



## Douglas F3D-3/F-10C Skyknight

The Skyknight was a very unique fighter due to its bulkiness. That was mostly owed to the fact, that it was designed to intercept bombers at night and was build around the only powerful intercept radar system that was available at the time, the Westinghouse AN/APQ-35. This made the radar vision of the Skyknight superior to any other fighter of its time, most of which did not have any radar.

The first Skyknight flew on March 23rd 1948. The first version, the F3D-3-1, was based on the prototype, and had notably smaller engine nacelles, than the later

F3D-3-2. The F3D-3-2, which was the version to be delivered to operational squadrons, received a bigger engine, which led to the bigger nacelle, and the improved APQ-36 radar. Its bulky appearance earned the Skyknight its nickname, "Willy the Whale". In its later career it was also called "Drut" (backward for \*\*).

The Skyknight was first used in combat in the Korean war, where it soon became the main escort for the B-29-formations, which were vulnerable to attack by the nimble MiG-15. The Skyknight proved successful thanks to its powerful radar,

which made it superior to smaller fighters at night, and especially the second radar in the tail proved useful, as it warned the pilot, if a MiG was on the tail.

During the Korean war, a Skyknight became the first Jet fighter to achieve an aerial victory at night, when Major William T. Stratton shot down a Yak-15. During the Korean war, Skyknights scored six other aerial victories, which made it the most successful Navy/Marines type of the Korean war. The Skyknight was more successful with Marines squadrons, because while it did qualify

for carrier landings, these were extremely tricky, so it was tried to avoid them and many Navy squadrons that operated the Skyknight didn't see combat.

Thanks to its radar, and its stability in the air, the Skyknight became the development testbed for the new Sparrow-missile and as such was the first Navy aircraft that became operational with air-to-air missiles.

After being retired as a fighter, the Skyknight was used mainly for radar training. It was the only second-line type that was available, which had a strong enough radar and could fire Sparrow missiles, which could help to train the radar operators for the F-4 Phantom II.

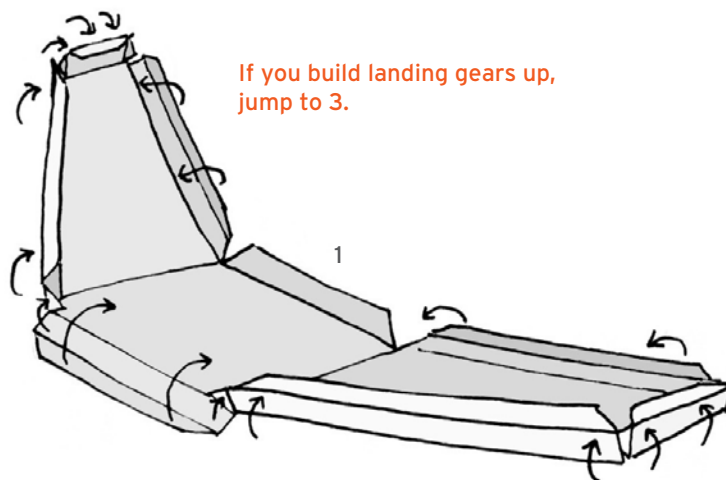
Its bulky and spacious fuselage led the Skyknight to its final role, as an ECM-bird. As such, it saw action again in Vietnam, where it was flown by Marines Squadrons to support air-to-ground strikes with electronic countermeasures, until the Squadrons converted to EA-6's.

The last Skyknights were operated by Raytheon company as missile testbeds, as no other aircraft had the same stability in flight as the Skyknight.

**After the Korean war, the Skyknight soon became obsolete as a fighter, when new swept-wing designs became available. Douglas proposed an improved swept-wing Skyknight, the F3D-3, to the Navy, but that version never reached prototype stage. The designs for the wings and tail were later modified for the creation of the A3D Skywarrior.**

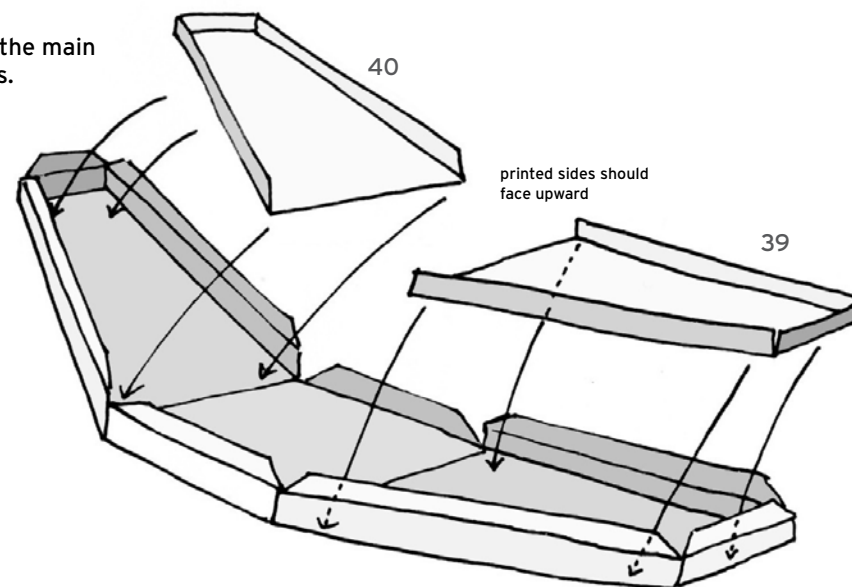
**This model depicts how amazing this glorious swept-wing version (eventually to be known as the F-10C) could have been, how it would have looked in various roles until serving as ECM-Aircraft in its final role.**

1. Glue together the upper part of the wing stiffener.



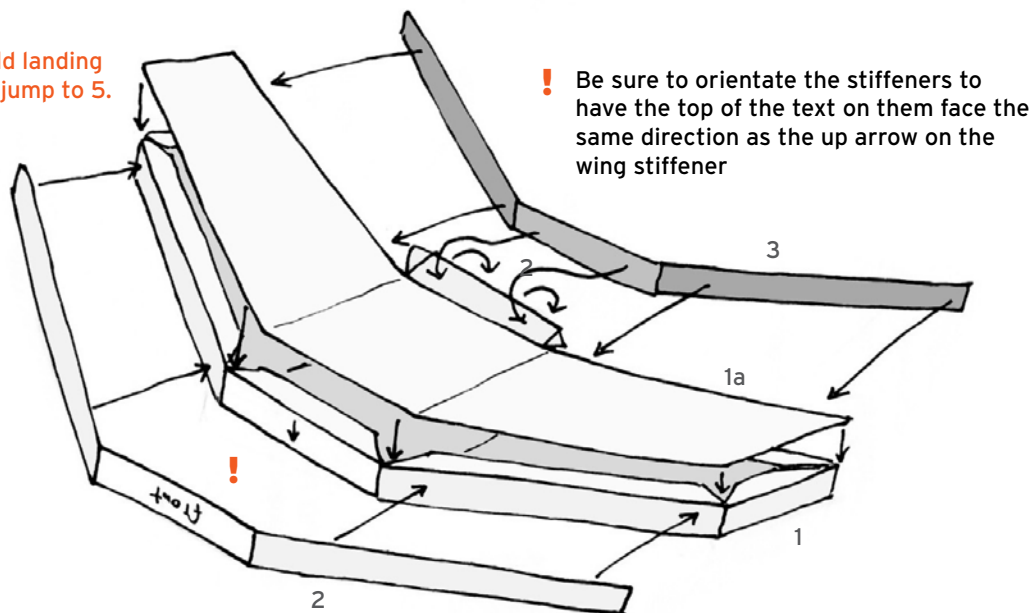
If you build landing gears up, jump to 3.

2. Build in the main wheel wells.

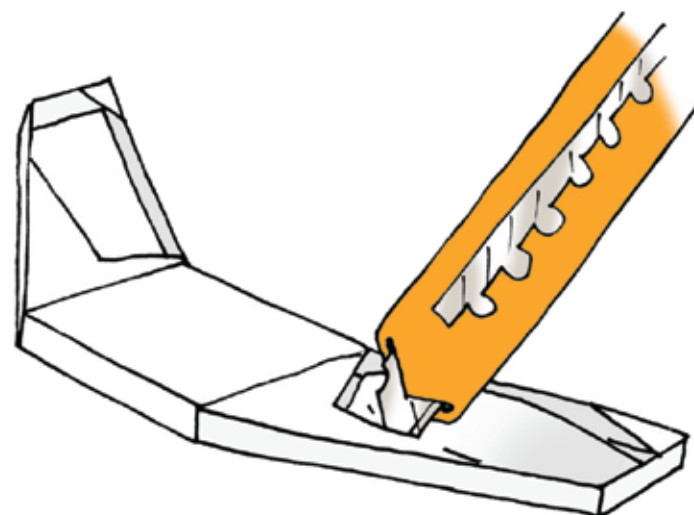


3. Add the lower side of the wing stiffener and attach the strengtheners on the front and the back.

If you build landing gears up, jump to 5.



4. Cut out the wheel wells.



5. Score the dashed lines on the forward fuselage part.

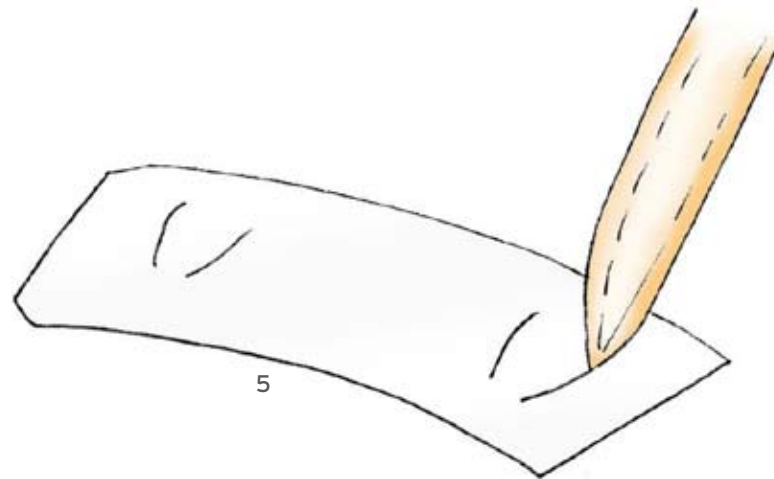
Note:



Areas with a green cross should be cut out before assembly.

