Saab J35 / Sk35

Draken

The Saab J35's name, "Draken" can mean both Dragon or Kite in the swedish language. This ambiguity was intended by its designers, letting the former stand for the Draken's abilities and the latter for the Draken's design idea. The revolutionary shape of its wing stems from the idea of combining two delta wings with different angled sweep into one wing: one for higher speeds, one for lower speeds. This solution provided the Draken with a maximum of stability and agility at both higher and lower speeds, while at the same time providing it with a high load capacity for fuel and arms.

After its development had already been commissioned in 1949, the revolutionary concept for the Draken was first tested by a smaller "proof-of-concept" plane, the Saab 210, which was also referred to as "Lilledraken" (The small Draken). The Lilledraken was half as big as the final Draken. It flew first on January 21st 1952 and is preserved today at the Swedish Air Force Museum.

The maiden flight of the prototype of the big Draken took place on Oktober 25th 1955. The second prototype became famous for becoming the first aircraft to break the barrier of sound during a climb. This hadn't even been intended at that time, but still showed the capabilities of the new design.The air intakes which were placed at the front of the forward delta wing forming the characteristic "wide shoulder", which let the Draken become an icon of jet aircraft design.

The armament of the Draken as an interceptor consisted mostly of air-to-air missiles carried on four, later six, hardpoints. These were mostly AIM-9 Sidewinders, or alternatively the swedish license-built RB27 and RB28, which had been based on the AIM-4 Falcon. Due to its high rate of climb and its excellent dogfighting abilities, the Draken was predestined to be an interceptor and was almost exclusively used in that role. Swedes and Finns used it to intercept high-flying soviet reconnaissance planes, even though it never came to any actual use of arms.

The rear section of the Draken was prolonged for the so-called "Adam lang" version (adam for a, lang means long) to house a stronger afterburner. This version also had an additional tail landing gear, which allowed landings with a high level of attack to shorten the landing distance.The Trainer-version SK35 was modified from the early Drakens with shorter rear section and could not carry any external arms, except for two fuel tanks under the belly. The reconnaissance version S35 had a modified nose and also didn't carry weapons.

The definitive and most widespread version of the Draken was the J35F of 1965 with modified armament, improved avionics and a strut-free canopy for improved view.These machines also featured a FLIR sensor unit under the nose as guidance system for the RB27/28 missiles in swedish and finnish service.

Due to the restrictive export policy of the swedish government, the Draken was only allowed to be sold to countries that had no totalitarian or despotic government, which narrowed down the potential customers considerably, since most countries that didn't fall under that, were either supplied by the NATO or the Soviets at the time. Only export customers were the neighbor countries Finland and Denmark as well as Austria. Austria bought 24 modified used J35Fs under the new designation J35Ö.

The danish Drakens were refitted to allow ground attacks: The danish reconnaissance Drakens were capable of carrying armament and the Danes were the only to operate a Draken two-seater with long rear section and ground attack capability including the ability to use the AGM-12 Bullpup missile.

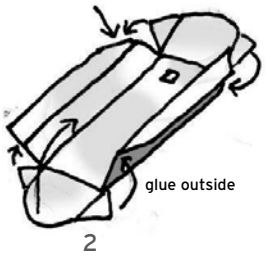
The Danes were nevertheless the first to retire their Drakens in 1993 to replace them with F-16 Falcons. Sweden converted to Saab Gripens in 1999 and Finland in 2000 to F-18 Hornets. The Austrians kept their Drakens for five more years, retiring them in 2005 to be replaced by Eurofighter Typhoons.

Saab Draken

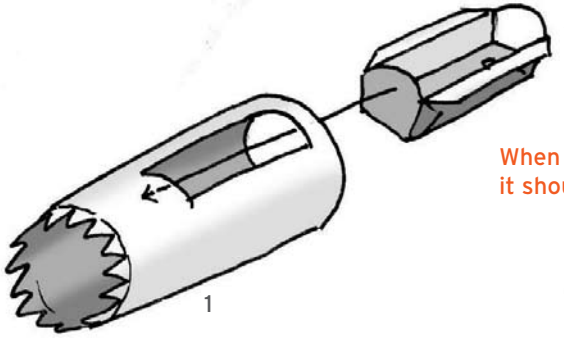
If you don't want to build the landing gear, jump to step 4

1. Build the forward fuselage part and use a paper knife to cut away the landing gear doors

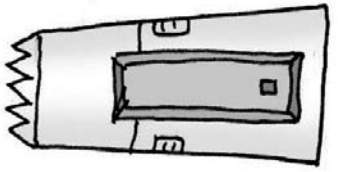
2. Build the front wheel well, glue the tabs on the outside. Make a hole in the marked position



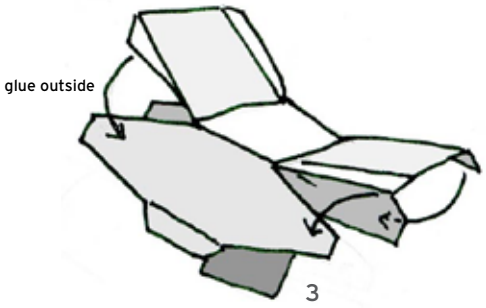
3. Glue the wheel well into the fuselage.



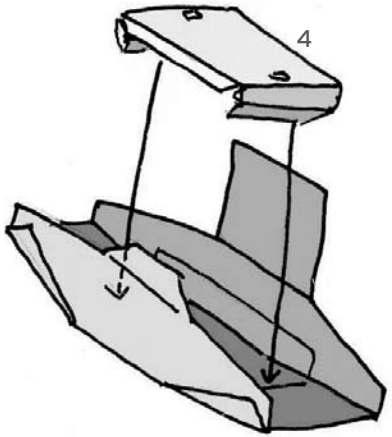
When finished, it should look like this:



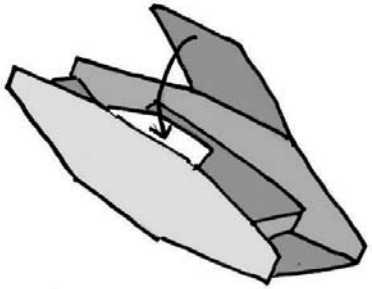
4. Build the Main wheel well, even if you don't want to build the landing gear, you will need this part to add stability and shape



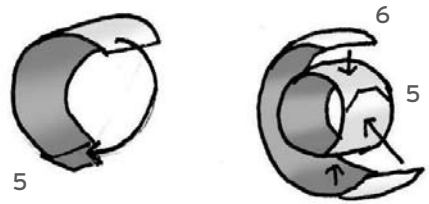
5. Glue the inner plate into the well, make holes for the struts in the marked position If you don't want to build the landing gear, you can omit his step.



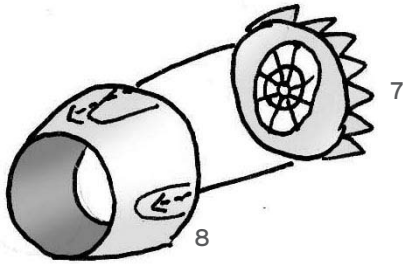
6. Glue the final flap on the wheel well.



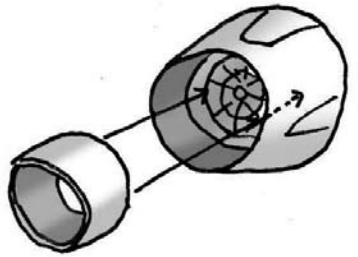
7. Glue the inner exhaust tunnel together, with the black part to the inside, then glue the outer, silver ring on the outside



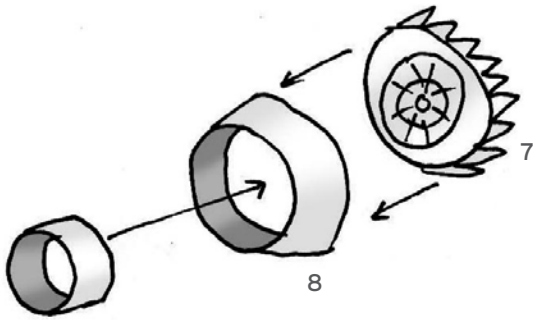
8. Build the fuselage end part and glue the exhaust plate into it.



