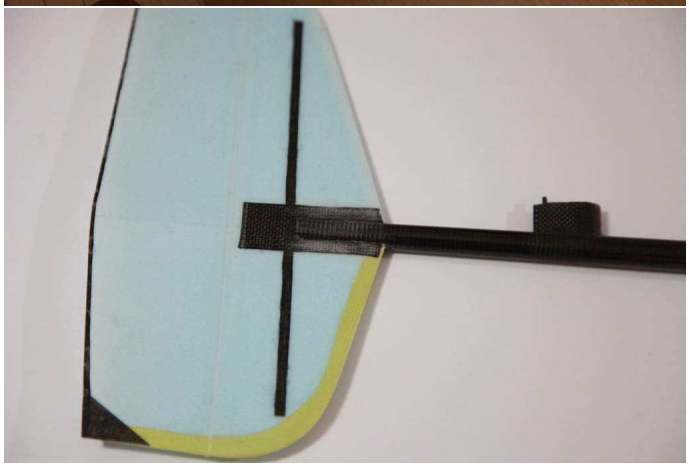
49. Plan for cutting, the width equals to the diameter of the rear end of the boom



50. Use a razor saw to cut 2 slots and don't remove the center part, it can help fix the fin to the boom

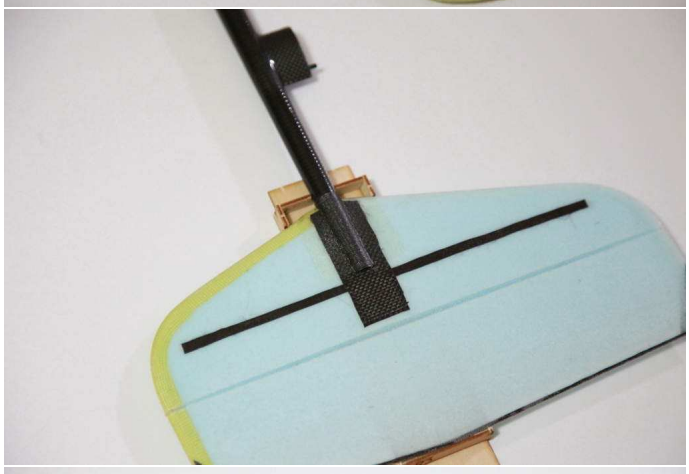


51. Glue the fin to the boom, before the epoxy cure, now you have enough time to make sure the fin is perpendicular to the stabilizer

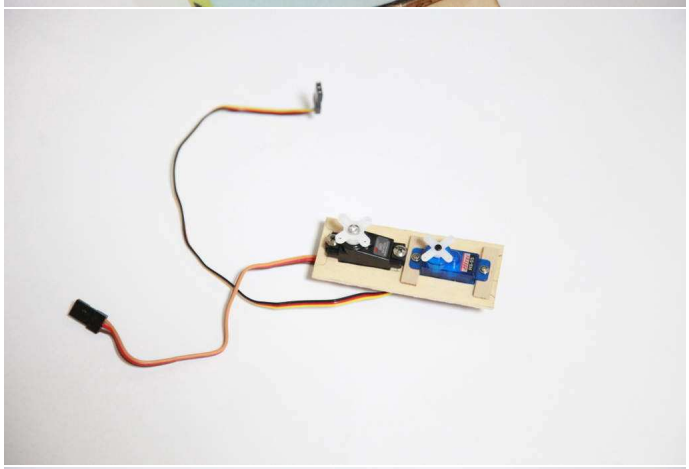


52. Lightly sand the joining area

53. Use 2 small FC pieces to reinforce the joining area



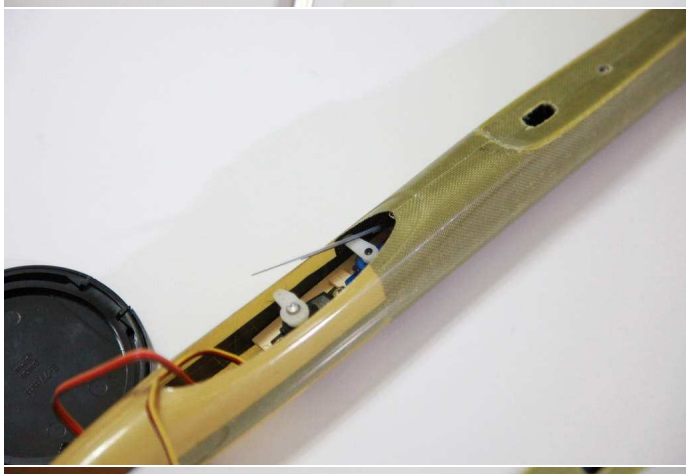
54. Wet up with finishing resin and wait for cure



55. Prepare Servo tray, the tray comes with the kit is for Futuba Micro servo, you can modify it or use plywood to make a new to adapt your servos

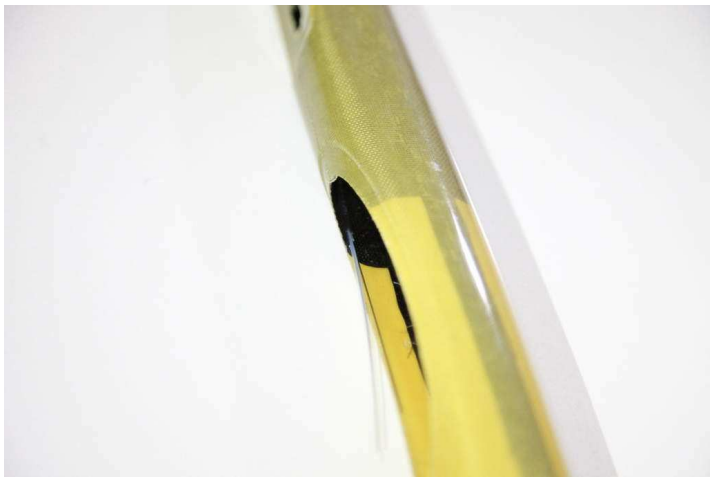
56. The Teflon tubes in the kit are not able to be glued with CA, but a heat shrink tube can hold them together and then you can glue the black tube to the fuse with CA or epoxy, Glue the servo tray first, open the fuse for aileron servo wire connector

57. Open the fuse for the tubes going out

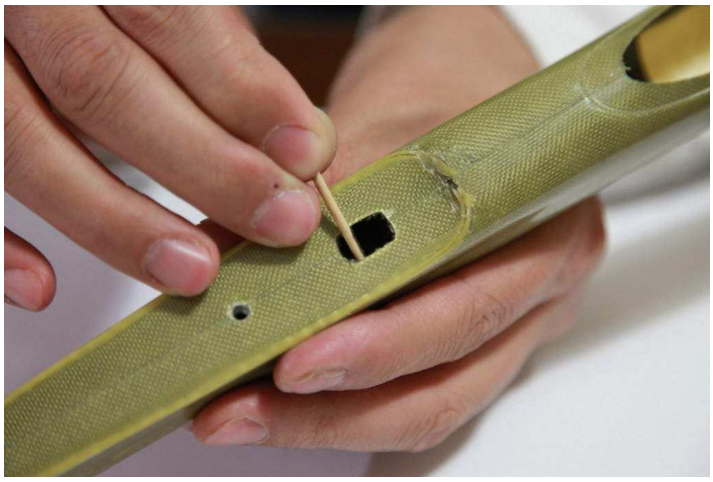


58. Inset Teflon tubes with the heat shrink tubes from the rear hole that was just opened

59. Locate the correct position



60. Use CA or 5min epoxy to fix the front tube first



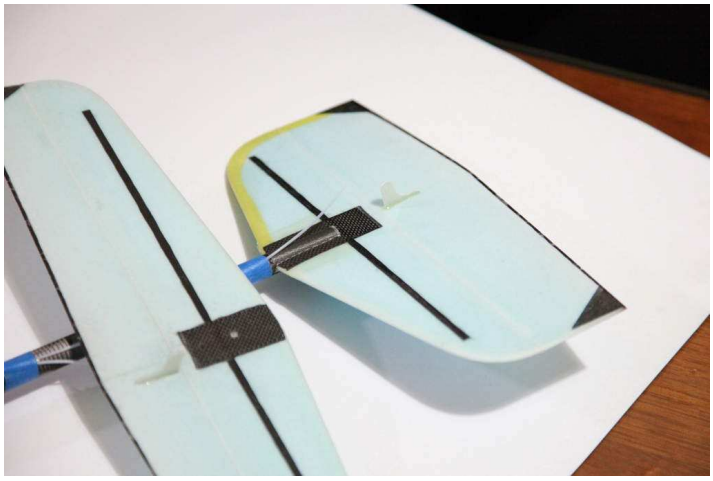
61. Then glue the 2nd one from the hatch for wing connector, use 5min epoxy here, it gave you longer working time and can fix the tube very well

62. Hold for cure

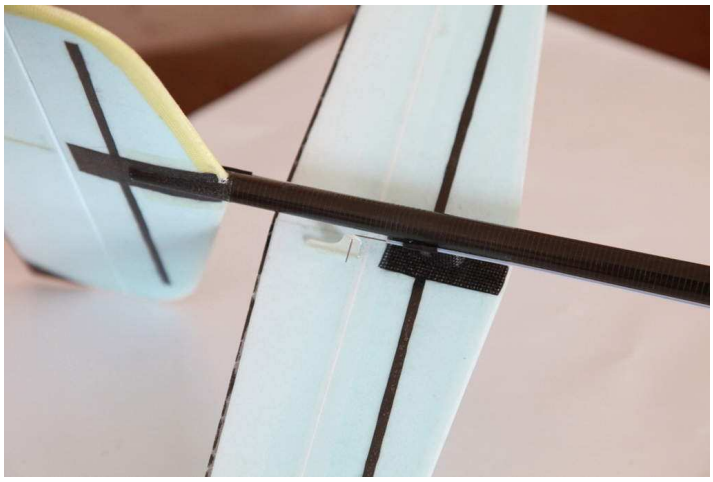
63. Glue the rear part

64. Glue the boom to the fuse now, it's quite easy to align everything before the epoxy cure.

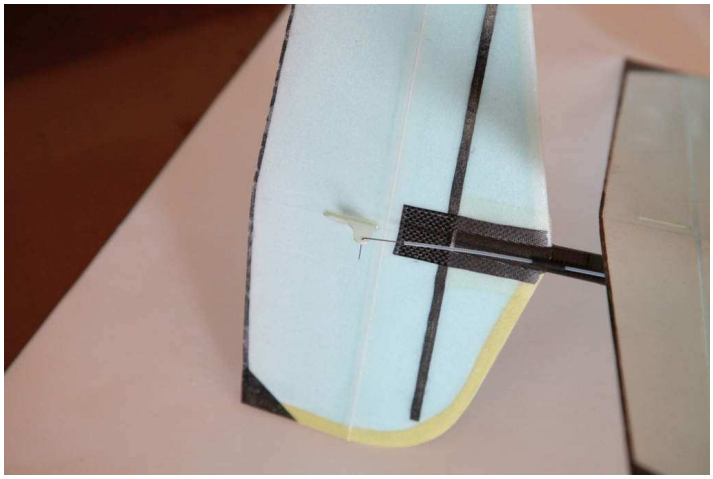
65. Run the Teflon tubes along the boom and use transparent tape to fix them with the boom



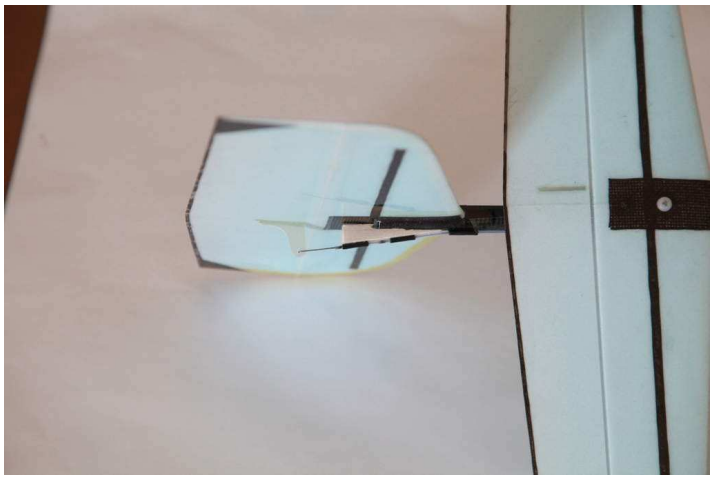
66. Find the position for linkage holding tube to be fixed