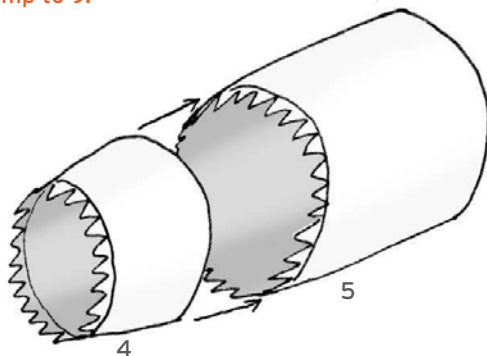


Areas with a red cross should be cut out after the construction of the fuselage.

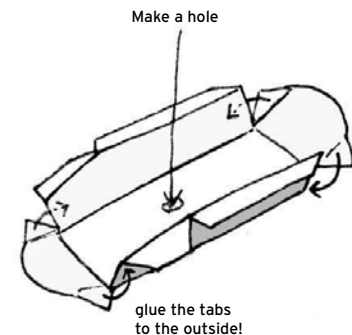
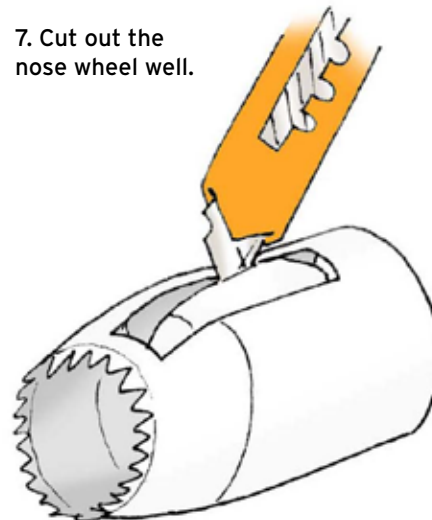


6. Glue together the two front fuselage parts.

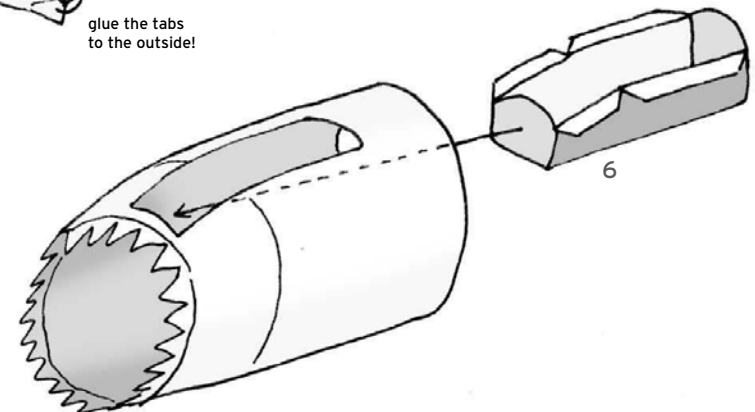
If you build landing gears up, jump to 9.



7. Cut out the nose wheel well.

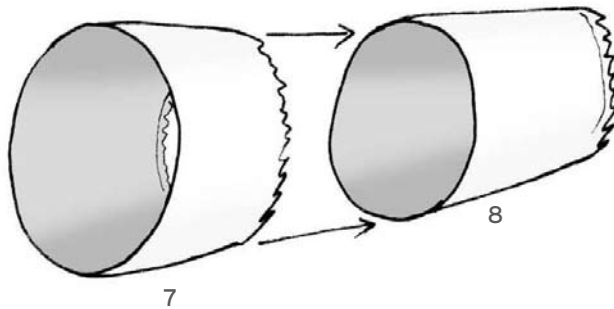


8. Build the nose wheel well and glue it into the front fuselage.

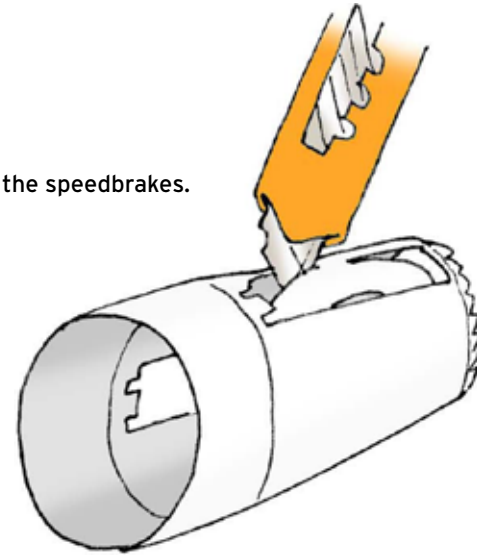


9. Glue together the middle rear fuselage parts 7 & 8.

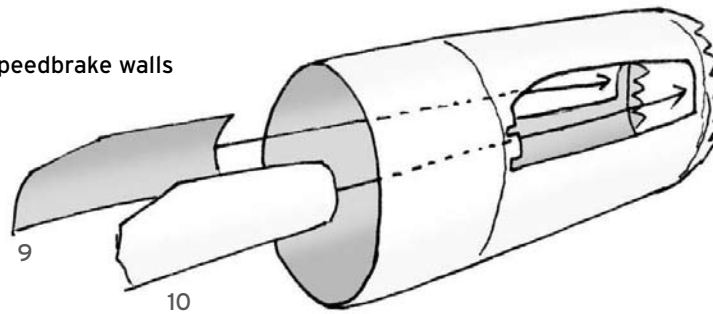
If you don't build the extended speedbrakes, jump to 12.



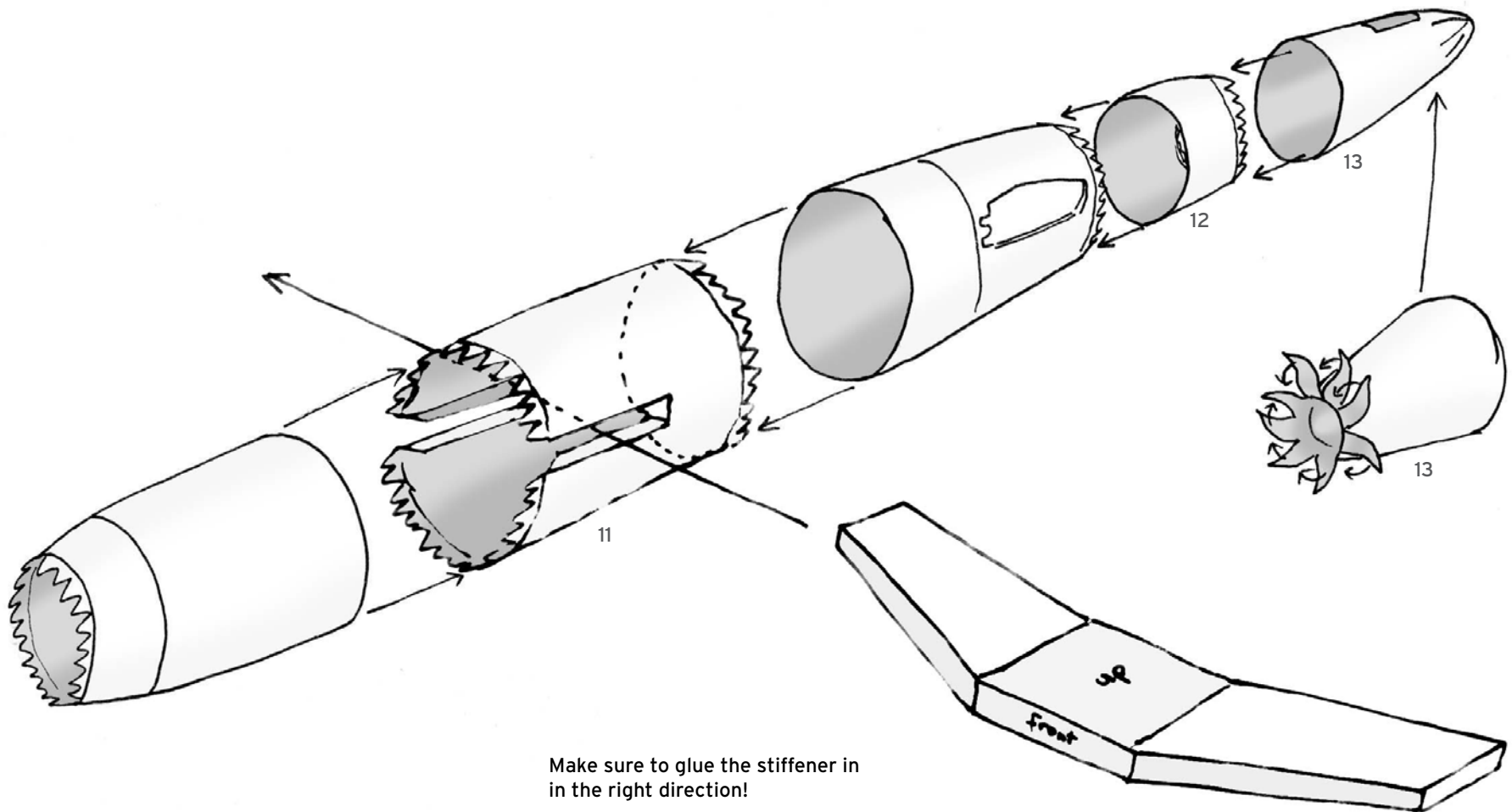
10. Cut open the speedbrakes.