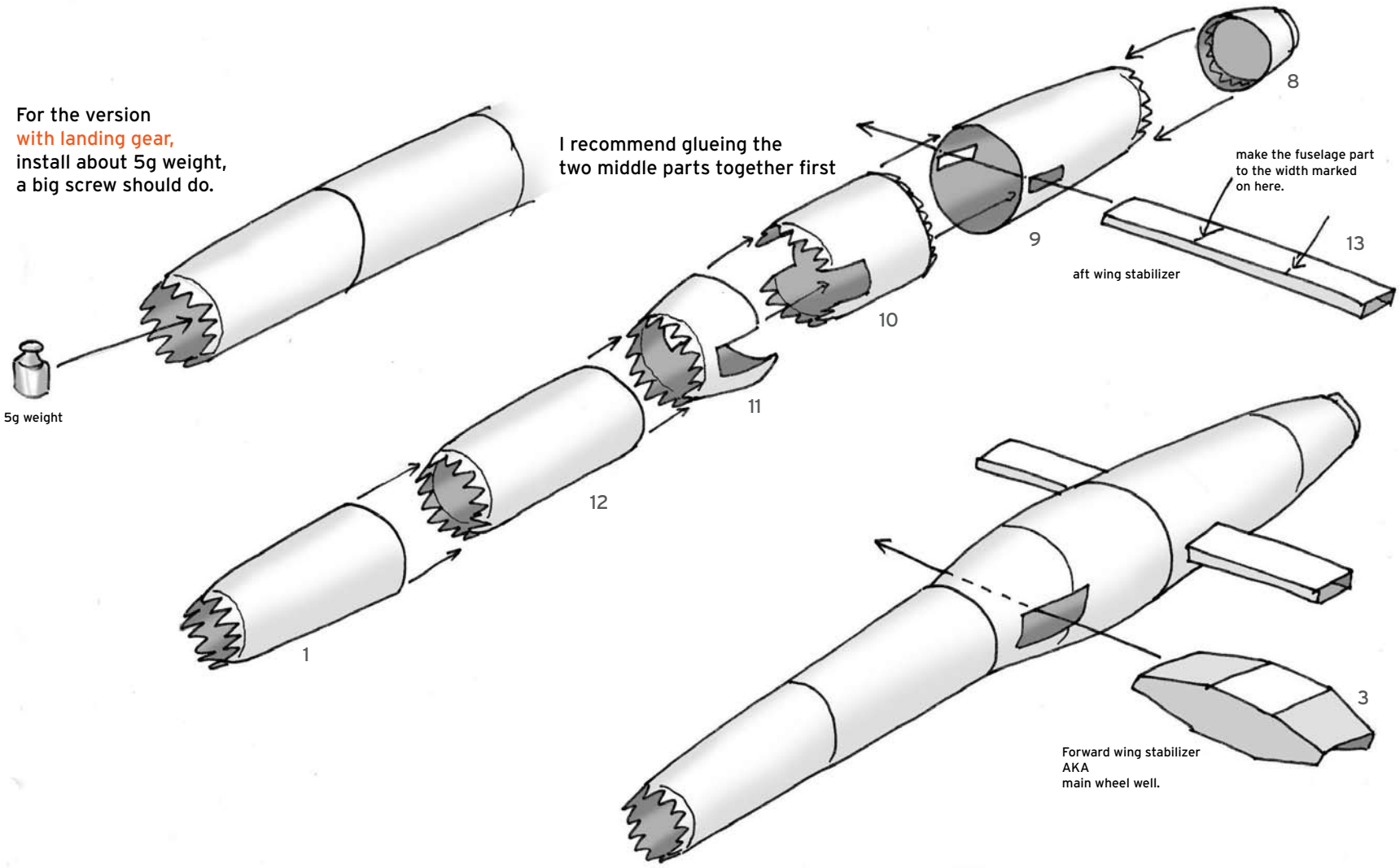
9. Glue the Exhaust Tunnel into the fuselage end part



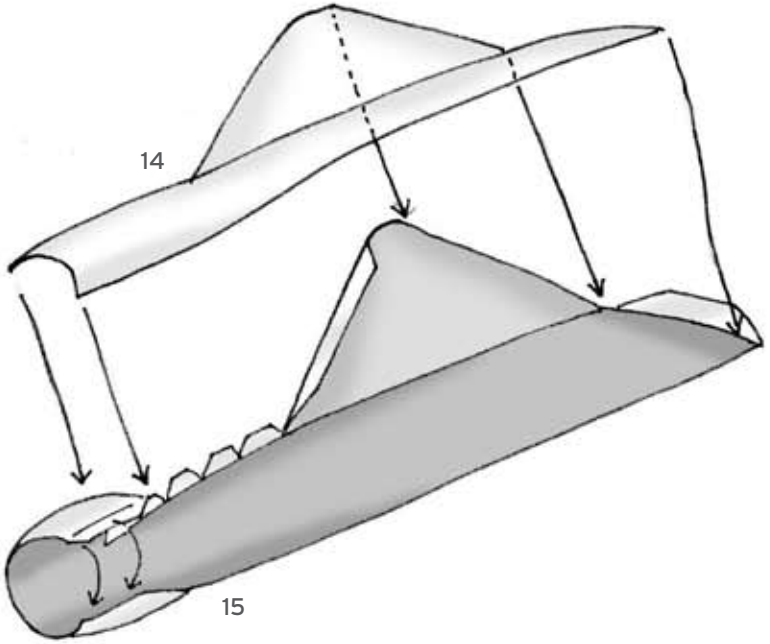
The SK35 's exhaust
is a little different in its dimensions, but build in the same manner



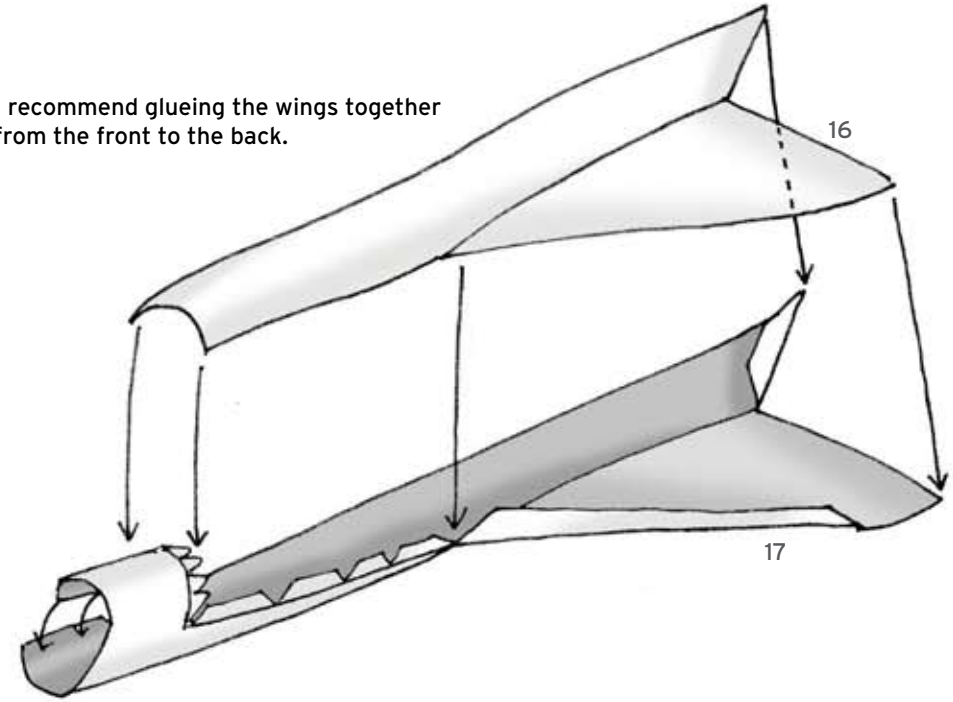
10. Build the fuselage, then attach the two wing stabilizers in it.



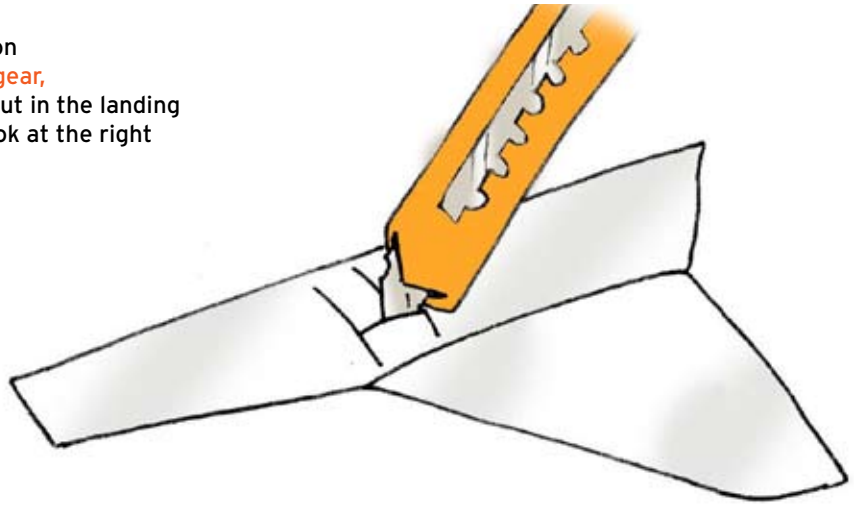
11. When building the wings, rounden them slightly to make an airfoil, roll the front part with the the air intake



I recommend glueing the wings together from the front to the back.