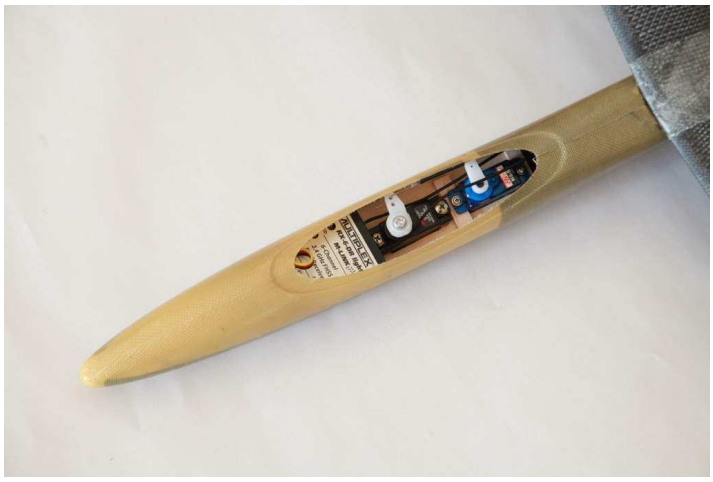
67. Use small diameter heat shrink tube to fix the Teflon tube with the boom here, bend the wire and connect it with the horn, you can use a 0.5mm drill bit to create a new hold on the horn to fit the wire



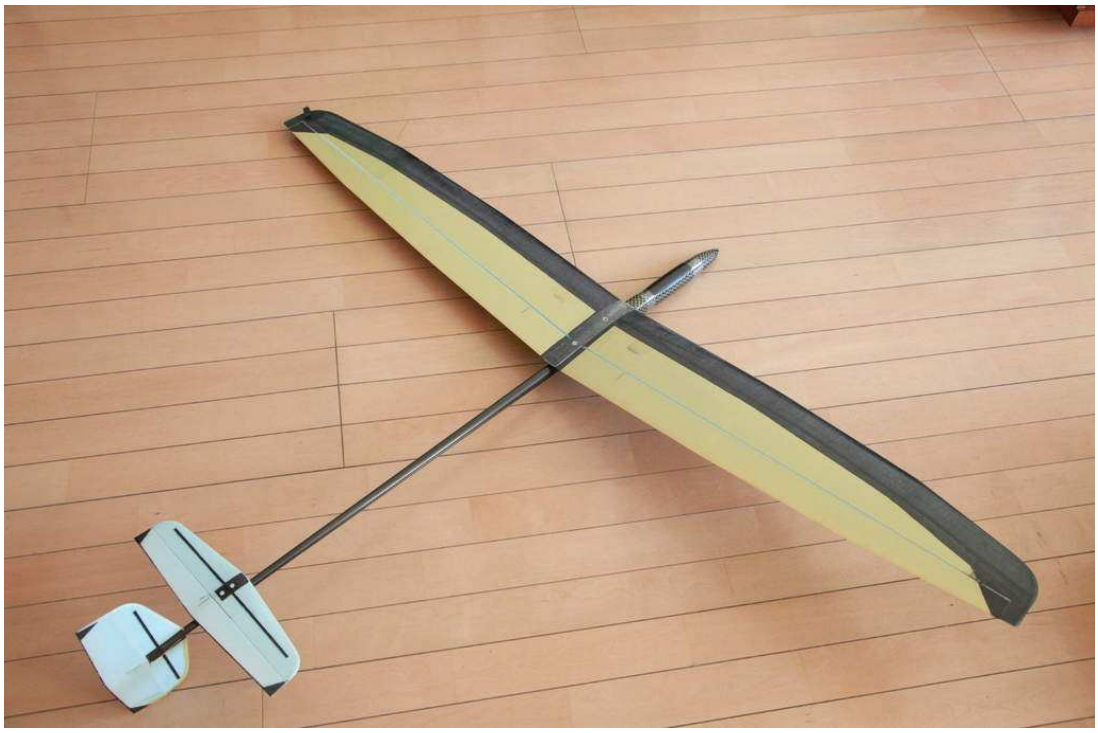
68. Connect the wire with rudder horn



69. Use heat shrink tube and triangle balsa wood to fix the linkage



70. Install battery and receiver to finish the job, then add one more heat shrink tube to fix the Teflon tube, and now the music wire extends to the front servo



71. All finished.

This Manual can been download from : WWW.TOPSOARING.COM

Thanks to Mr. Thomas Wang