11. Glue the inner speedbrake walls inside.

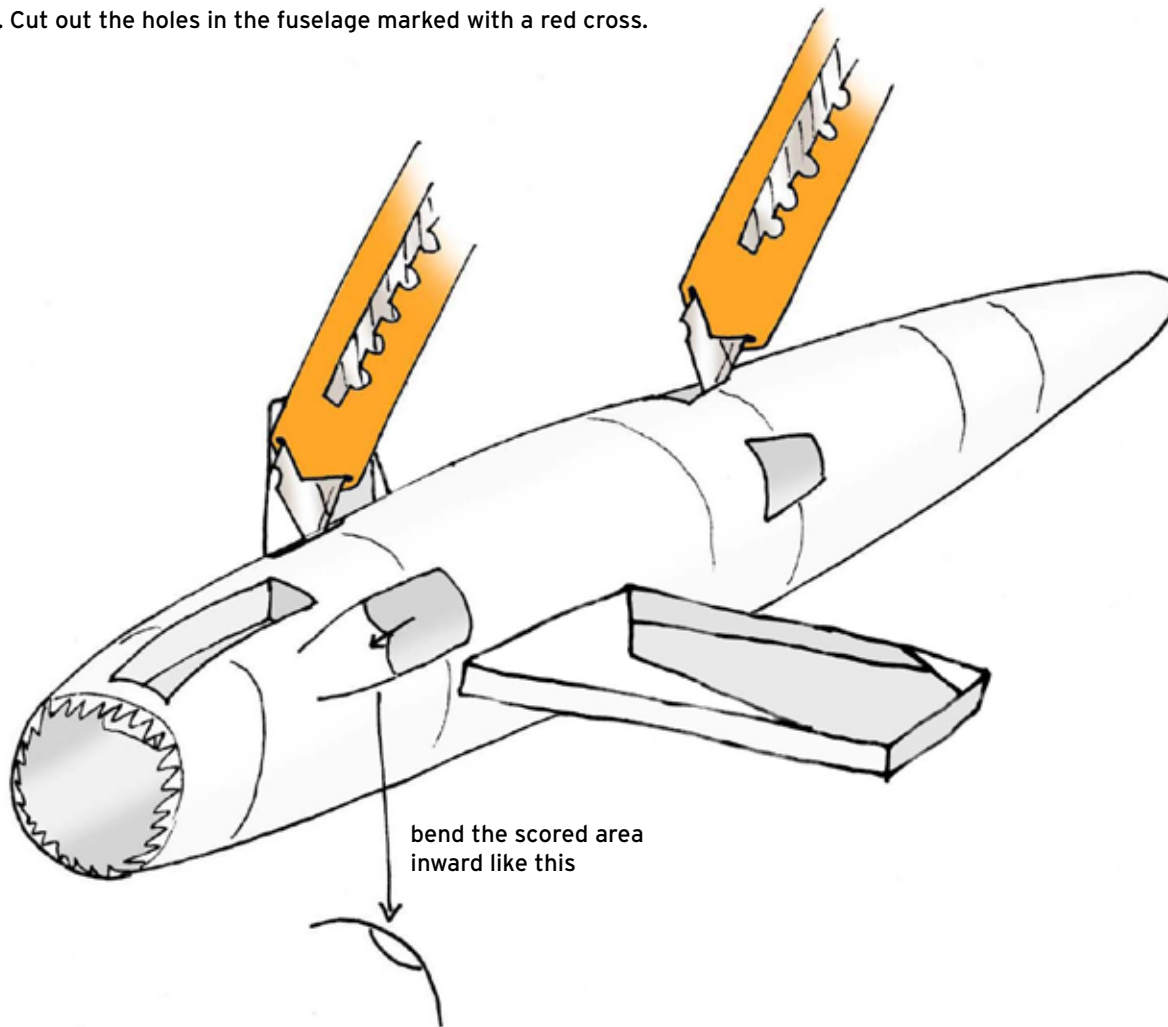


## 12. Main fuselage assembly.



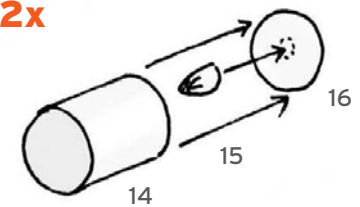


13. Cut out the holes in the fuselage marked with a red cross.

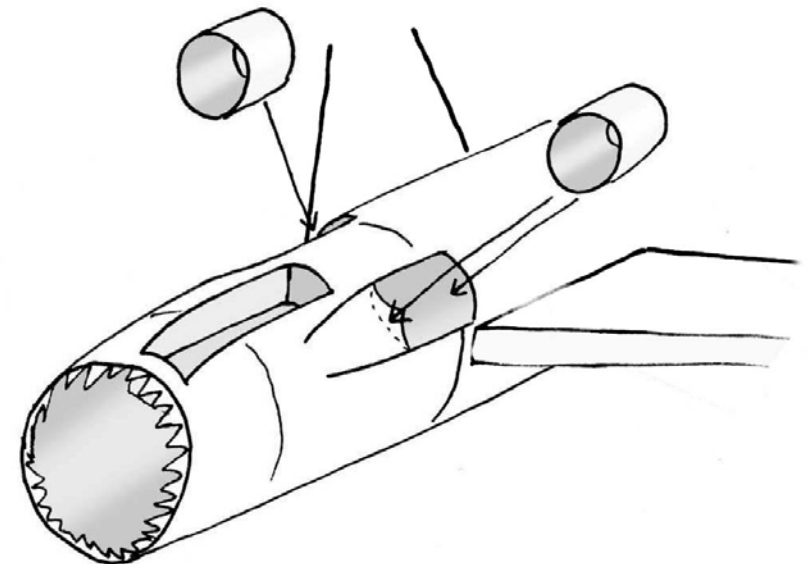


14. Build air intake tunnel and engine compressor.

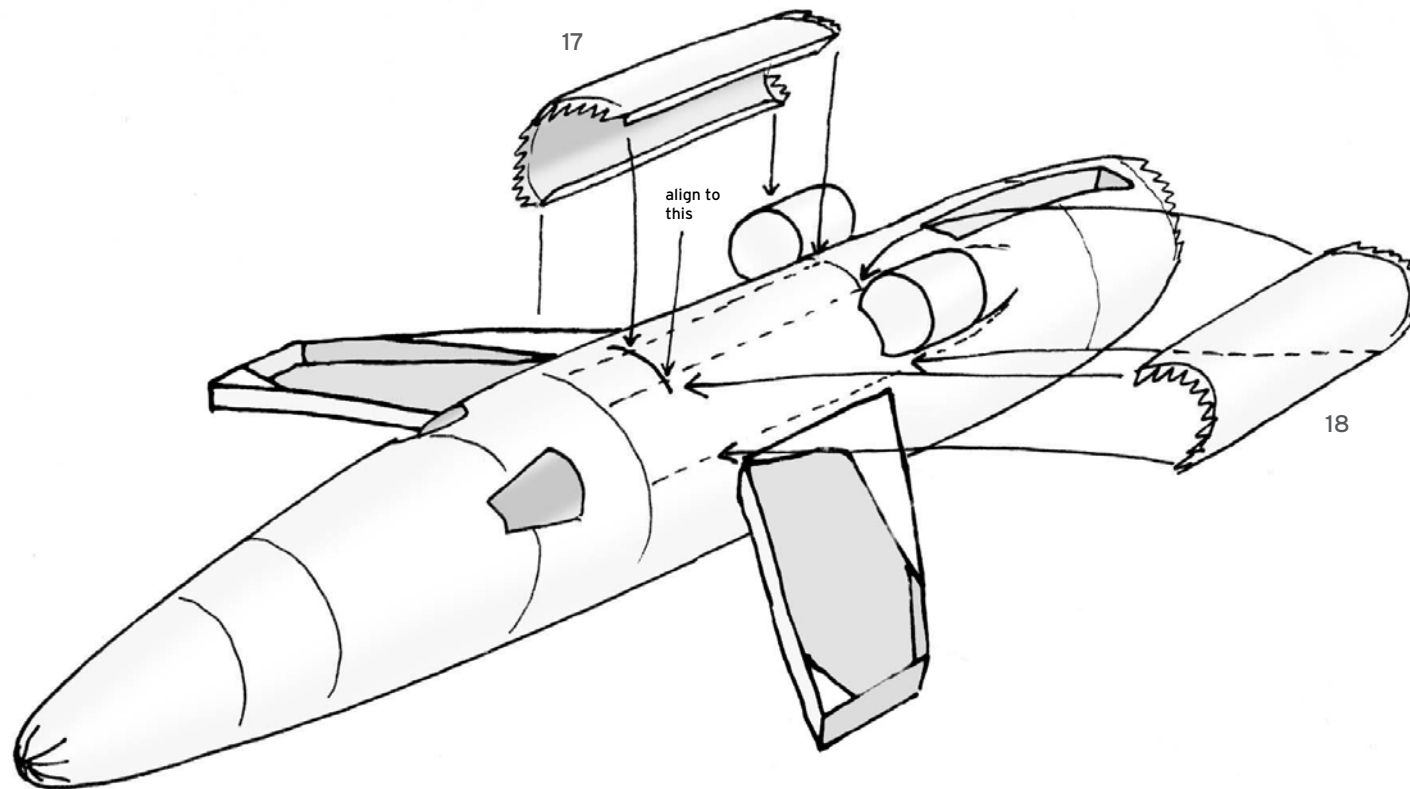
**2x**



15. Glue the intake tunnels into the front holes.



16. Glue the engine section main parts on the fuselage.  
align the front edge with the front edge of part 11 and the rear  
edge with the marked line.