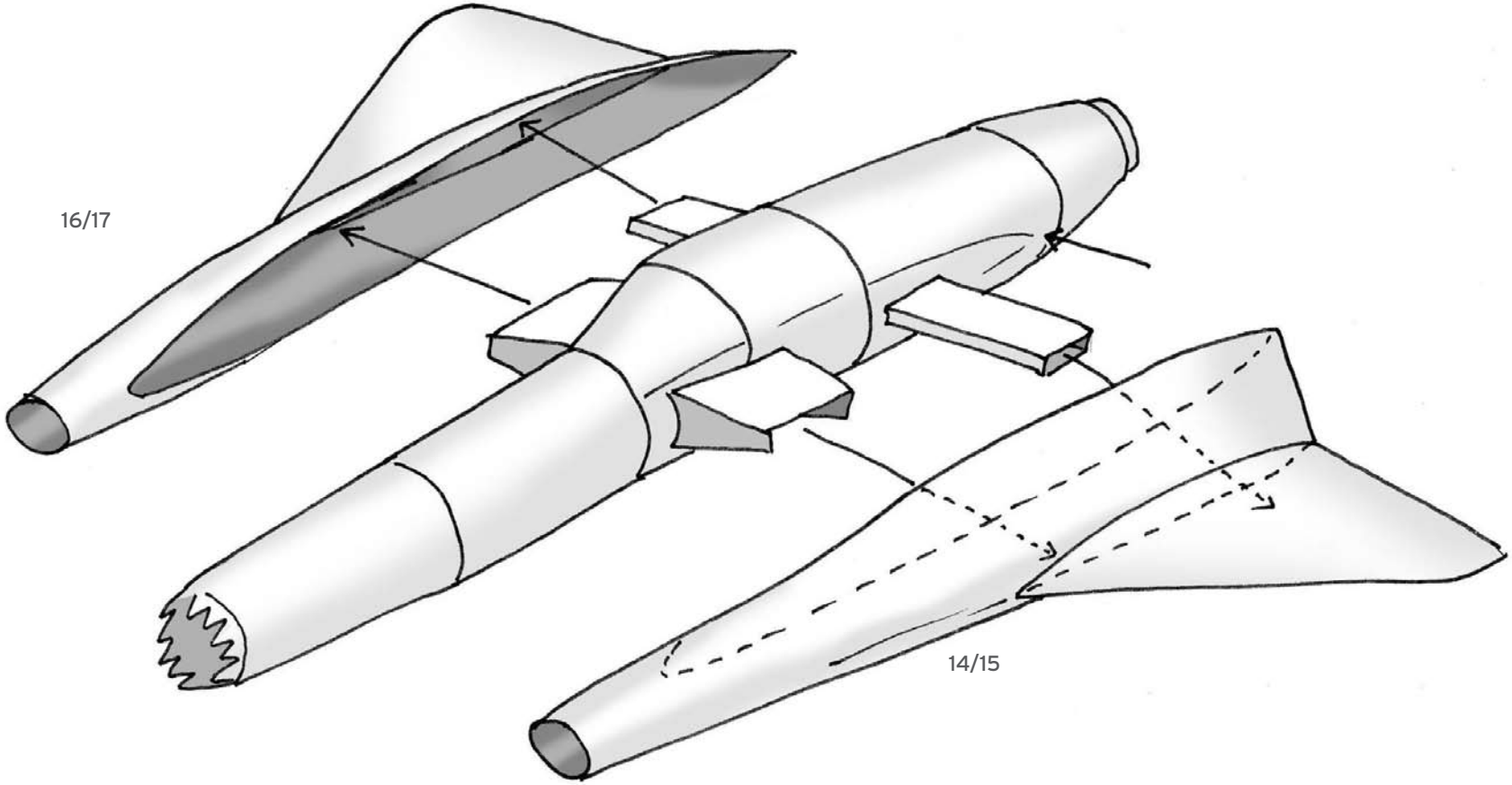


! For the version with landing gear, you need to cut in the landing gear first. Look at the right schematic

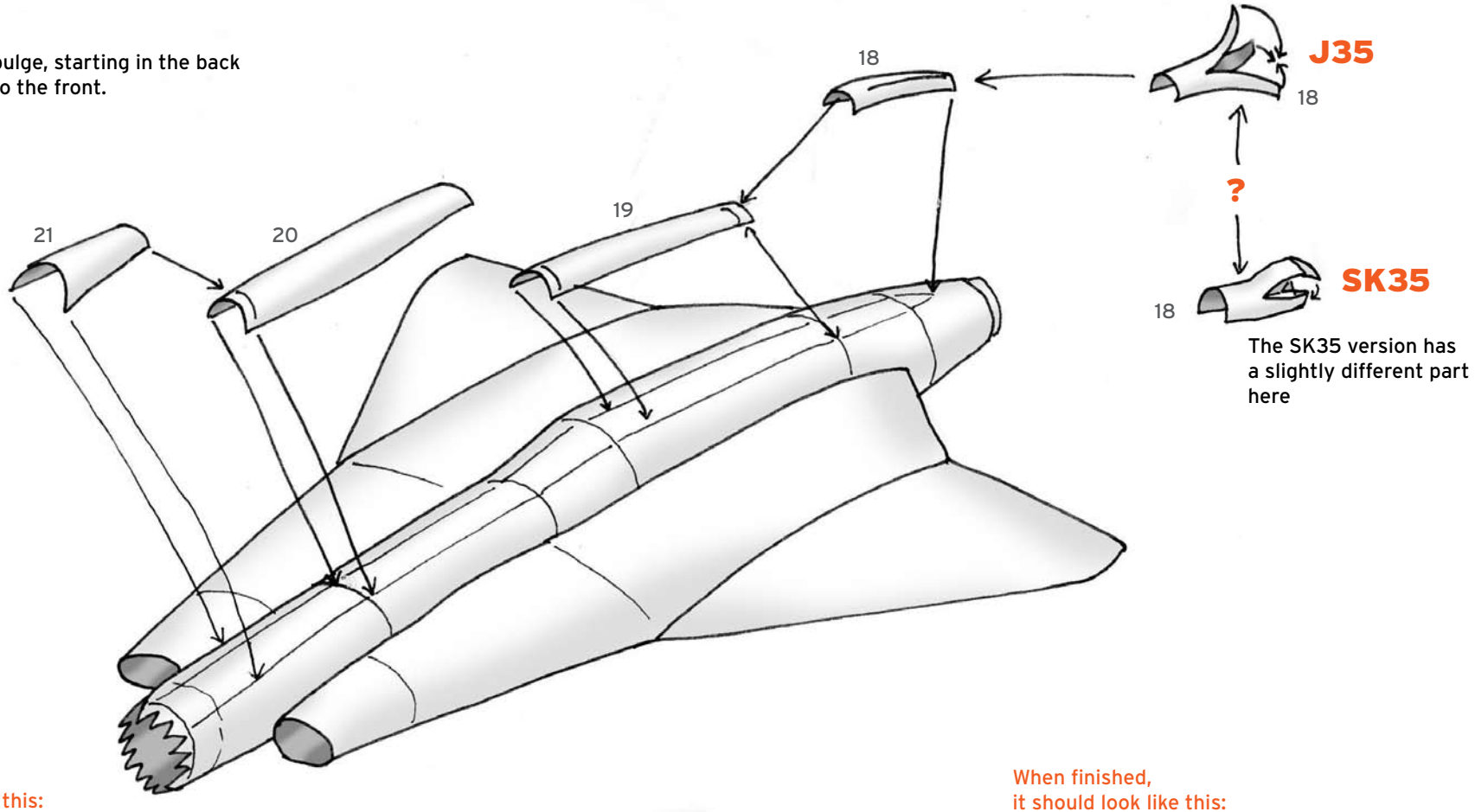


score the dashed lines
cut the solid lines

12. Attach the wings to the fuselage, make sure you get the position right, so that structure lines/ paint schemes fit together.



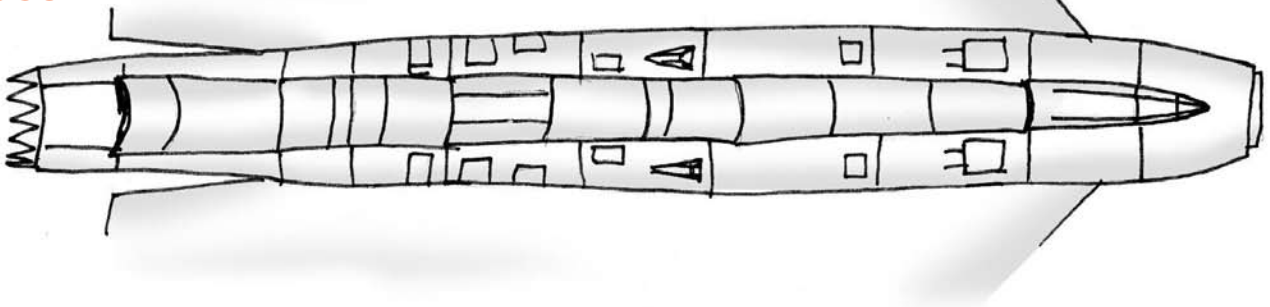
13. Build the top bulge, starting in the back and progressing to the front.



The SK35 version has a slightly different part here

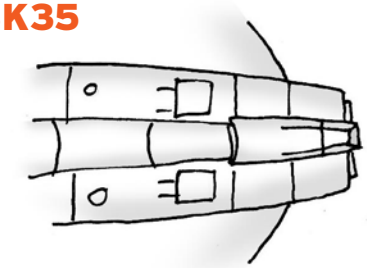
When finished, it should look like this:

J35



When finished, it should look like this:

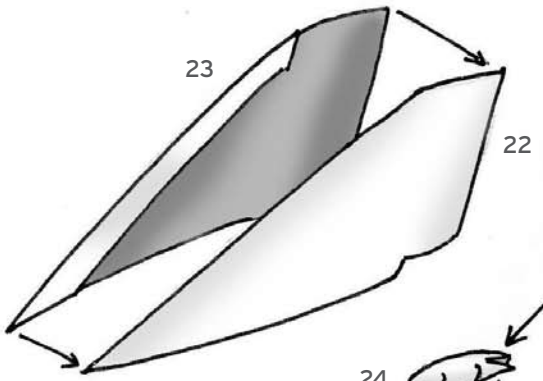
SK35



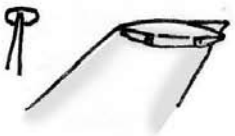
14. Build the tail.

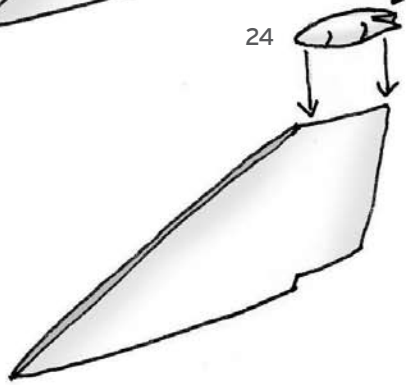
The late and early versions have different tails. The Dragonknights and Ostarichi Versions also have a slightly different tailrider.

late

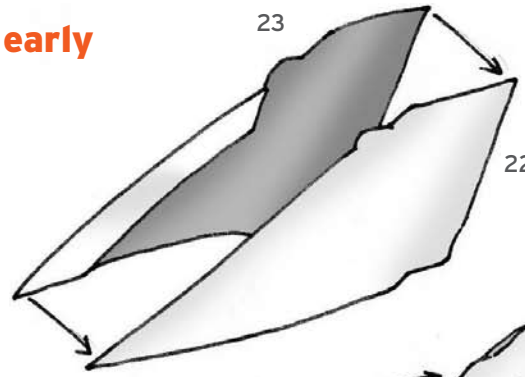


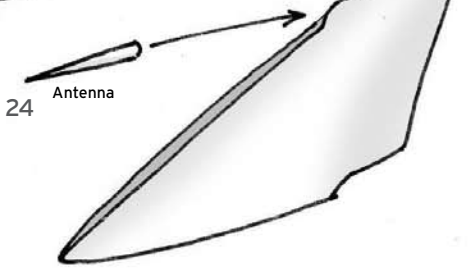
Sections of the tailrider



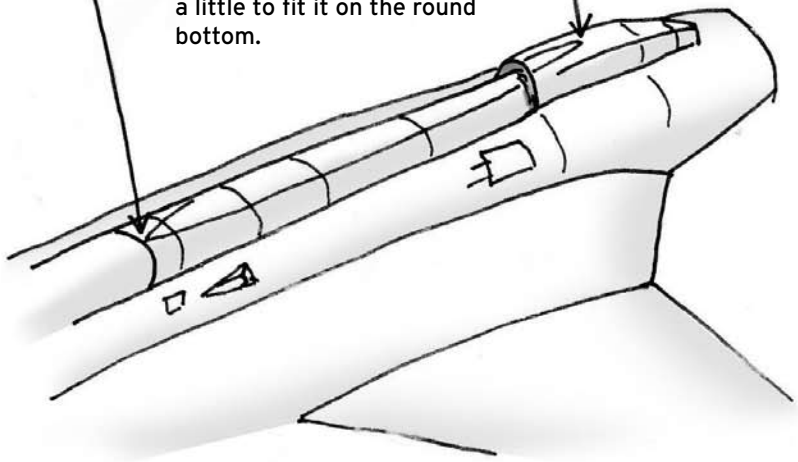


early



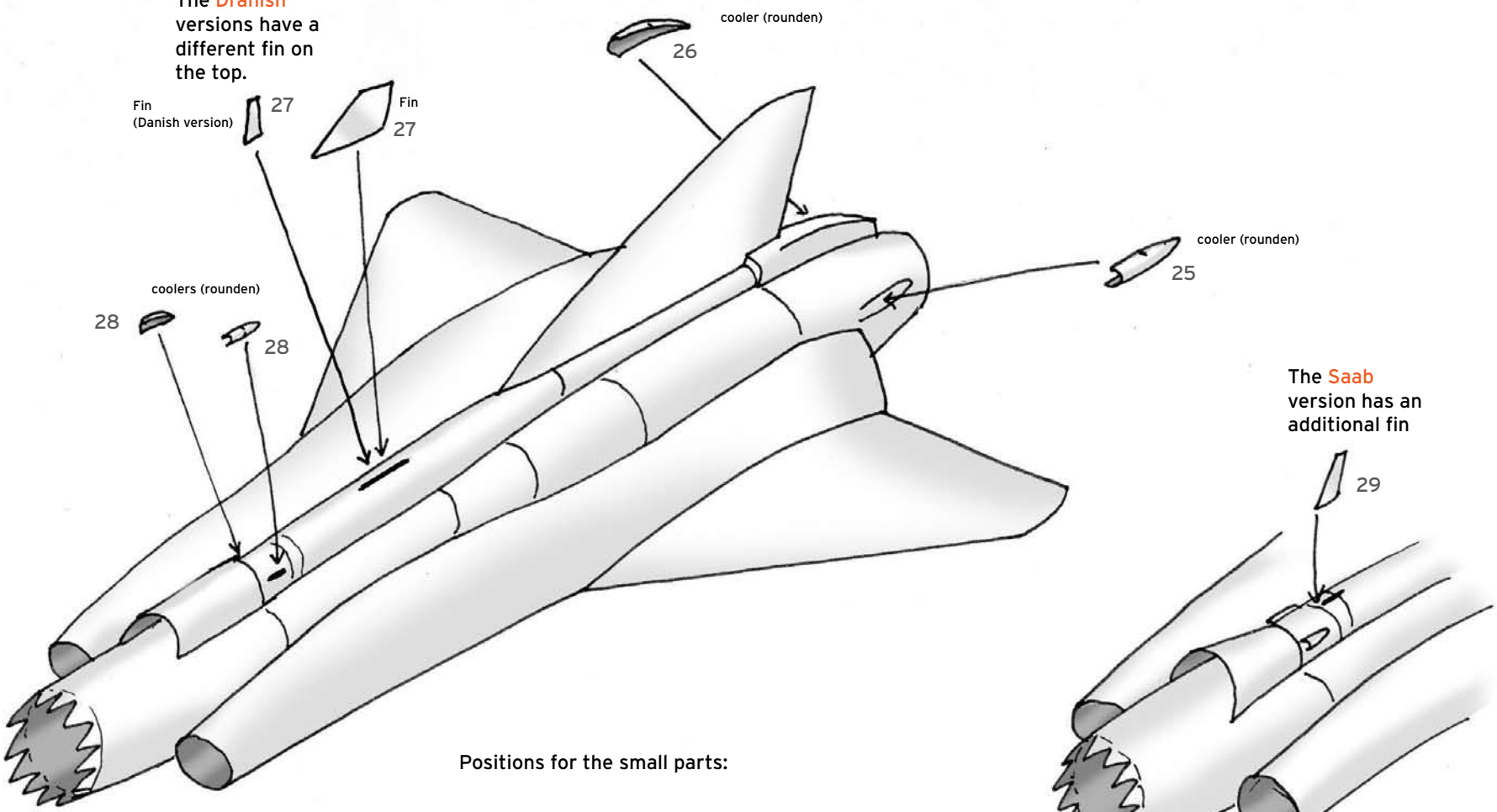


Make sure to rounden the tail a little to fit it on the round bottom.