## exhaust section

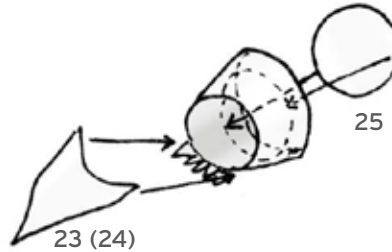
17. Roll and glue the inner exhaust area (with printed side to the inside).



18. Glue the outer exhaust area around it, align it to the tab as shown.



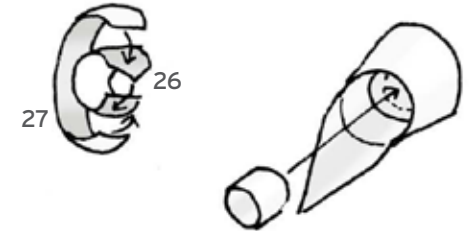
19. Glue the exhaust plate in and the exhaust valley on the tabs as shown.



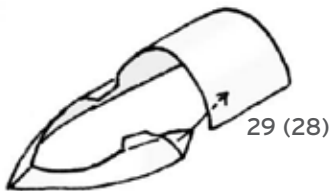
When finished, it should look like this:



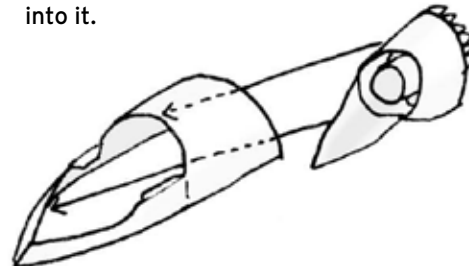
20. Build the exhaust nozzle and glue it inside the exhaust tunnel.



21. Build the engine section rear part.



22. Glue the exhaust section into it.

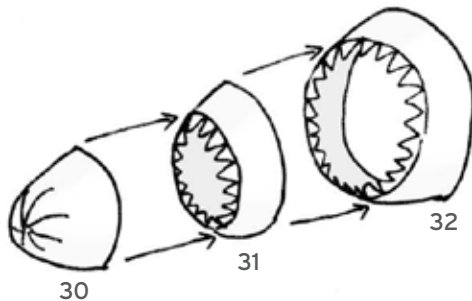


**2x**

Repeat steps 17-22 for the other side (numbers in brackets)

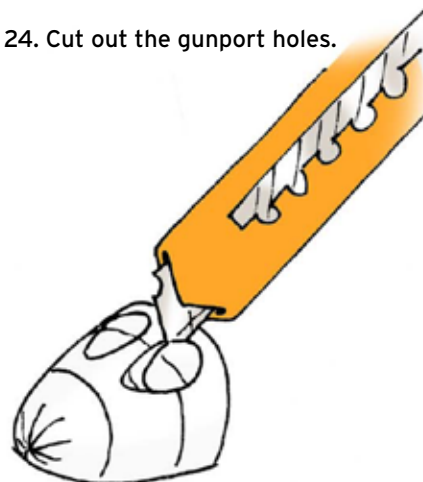
## nose

23. Glue together the nose parts.

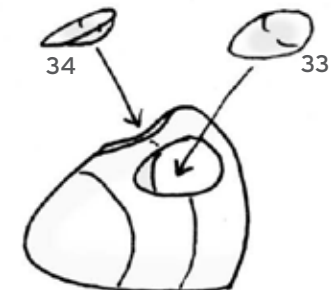


There is an optional long nose, whose part numbers are written *ITALIC & BLUE* if you build that nose, jump to 26.

24. Cut out the gunport holes.



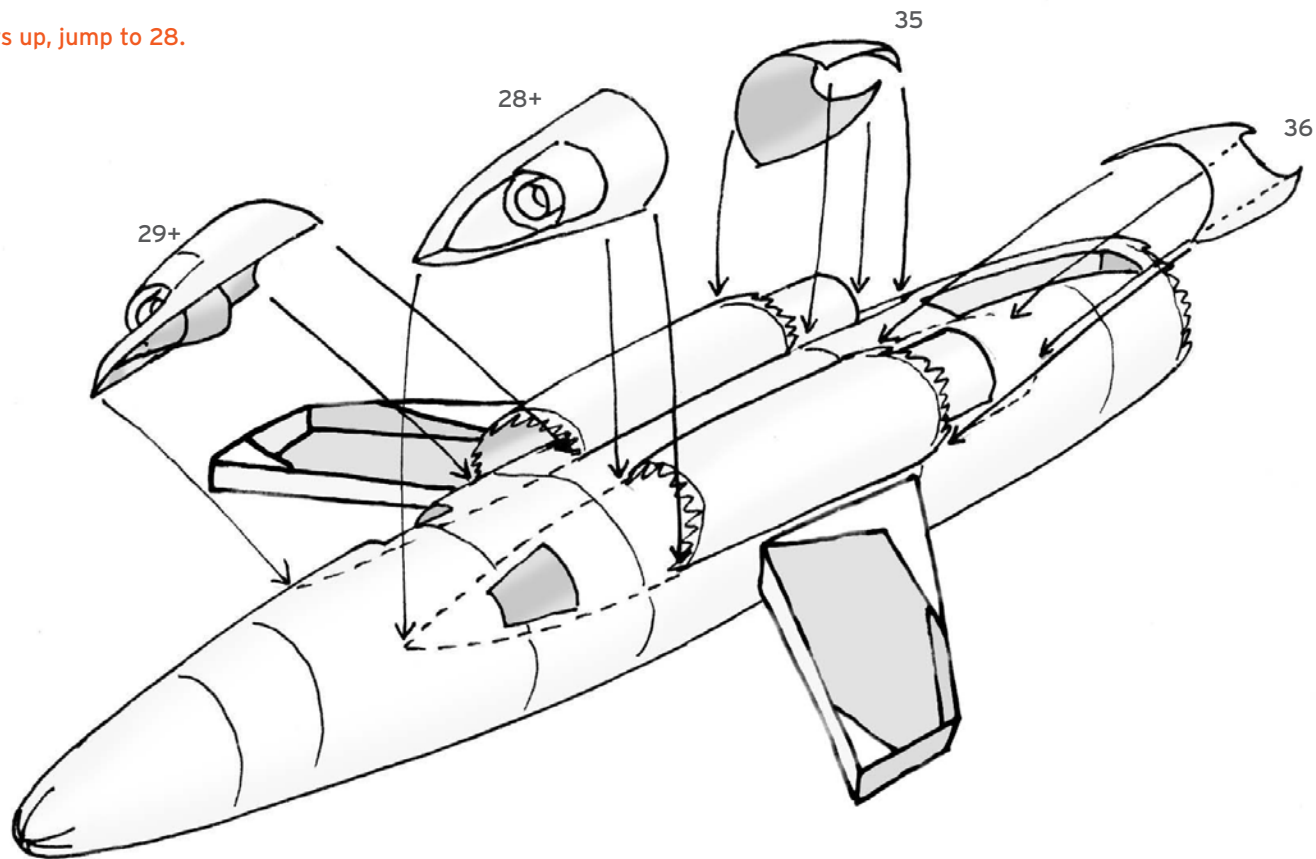
25. Glue the gunports inside the holes



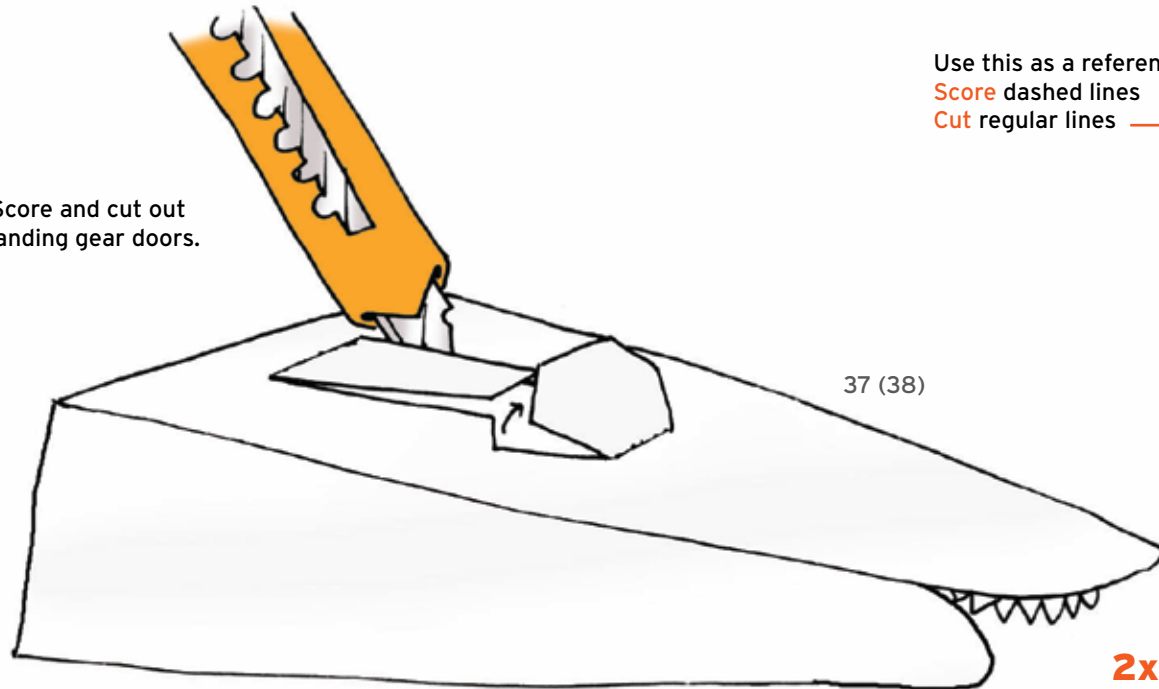


26. Glue exhaust sections and intakes on the fuselage.

If you build landing gears up, jump to 28.



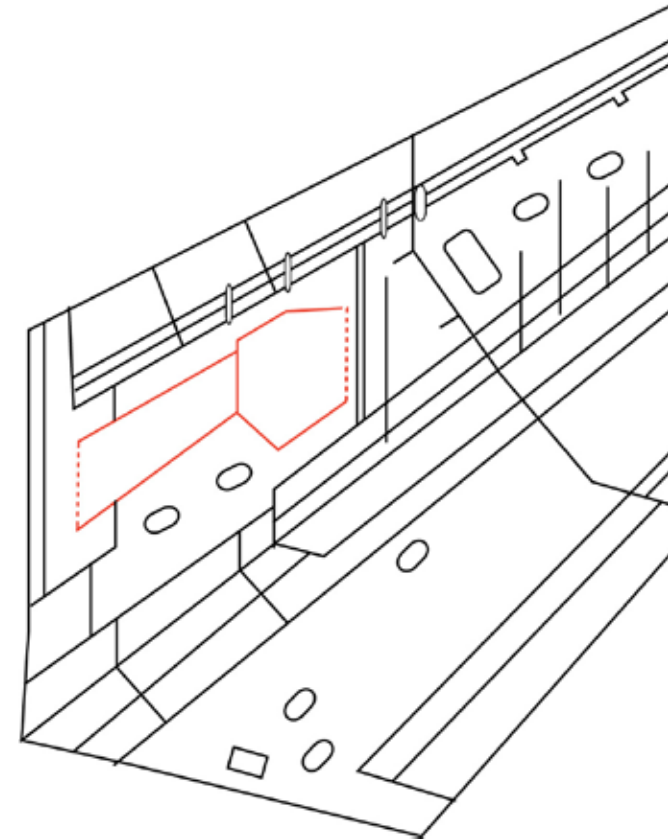
27. Score and cut out the landing gear doors.



Use this as a reference:

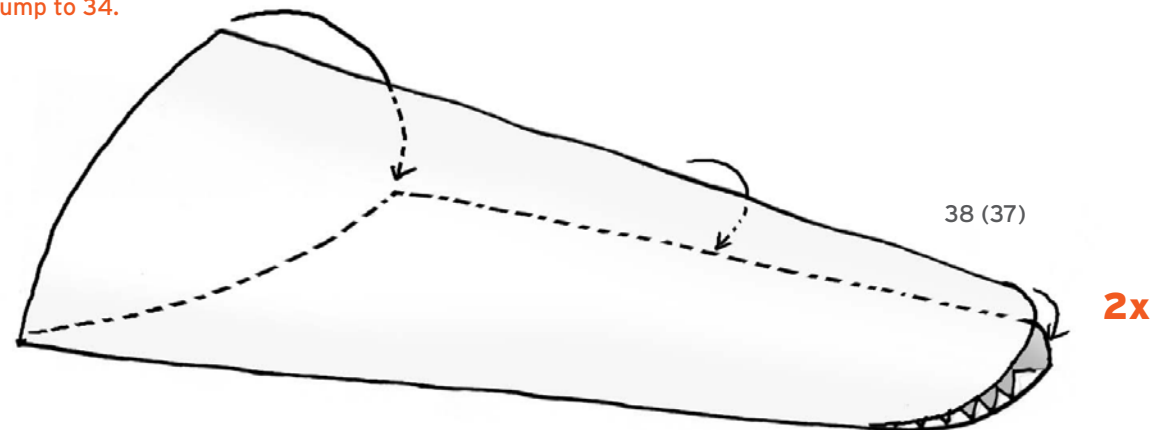
Score dashed lines - - - - -

Cut regular lines ———



Ignore the following step if you build folded wings

28. Glue together the upper and lower wings. Then jump to 34.

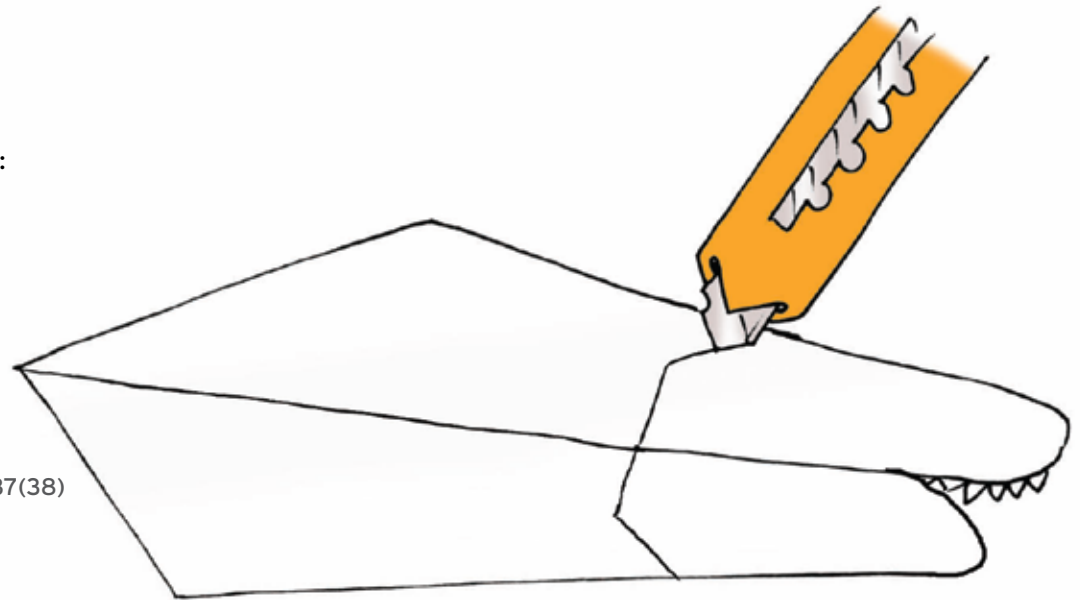


If you build folded wings continue here.

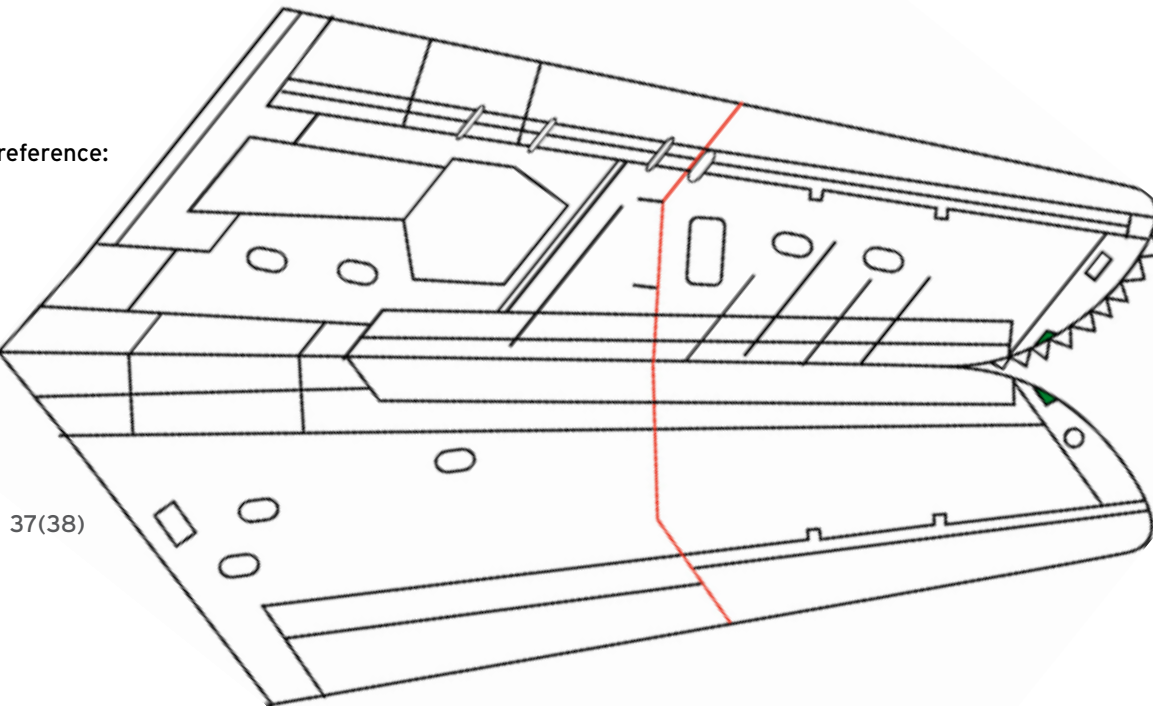
29. Cut the wings into two parts as shown:

**2x**

37(38)

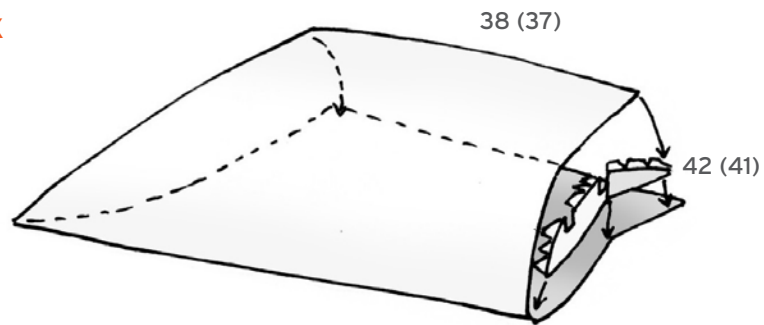


Use this as a reference:



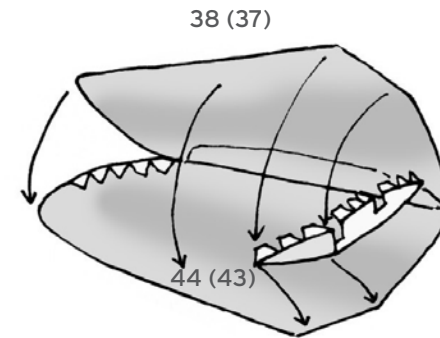
30. Glue the fold edge into the inner wing.

**2x**

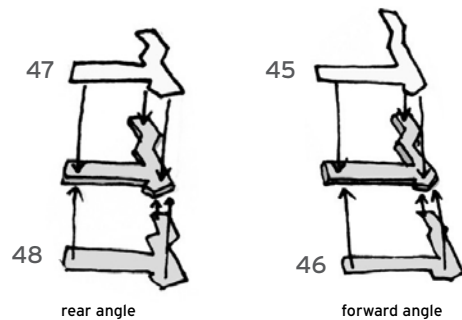


31. Glue the fold edge into the outer wing.

**2x**

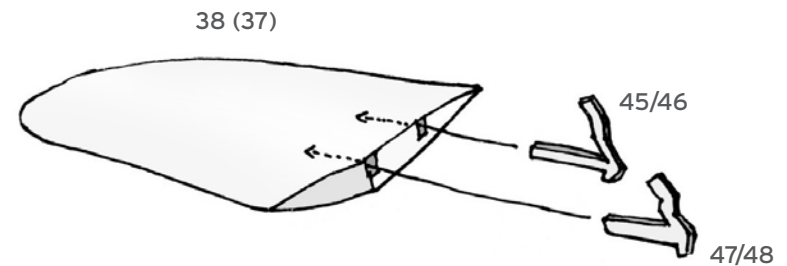
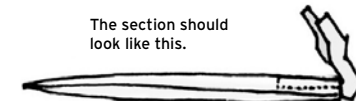


32. Glue the fold angles on stronger cardboard to make them stiff.

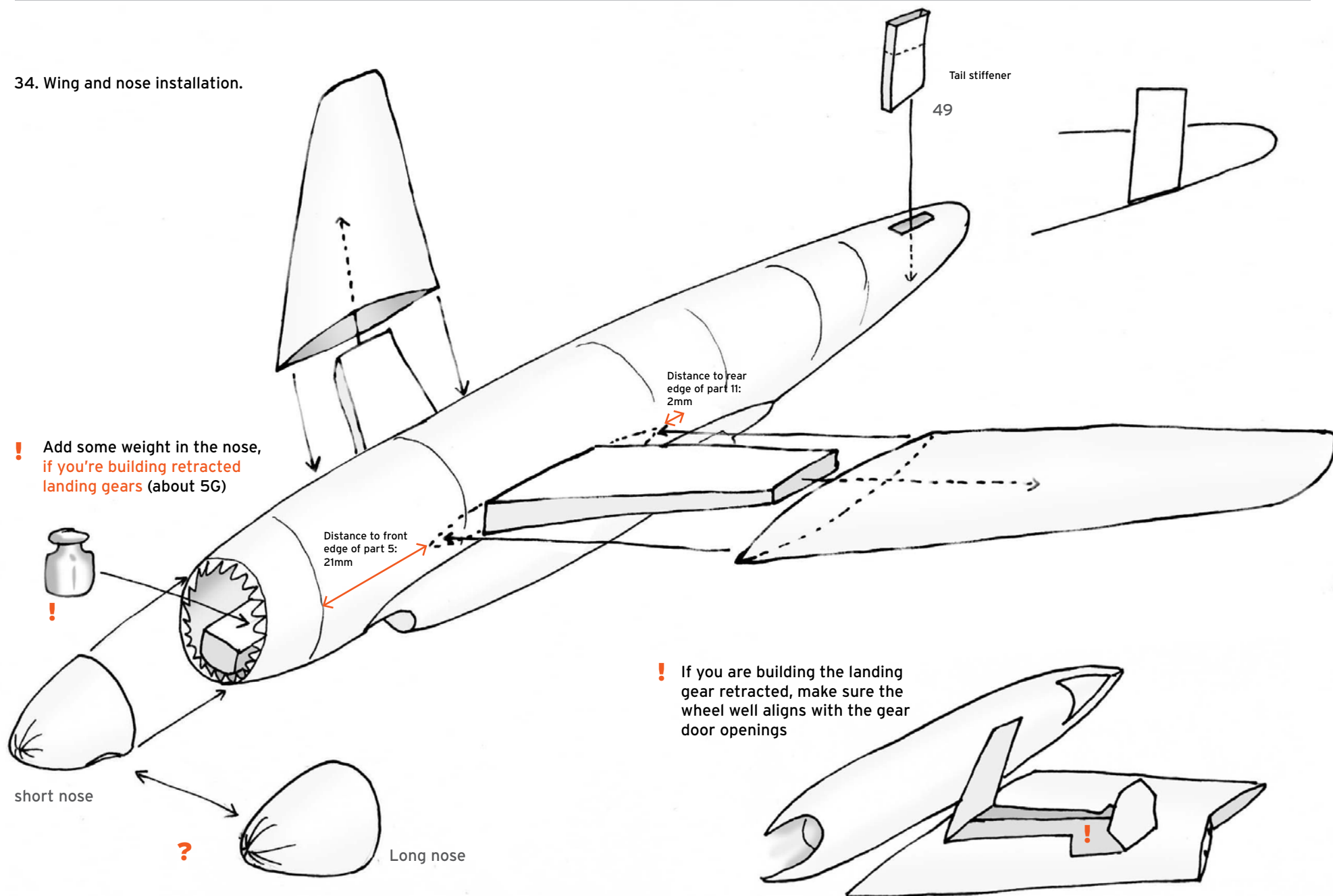


33 . Glue the angles into the outer wing parts.

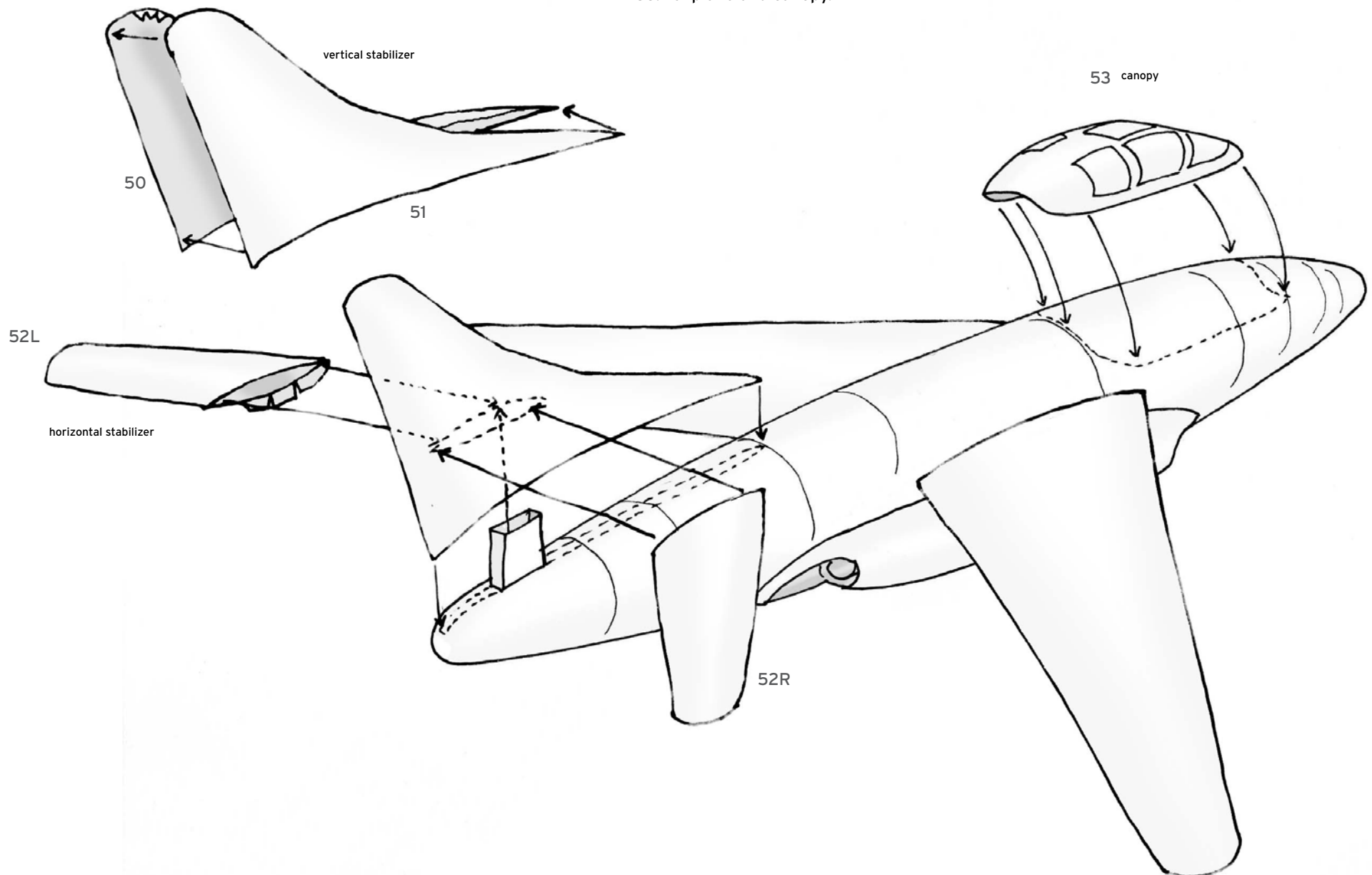
The section should look like this.



## 34. Wing and nose installation.

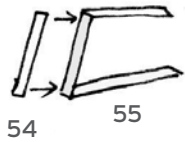


35. Tailplane and canopy.



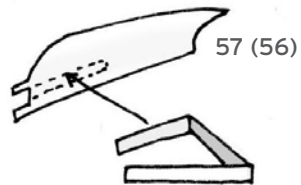


speedbrakes



36. Details.

ff you are building **landing gears down**, I recommend to wait with the installation of the speedbrakes until all else is finished.



Antenna  
58



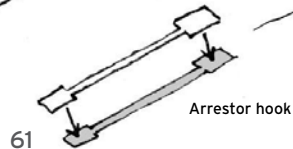
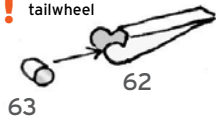
59  
Antenna



60

56+

! tailwheel



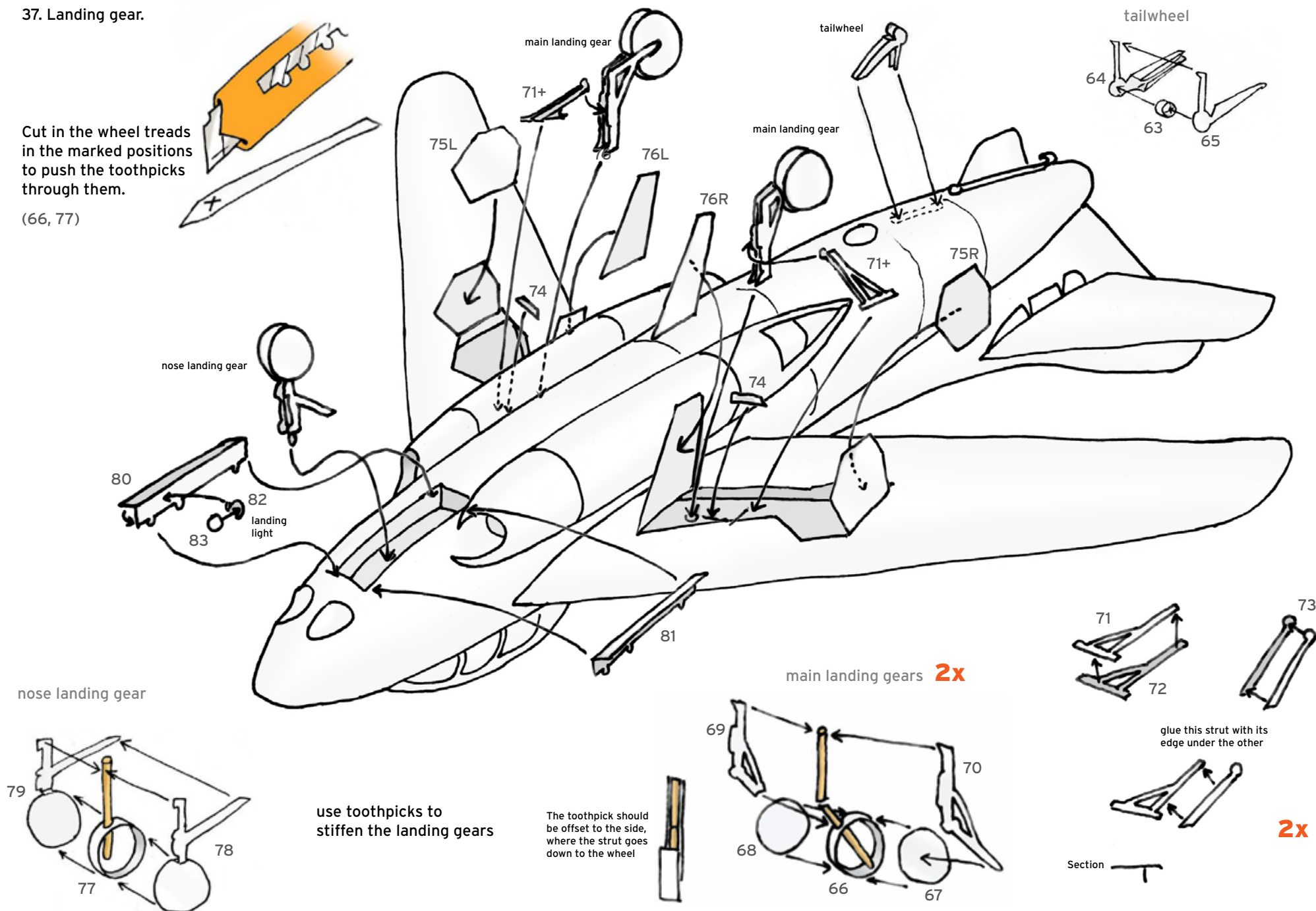
Arrestor hook

! Build parts 62 and 63 **only** if you build landing gears up

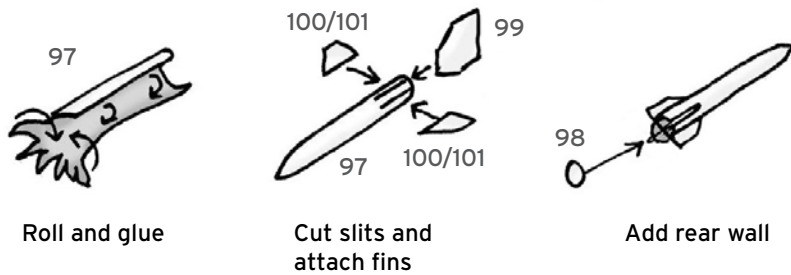
## 37. Landing gear.

Cut in the wheel treads in the marked positions to push the toothpicks through them.

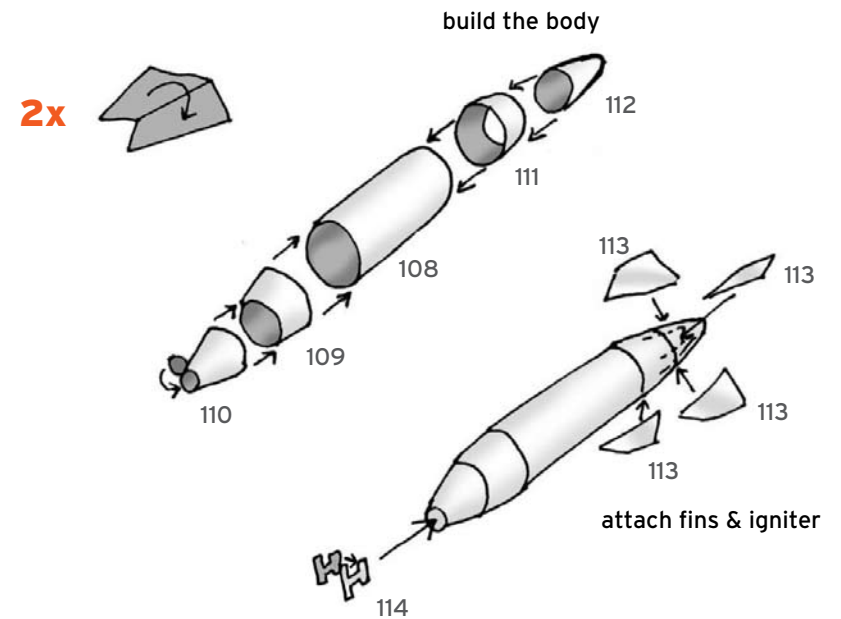
(66, 77)



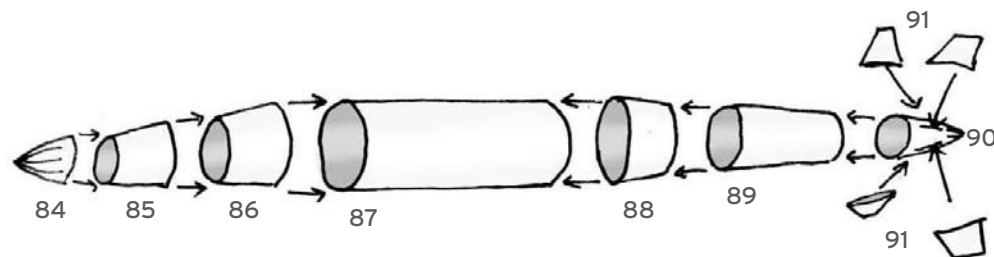
## 38. Rockets. (optional)



## 39. Bombs. (optional)



## 40. Drop tanks and ECM pods. (optional)



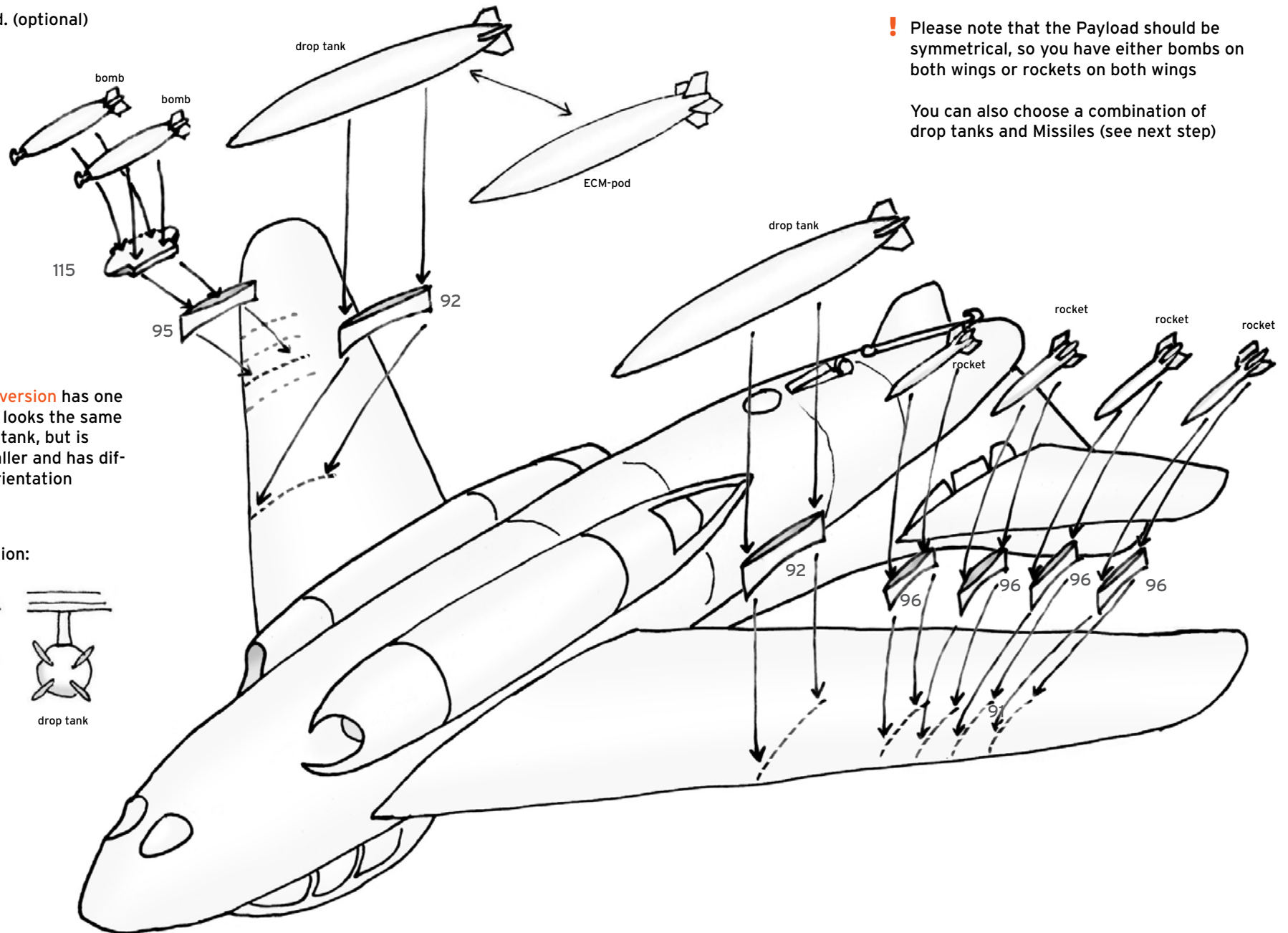
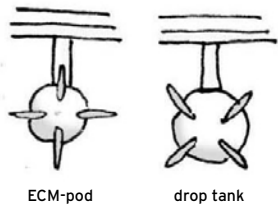
## 41. Payload. (optional)

! Please note that the Payload should be symmetrical, so you have either bombs on both wings or rockets on both wings

You can also choose a combination of drop tanks and Missiles (see next step)

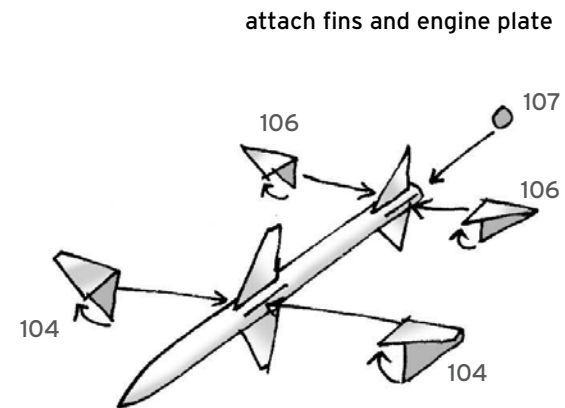
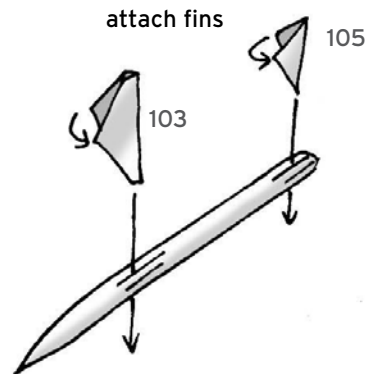
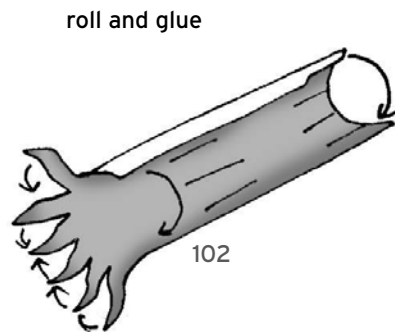
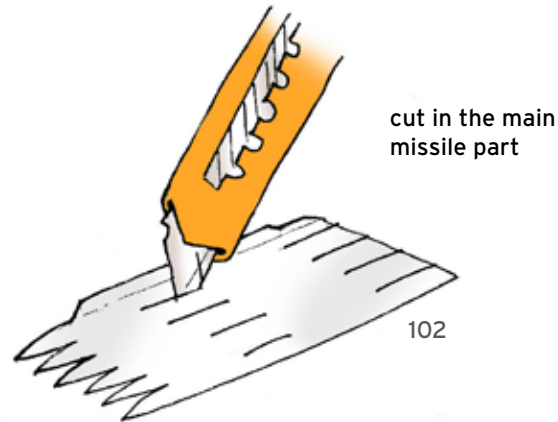
The **EF-10C version** has one ECM-pod. It looks the same as the drop tank, but is slightly smaller and has different fin orientation (see below)

Fin orientation:

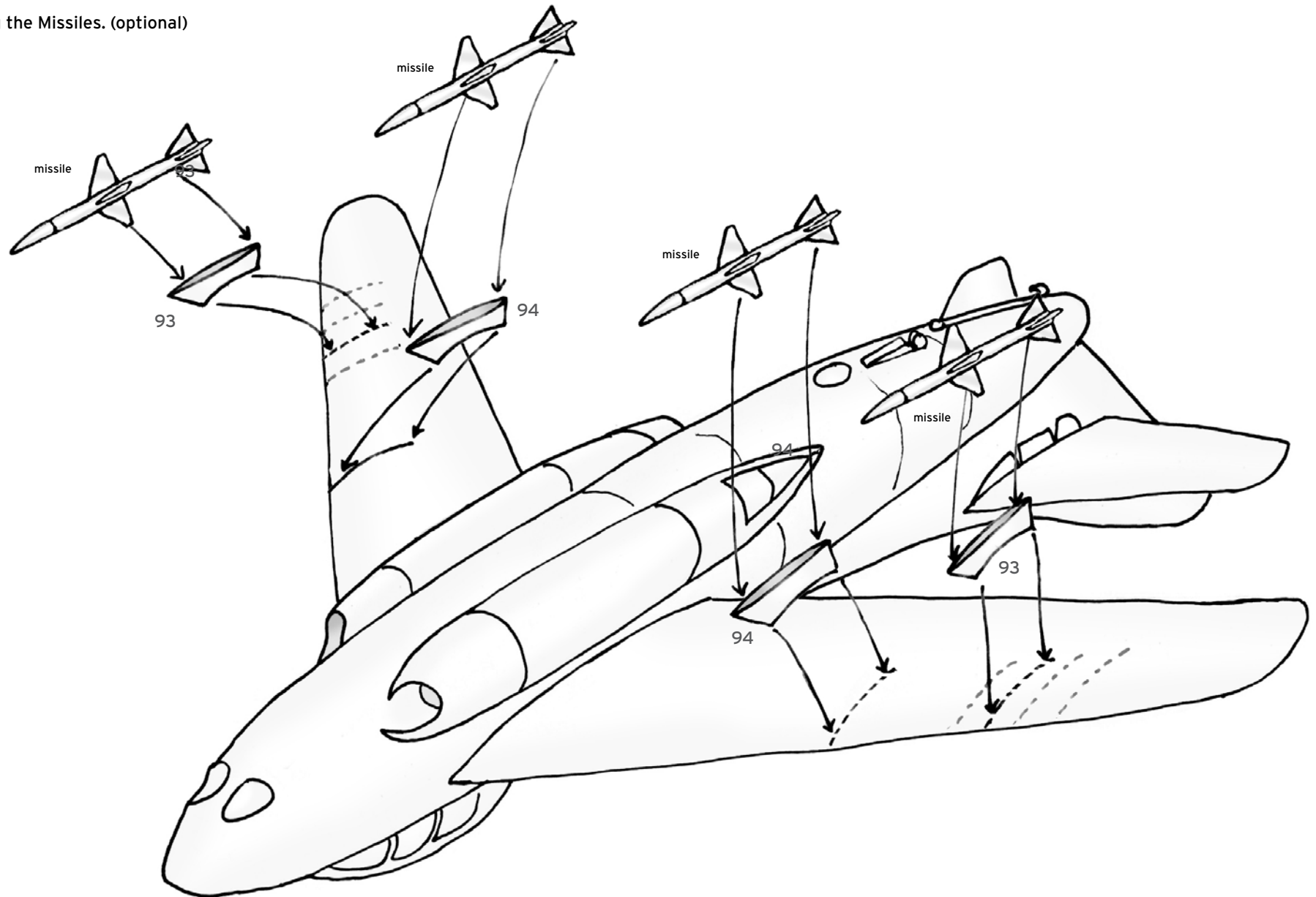


## 42. Missile assembly. (optional)

You can also replace the Sparrows included in the F3D-3 with the Sparrow I missiles carried by the straight-wing Skyknights.



## 43. Equipping the Missiles. (optional)





## 44. Folded wings.