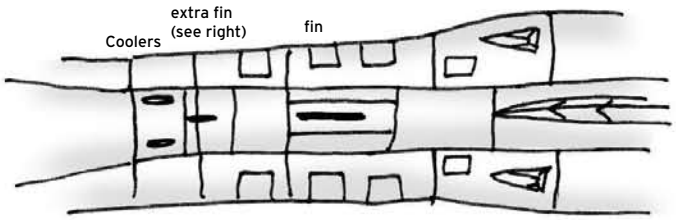
15. Upper Details

The Dranish versions have a different fin on the top.

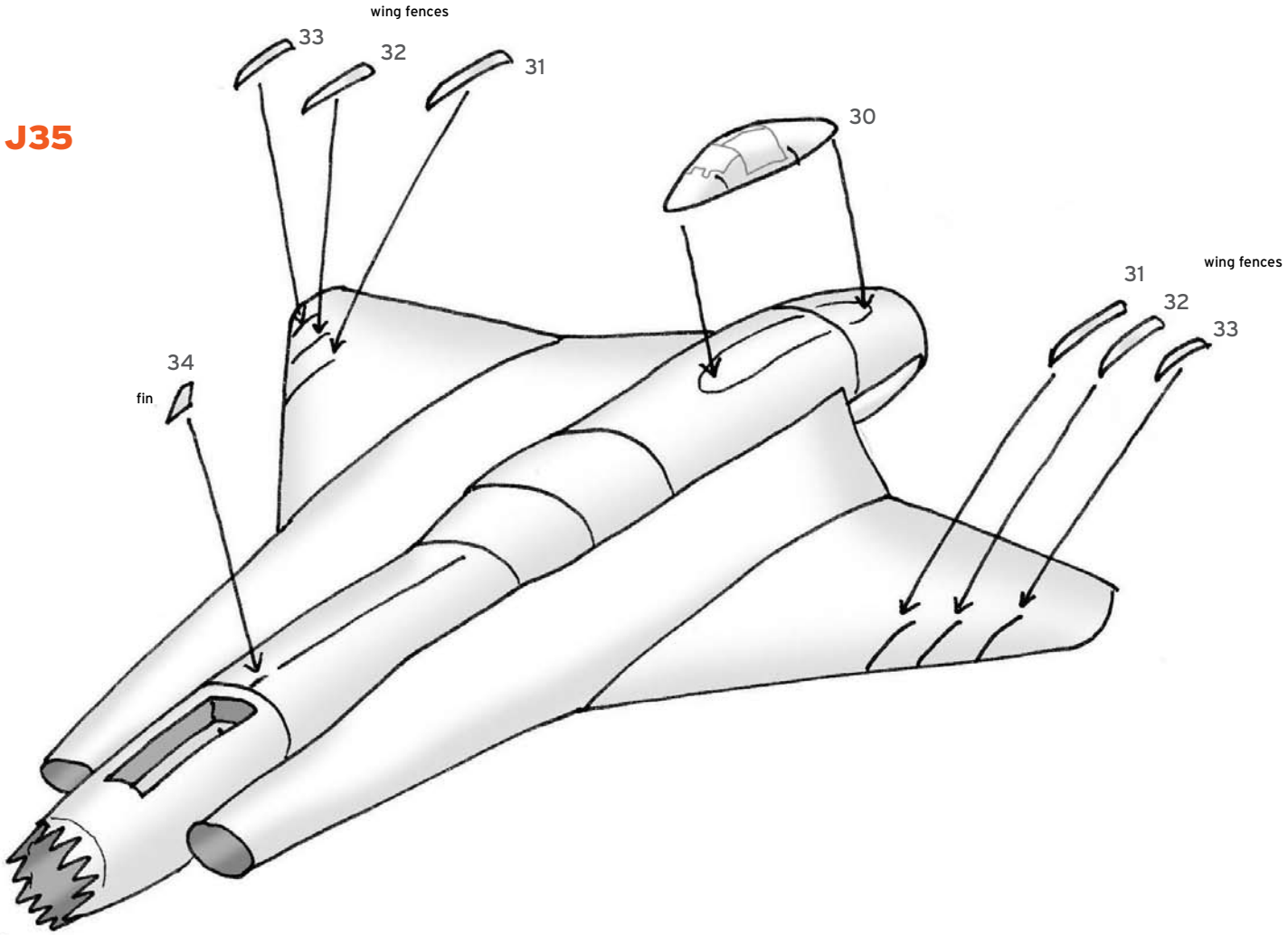


The Saab version has an additional fin

Positions for the small parts:

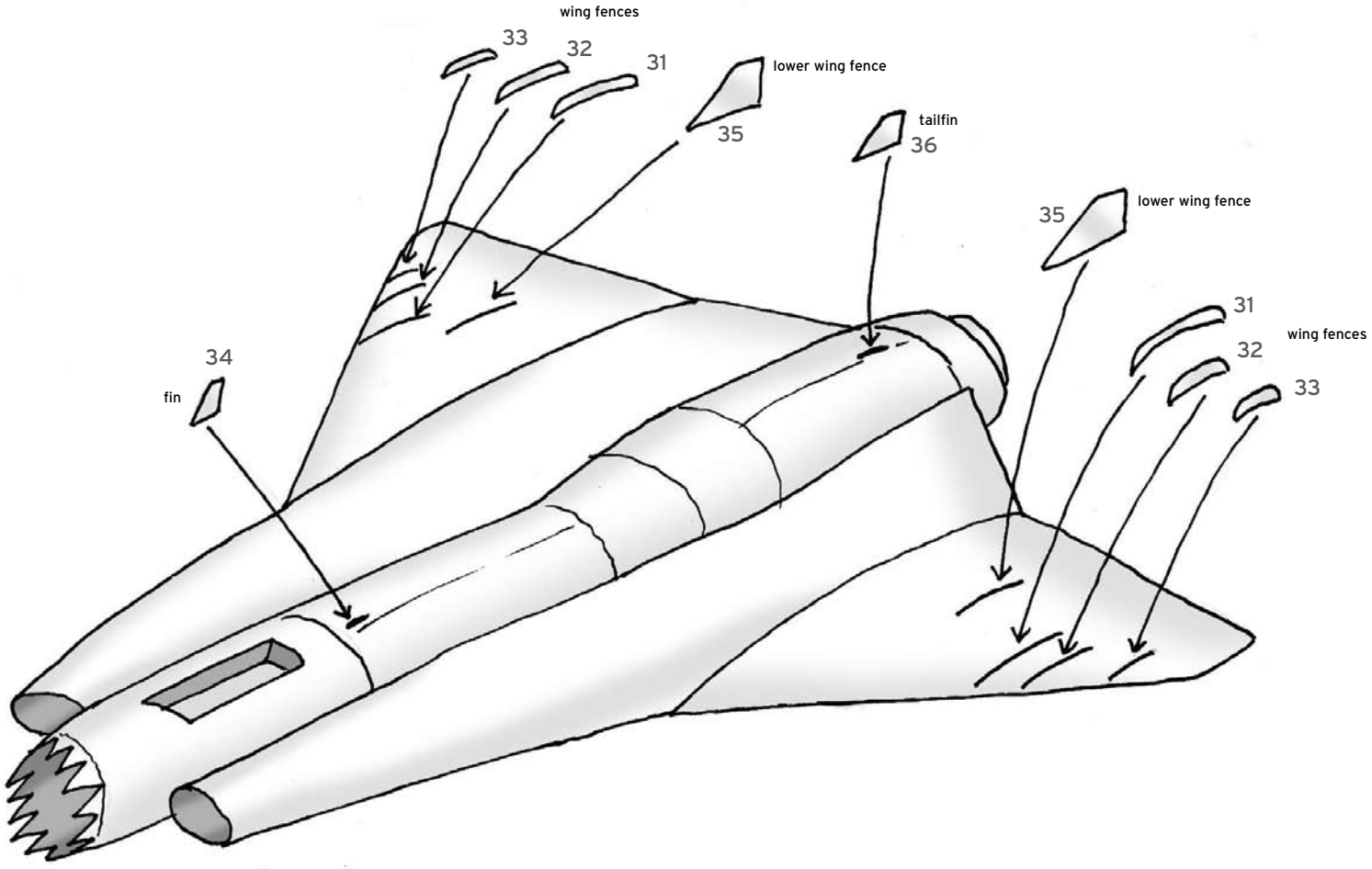


16A. Lower details for the J35 versions



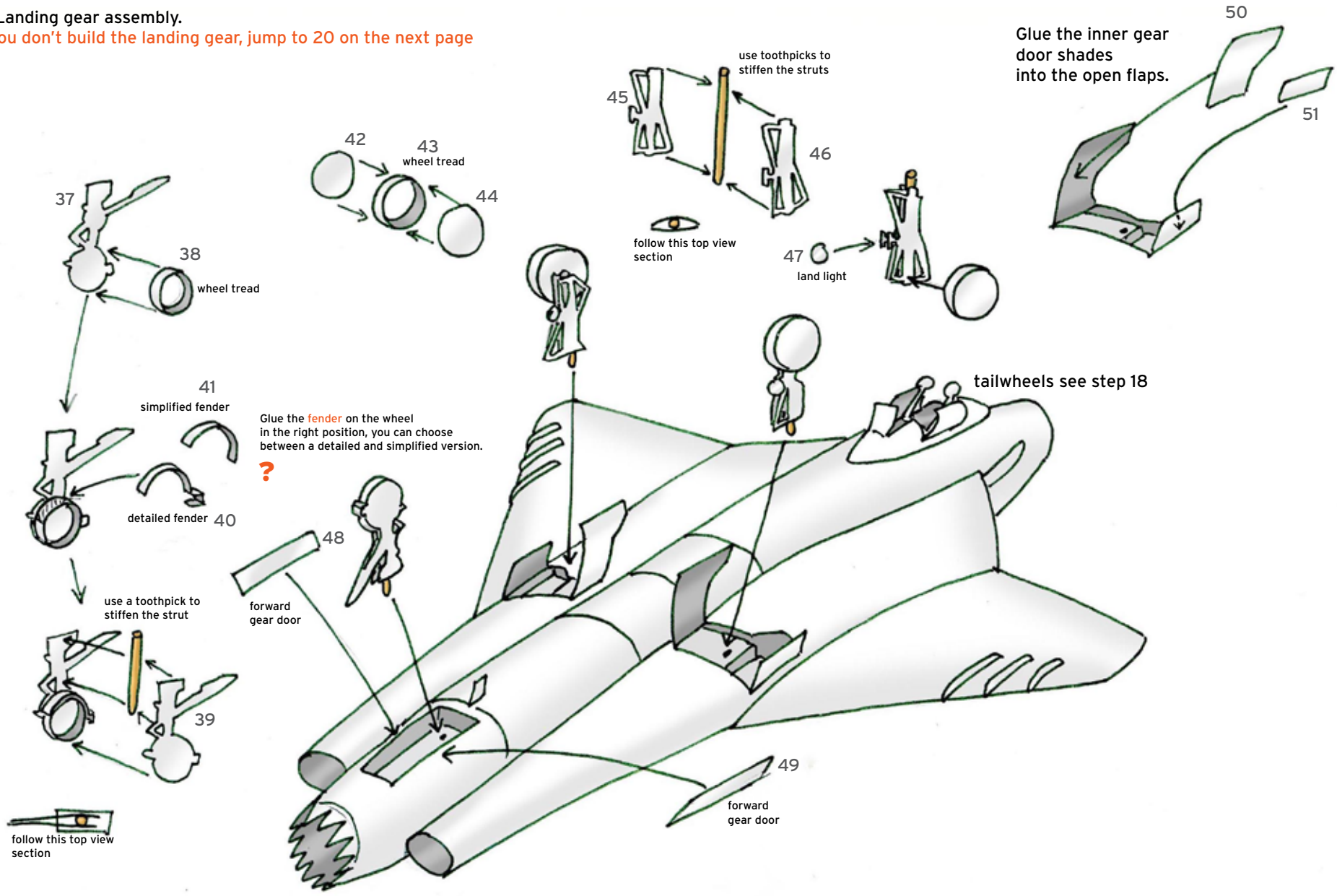
16B. Lower details for the SK35 versions

SK35



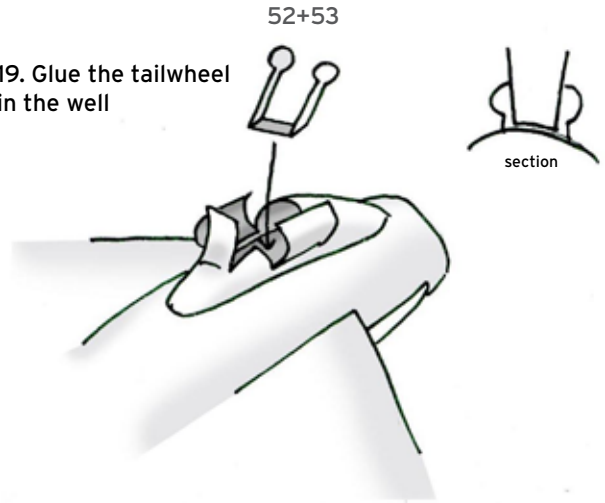
17. Landing gear assembly.

If you don't build the landing gear, jump to 20 on the next page



18. Cut open the doors of the tailwheel well.

19. Glue the tailwheel in the well

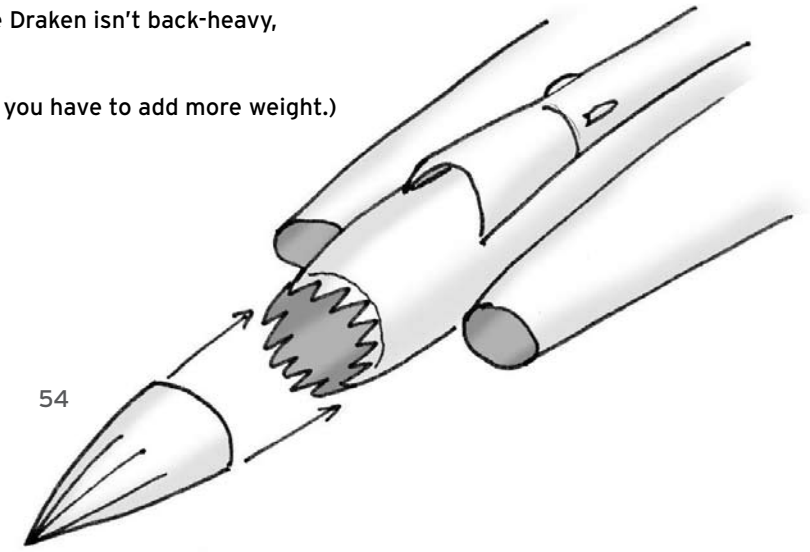


You can glue the doors to the wheel to give the tailwheels some extra stability.

20. After you made sure the Draken isn't back-heavy, glue the nose on the front.

(if it is back-heavy, of cause you have to add more weight.)

ignore this for S-35 version

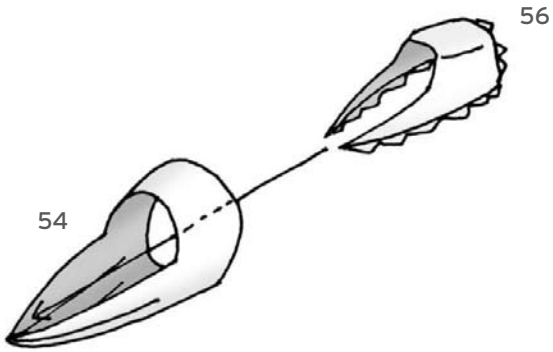


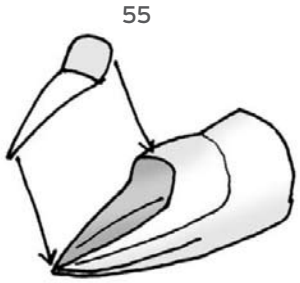
21. For S-35 versions only.

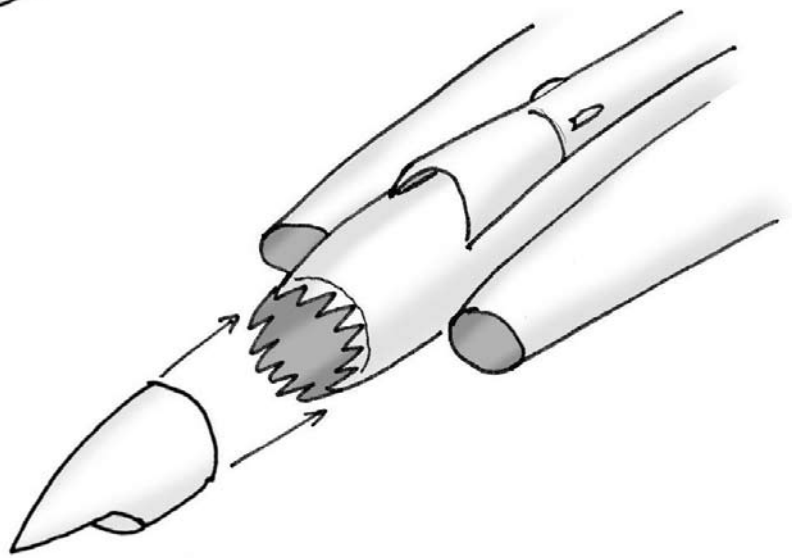
Build the photographic nose.

After you made sure the Draken isn't back-heavy,
glue the nose on the front.

(if it is back-heavy, of cause you have to add more weight.)



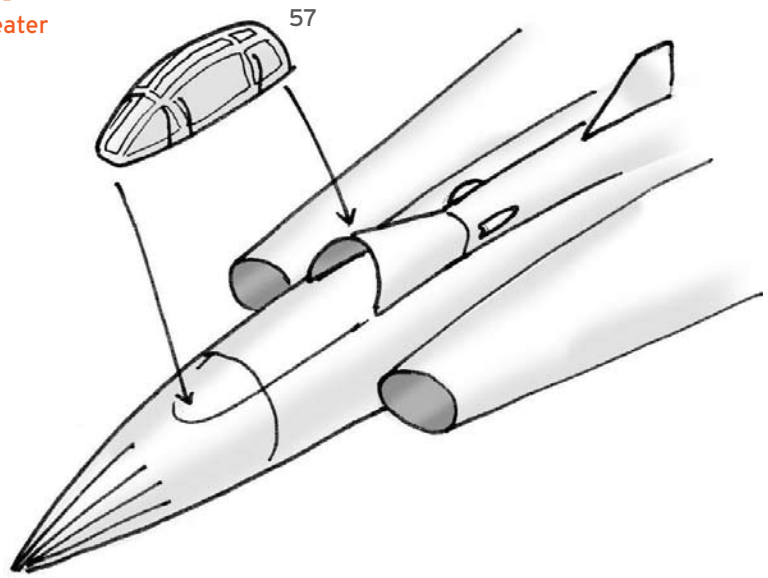




22. Glue the Cockpit on the fuselage.

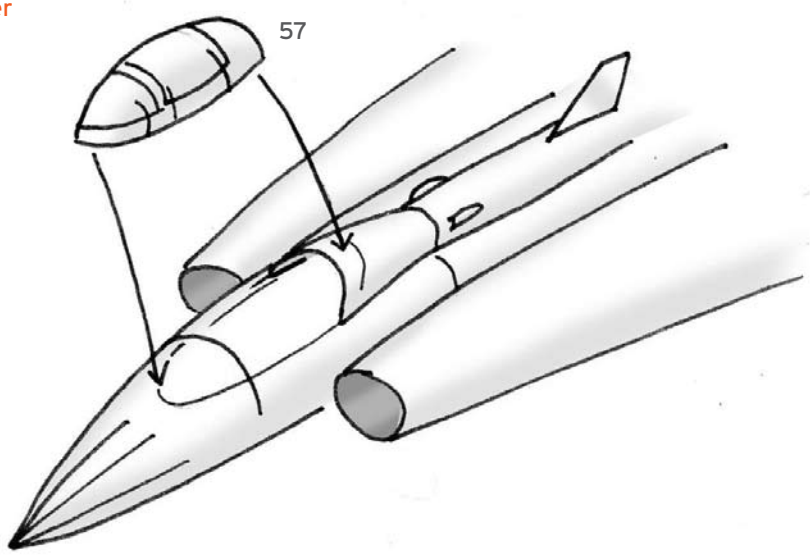
J35A/S-35A

early 1-seater

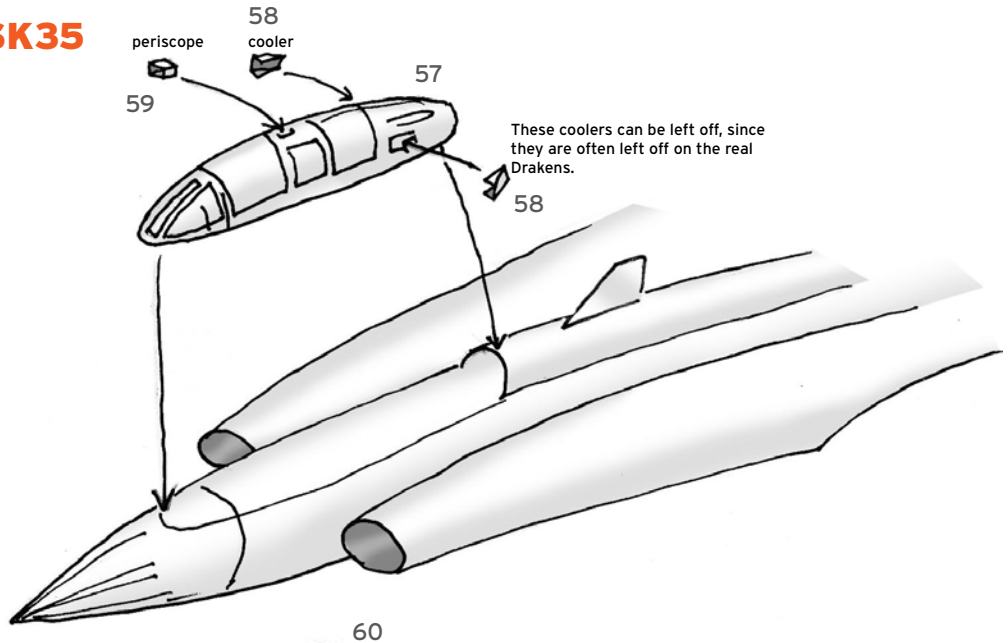


J35F/S-35F

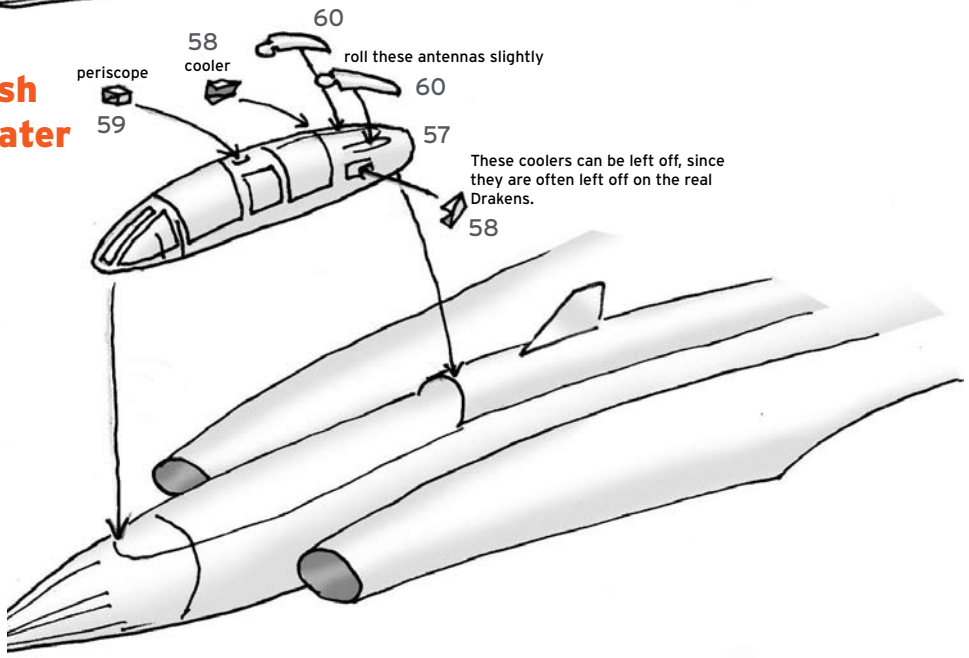
late 1-seater



SK35

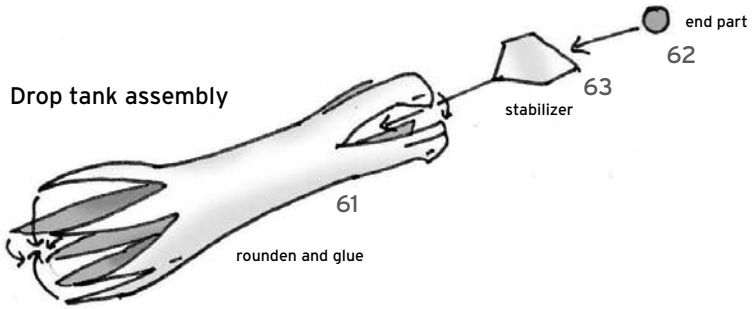


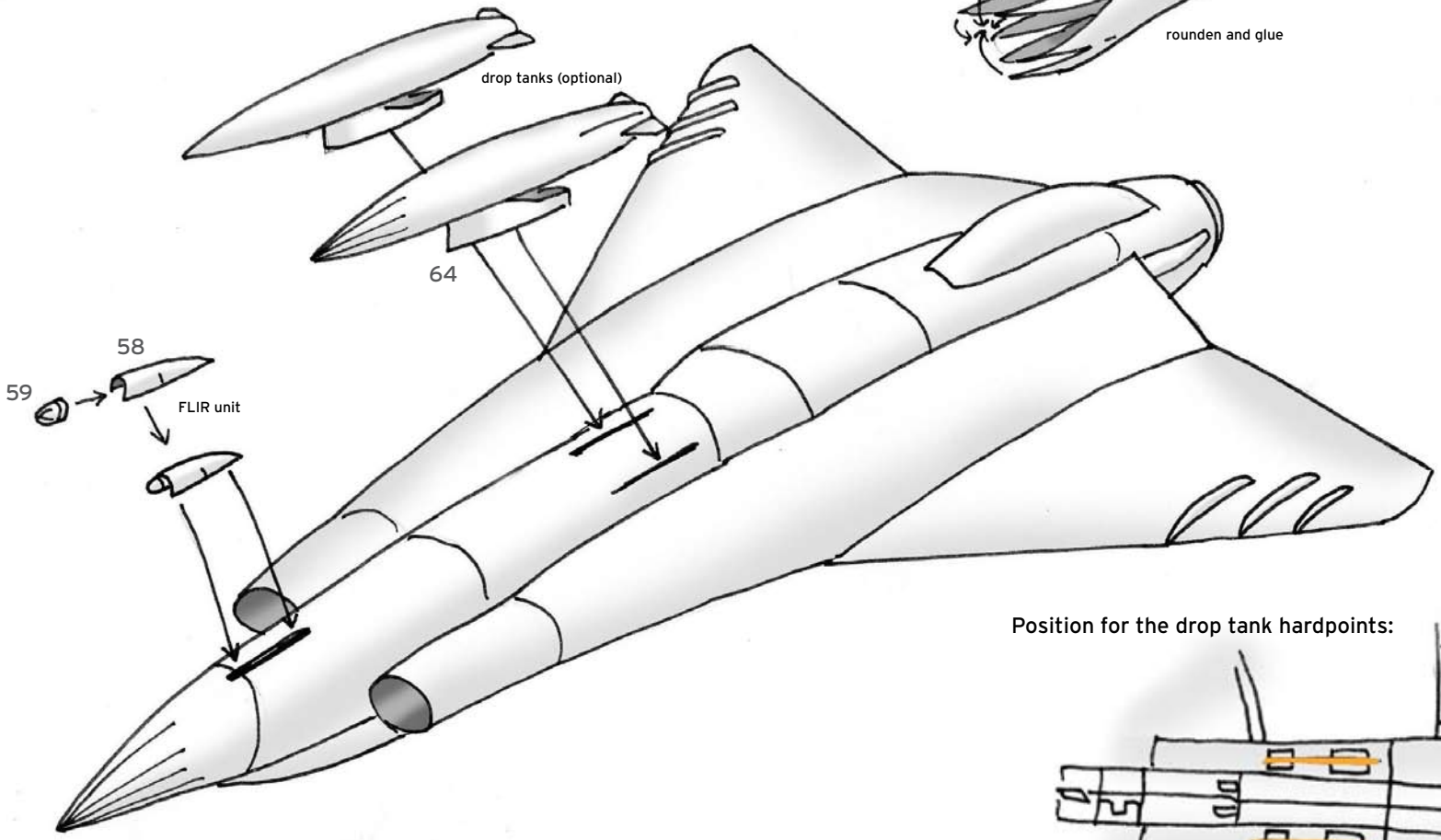
Danish 2-seater



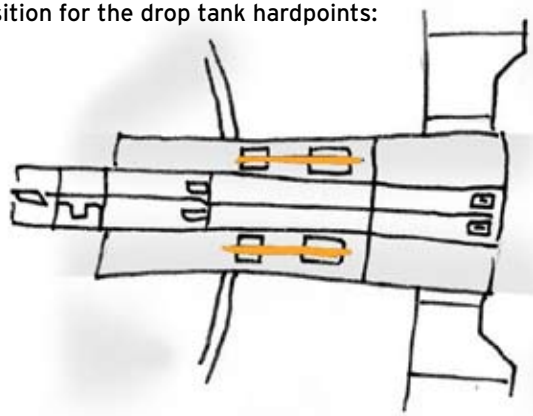
22. Build and attach the FLIR unit and the optional drop tanks. If you can't find the FLIR unit, then the version you are building doesn't have it. It's position on the page is under the canopy. Ignore for the SK-35

Drop tank assembly



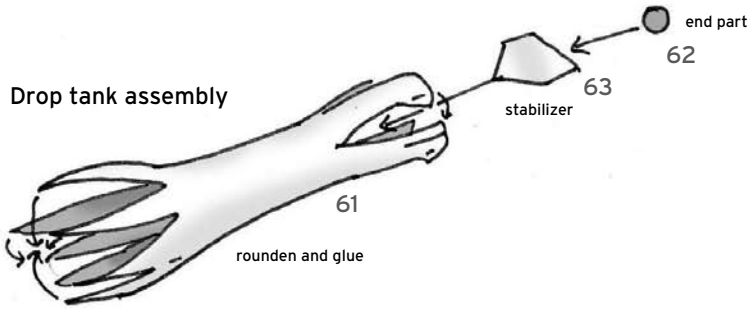


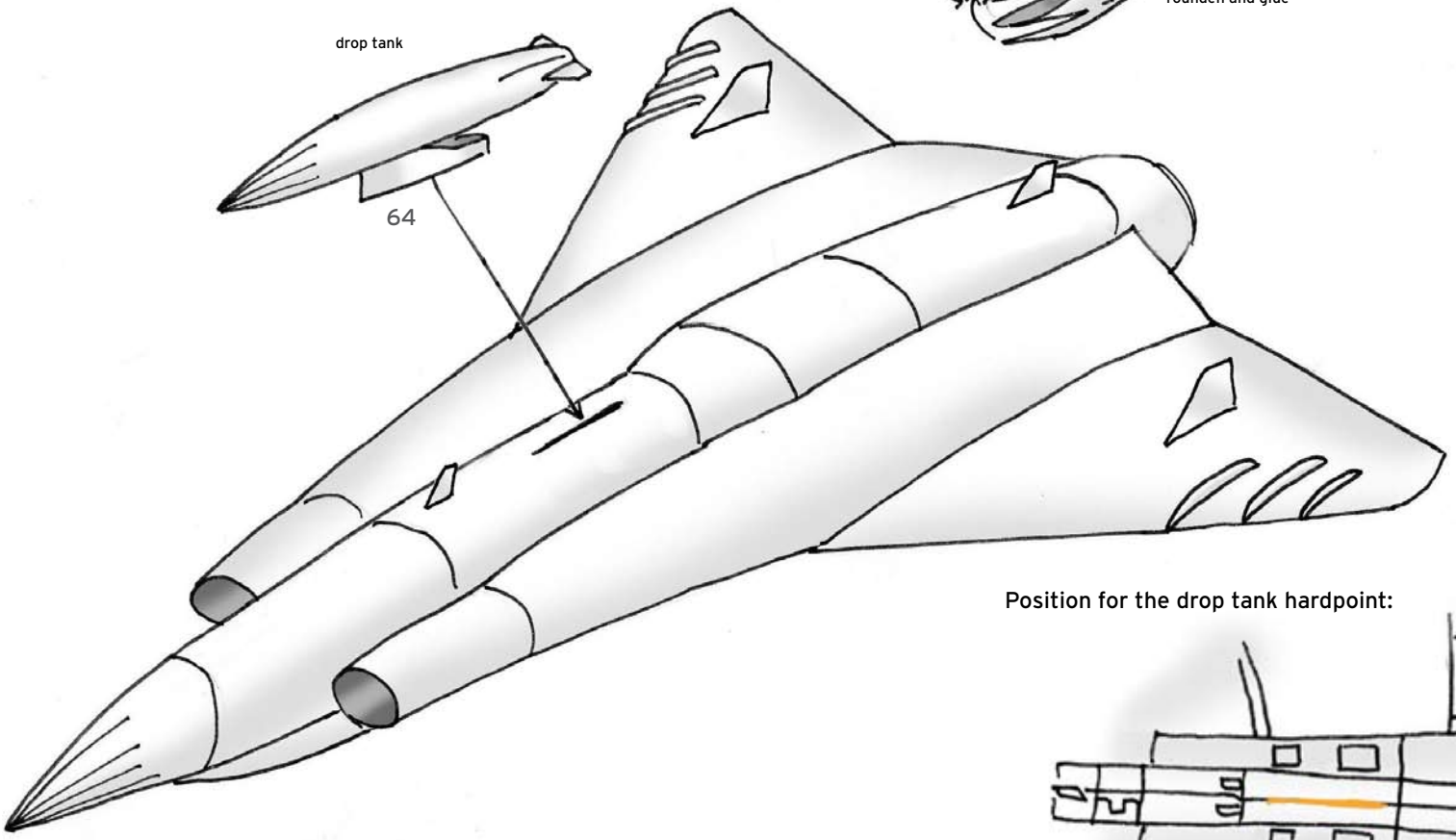
Position for the drop tank hardpoints:



24. For the SK-35 version only.
The SK-35 version carries only one drop tank on a centerline position.

Drop tank assembly





Position for the drop tank hardpoint: