

# *Rafale C*

*for single BF 300 turbine  
or 2 x Jet Cat P 160 SX*

## *Assembly Manual*

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# INTRODUCTION

The **Rafale** is a famous French delta fighter built by Dassault Aviation.

You love very big models, you love fighter, you love agile and aerobatic jets, you love power : The 1/5 **Rafale** is for you.

The **Rafale** model is really incredible in flight. It is a very big models, very aerobatic with good roll rate and incredible high angle of attack possibility. Flight is very realistic and impressive with big turbine sound and afterburner lights.

The **Rafale** from AVIATION DESIGN is fully CAD designed. All the plug parts were CNC machined.. It is a scale model, with all the panel lines and rivets engraved in the fuselage. It contains many scale details, (gears, hinges, cockpit...). It is available in single seat version or in twin seat version.

The **Rafale** is designed for either a single high thrust (30 kg) jet engine or twin standard turbine (2x16 kg). It incorporates special inlets and ducting for both version.

Of course the **Rafale** is fully molded in composite, and pre assembled : model is painted in mold, all bulkeads are glued, all control surfaces are hinged. No important gluing are required.

The special landing gear was designed for strong operation (grass airfield). It is CNC machined, will aluminum gear box and steel oleo legs. The full airframe is carbon reinforced with strong plywood gear support to accept without trouble "bad landing".

We also designed a specific front landing gear for the Navy version. This front gear is fully CNC machined with special cinematic for scale operation. The front fuselage structure is also specific for Navy version (only single seat)

The model has plug in wings and fin for transportation

The **Rafale** has a removable nose cone and a large canopy for an easy access to radio. The large fuselage hatch gives also an excellent access to the turbine, fuel system and tailpipe.

## KIT FEATURES :

- High quality, grey gel-coated epoxy-glass fuselage. All the panel lines are engraved. The fuselage is in 2 parts for an easier building.
- All the plywood formers and the necessary wood are already glued in fuselage.
- Nose cone in fiber.
- 2 Exhaust nozzles in fiber.
- Canopy frame in 2 parts in fiber for **Rafale C** single seater version or **Rafale B** twin seater version.
- Access hatch requiring no framework for single seat version or twin seat version.
- 2 Epoxy-glass inlets. Ductings are designed and specific for single turbine or twin turbine
- 2 Wings molded in epoxy under vacuum with carbon reinforcement, aluminum and carbon tube fitted.
- Fully molded composite fin with carbon tube fitted.

- 2 Fully molded composite canards with carbon spare fitted.
- Scale fiber details (servo covers, ...).
- ABS cockpit interior and scale accessories.
- Clear formed canopy in 2 parts for **Rafale C** single seater version or **Rafale B** twin seater version.
- Hardware package (includes ball link M3, threaded rod, aluminum control horn and hatch latches)
- Instructions in English.



**Parts required to complete the kit :**

- **Cockpit detail kit** incl. 1/5 ejector seat & scale instrument panel.



- **Scale retractable landing gear** for air force version incl. 2 main retracts + 1 front steering retract + air control system + 3 scale oleo legs. All gears are CNC machined, with steel struts and aluminium cissors. Very strong and reliable for grass operation.



- **Scale retractable landing gear** for Navy version. Same as the above version but with a modified special front retract. Front gear is fully CNC machined.



- **Wheels set + brakes** incl 2 main wheels + 2 front wheels, aluminium hub + bearings + scale brakes + air control system.



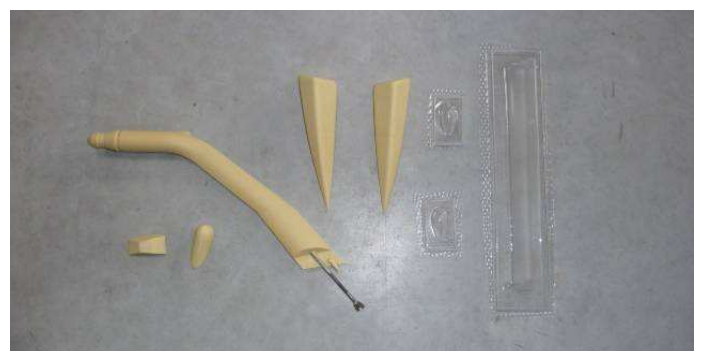
- **Gear doors set** incl. air cylinders, air control system, gear door sequencer and door hinges.



- **Kevlar fuel tanks + BVM upper tanks.**  
2 kevlar Fuels cells . Capacity : 2 x 4.4 liters  
Includes tubing, nipples and clunks + 2 BVM upper tanks



- **Details set** incl. refueling probe, ECM pod in resin, scale details.



- **Stainless steel double walled tailpipe.**



- **Twin exhaust double walled stainless steel tailpipe**



- **2 Magic wing tip missiles.**  
Molded in one part in fiber with rudders and fins included



- **2 Mica wing tip missiles**  
Molded in one part in fiber with rudders and fins included



- **2 Mica missiles + fuselage launch rails.**  
Missile molded in one part in fiber with rudders and fins included  
Rail molded in fiber



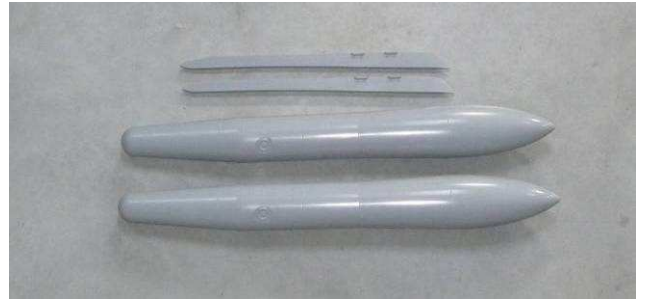
- **1 Supersonic centerline fuel tank + launch rail.**  
Fuel tank molded in fiber with panel line and rivets engraved  
Rail molded in fiber



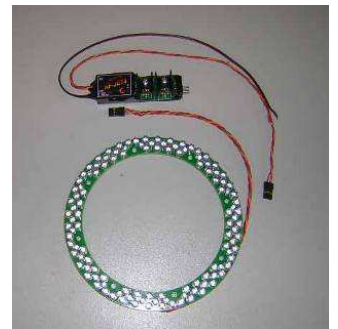
- **2 Supersonic underwing fuel tanks + launch rails.**  
Fuel tank molded in fiber with panel line and rivets engraved  
Rail molded in fiber



- **2 large underwing fuel tanks + launch rails.**  
Fuel tank molded in fiber with panel line and rivets engraved  
Rail molded in fiber



- **2 Afterburner ring lights.**



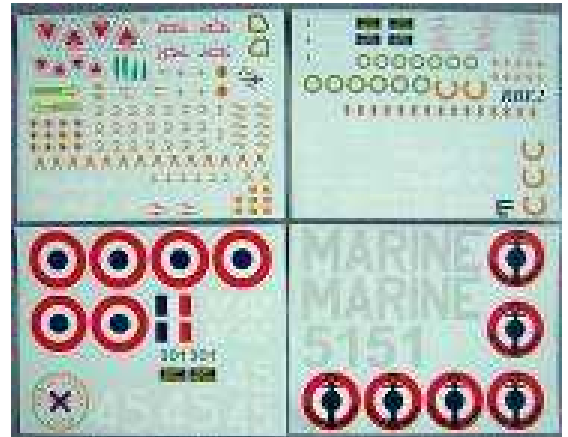
- **Lights control unit.**  
Including strobes, landings lights and navigation lights

- **LCD lightning cockpit instrument panel.**

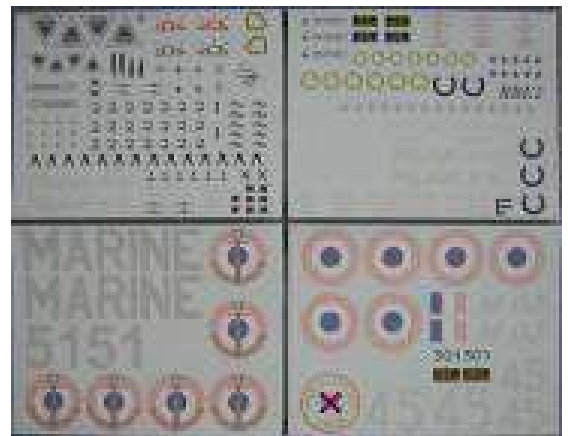


- **Cockpit voice recorder**

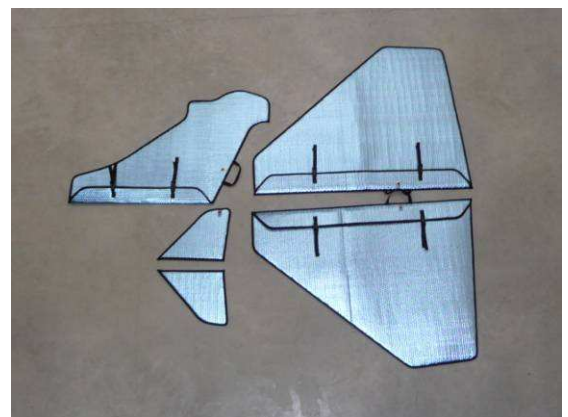
- **High visibility water decals**



- **Low visibility water decals**



- **Wings and rudder protection covers.**



**Jet Engine :**

1 single BF 300 turbine (30-32 kg thrust)

or 2 twin Jet Cat P160SX – P180RX turbine ( 2x16 kg thrust)



## **DISCLAIMER**

**AVIATION DESIGN** assumes no liability for the operation and use of these products. The owner and operator of these products should have the necessary experience and exercise common sense. Said owner and operator must have a valid Model Airplane license and insurance, as required.

## **FIBREGLASS PREPARATION**

The inside of the fuselage should be sanded with fresh #80 grit paper for best glue adhesion where bulkheads and other attachments are fixed.

## **GLUING TECHNIQUES**

All the plywood formers should be fitted with cyano adhesive and then glued with epoxy and glass fiber tape. All other parts should be glued with epoxy.

It is possible to let the fuselage in 2 parts for transportation.  
You can also glue the 2 parts together.

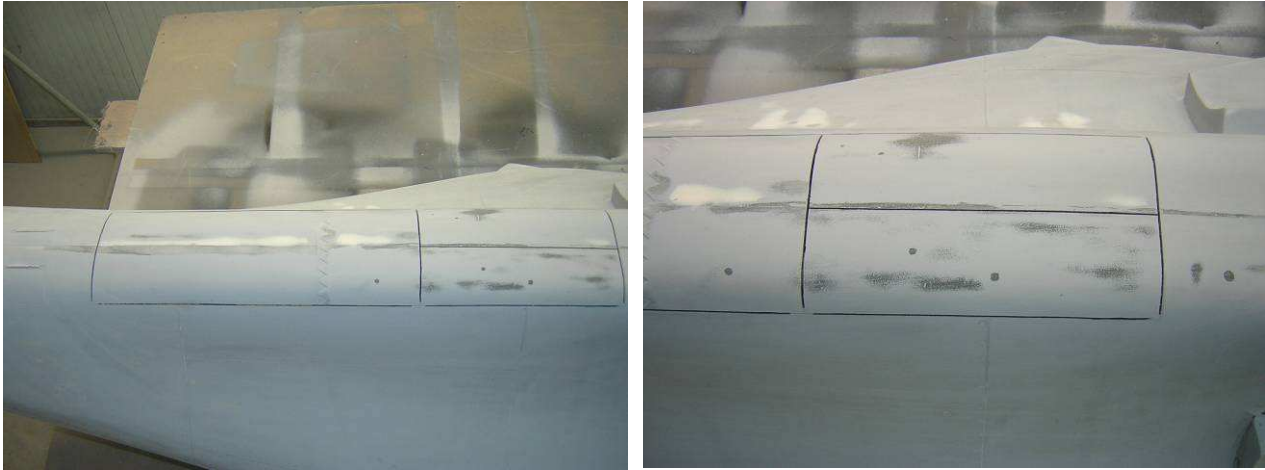
If you want to dismantle it easily, you'll have to screw the 2 parts together with 6 x 4 mm diameter screws + blind nuts.  
Don't forget to glue the screws with threadlock before to fly .....

# CONSTRUCTION

## FRONT FUSELAGE for Air Force version

Doors :

Cut the 3 front gear door according to the engraved panel lines and photos.

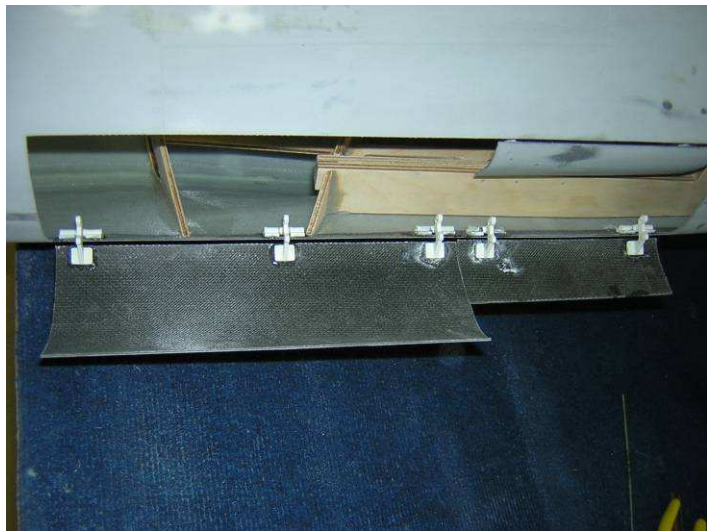


Glue 3 plastic door hinges with cyano on the front door.

Take care to glue the first front hinge as forward as possible. Otherwise the front wels will touch the hinges during retraction

Glue 2 plastic door hinges with cyano on the 2 small doors.

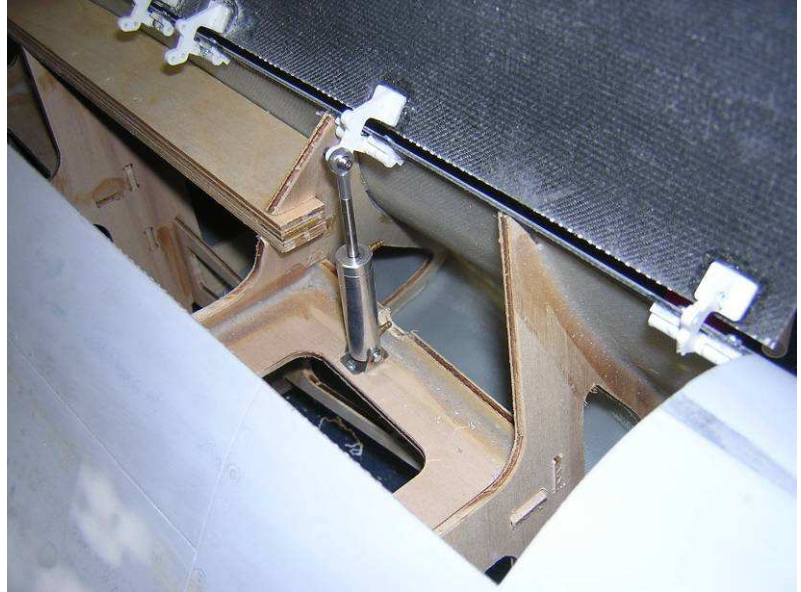
Secure all door hinges with small parker screws



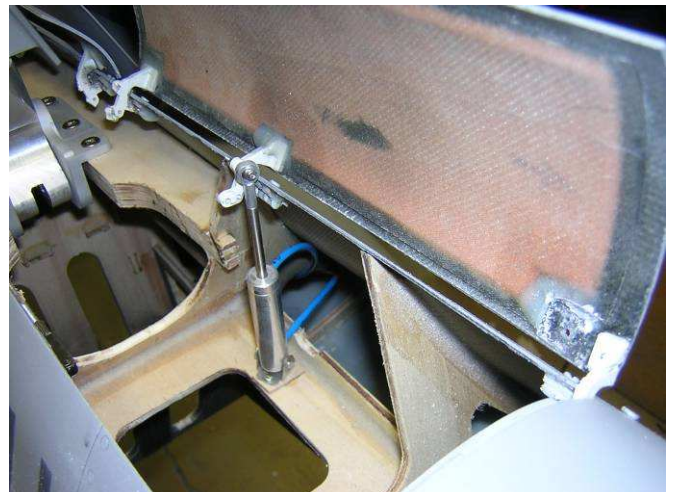
## Air cylinder

Fit the small air cylinder on the front door .  
The ball link must be screwed on the central door hinge

The 2 small rear side doors will be closed by a spring



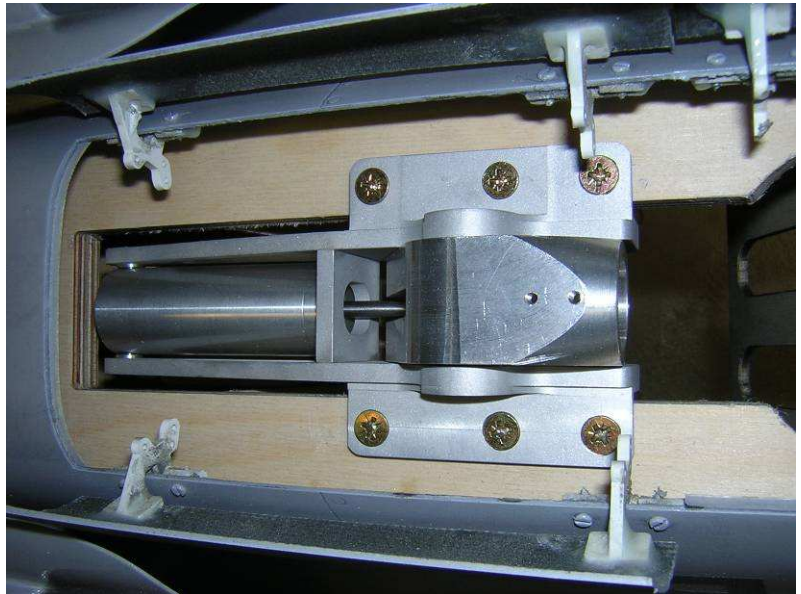
Glue the internal gear door reinforcement on the front gear door with epoxy



### Assembling the nose gear

Screw the front landing gear on the plywood

Fit the leg in the gear



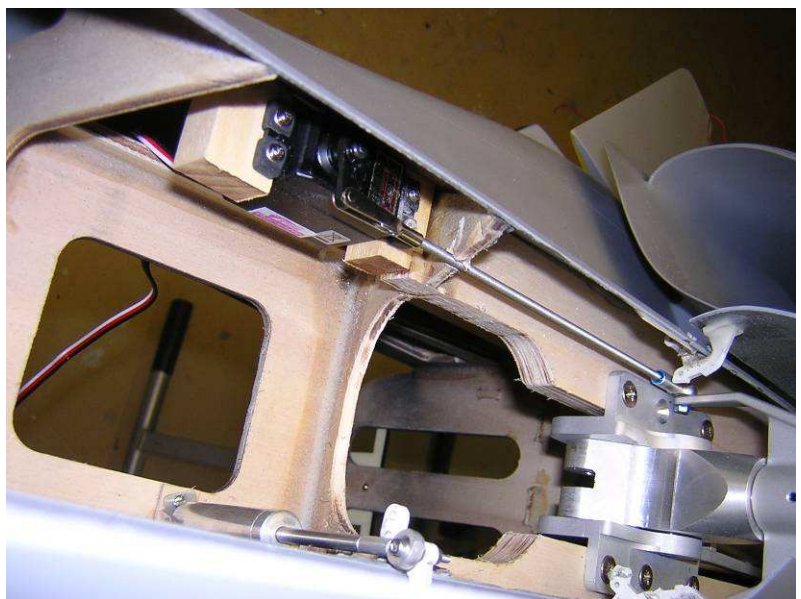
Screw the 2 wheels



Steering servo :

Used a strong servo for the steering  
Screw the servo on a plywood support

Connect the servo with M3 threaded rod, steel link + aluminium ball link.



## FRONT FUSELAGE for NAVY version

Doors :

Cut the 3 front gear door according to the drawn panel lines and photos.



Glue 2 plastic door hinges with cyano on the front door.

Glue 2 x2 plastic door hinges with cyano on the 2 rear door.



Secure all door hinges with small parker screws



Glue a flat plastic door hinge on the small rear door



### Assembling the nose gear

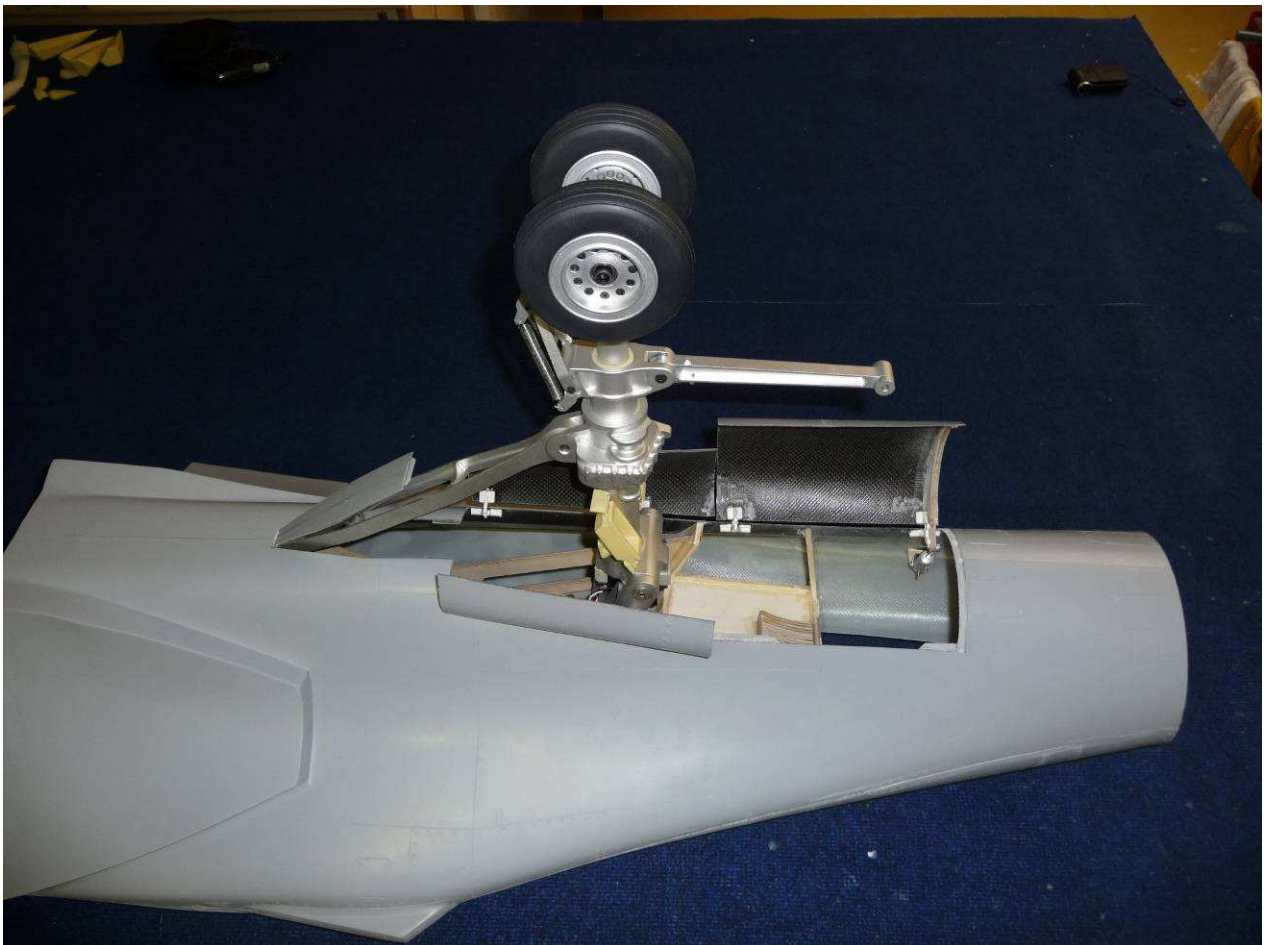
Steering servo :

Used a strong servo for the steering (25 kg.cm)

Screw the servo inverted on the support.

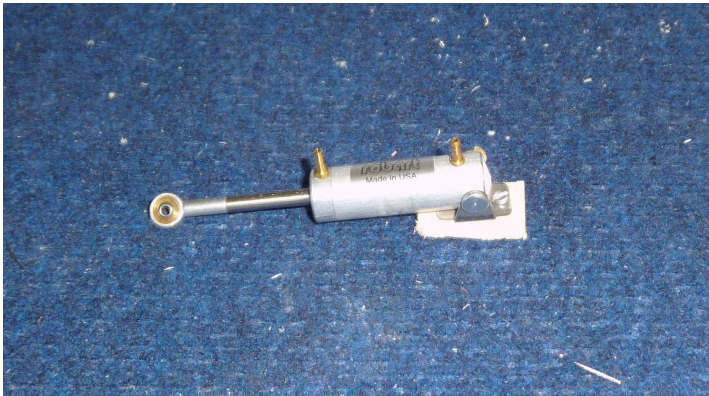
Screw the front landing gear box on the plywood with the 6 parker screw

Screw the rear back fork to the plywood with the M8 allen screw

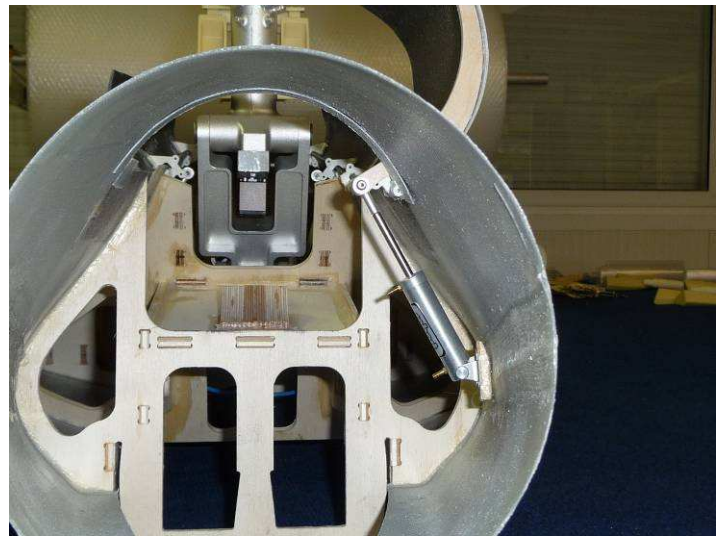
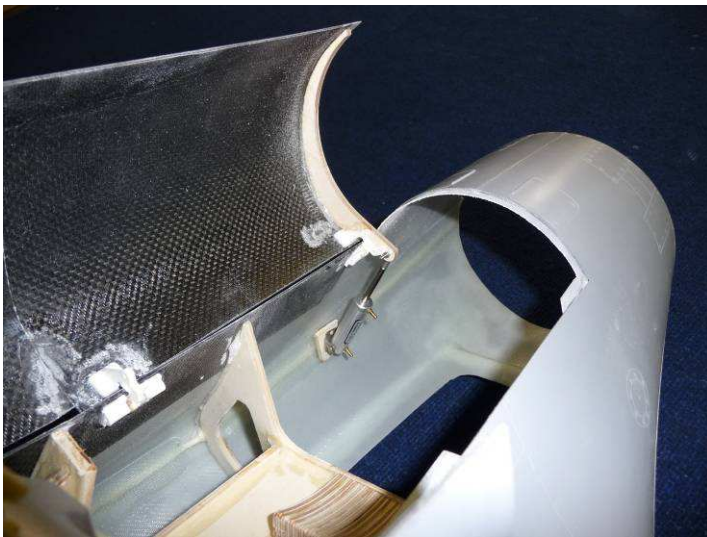


## Door Air cylinders

Screw the small air cylinder on a wood block with a small parker screw.  
Screw the ball link to the wood frame as the photo



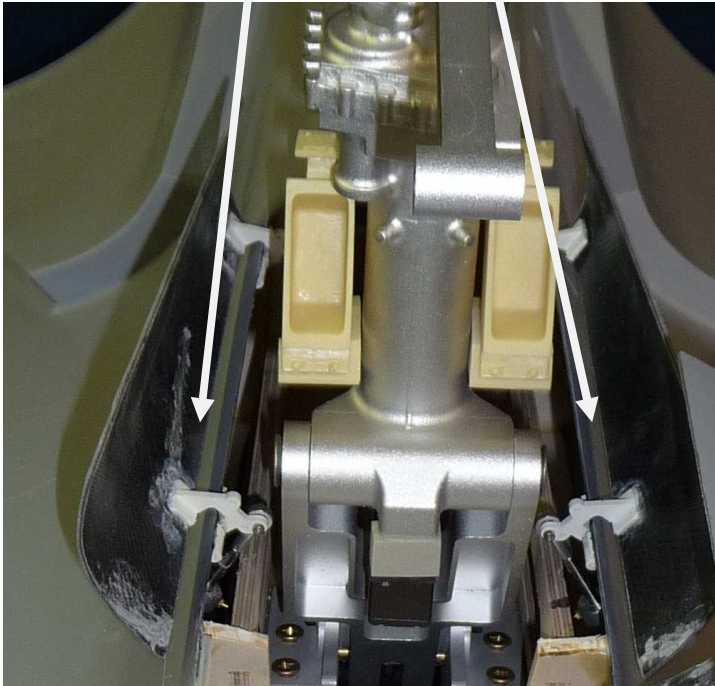
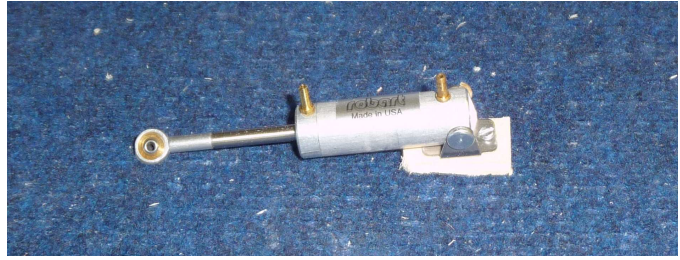
Glue the wood frame to the front gear door with CA.  
Open the gear door  
Extend the air cylinder  
Glue the wood block to the fuselage with door fully open



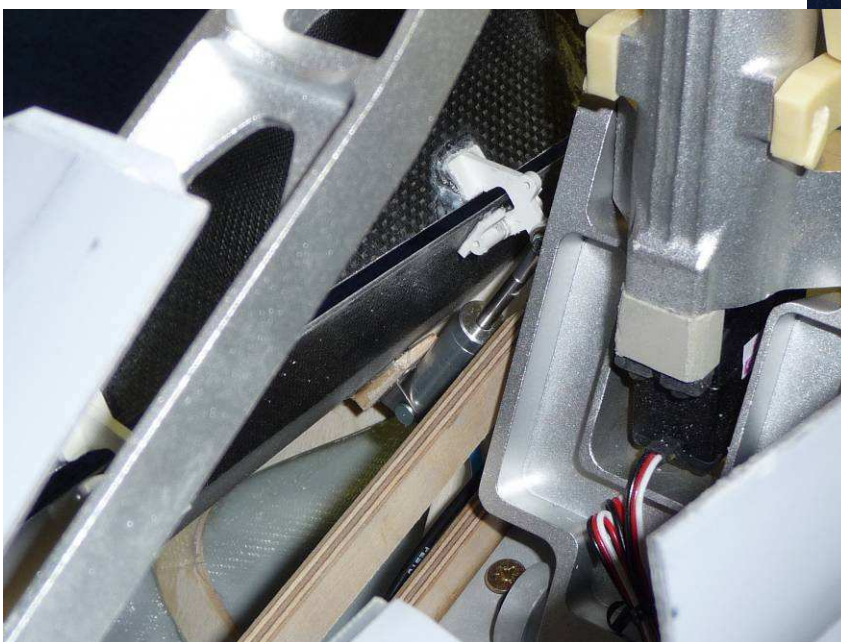
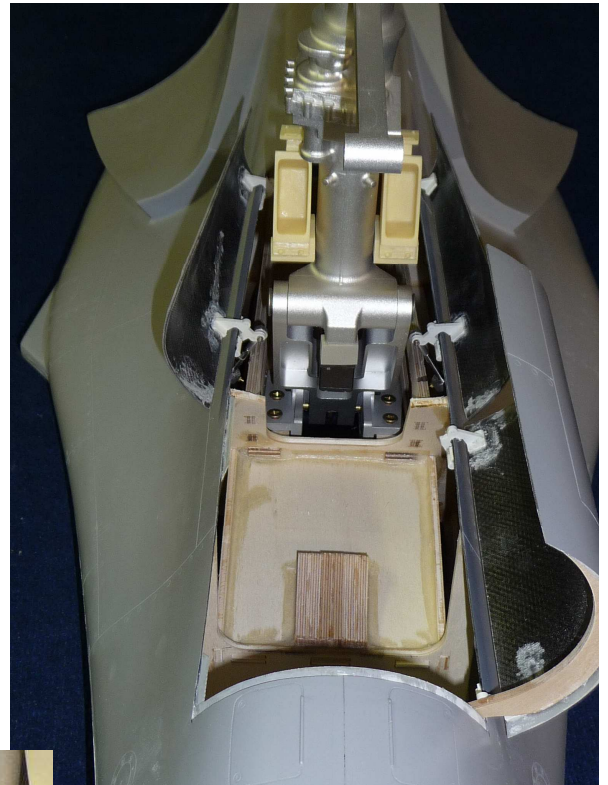
**Rear Door :**

Screw the small air cylinder on a wood block with a small parker screw.

The ball link must be screwed on the external hole of the door hinge

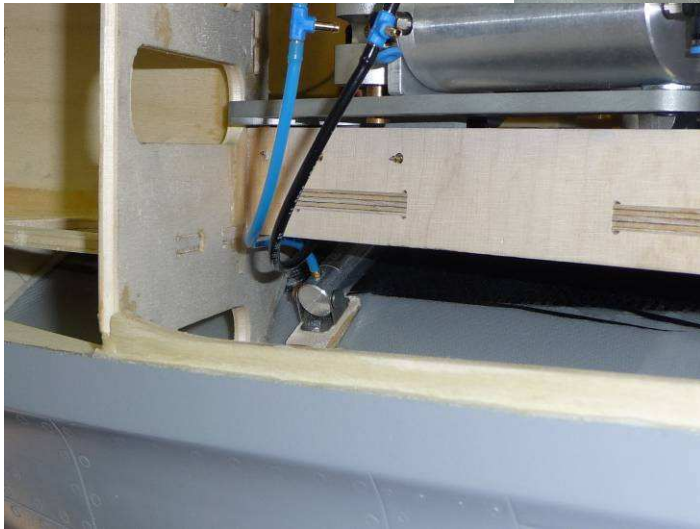
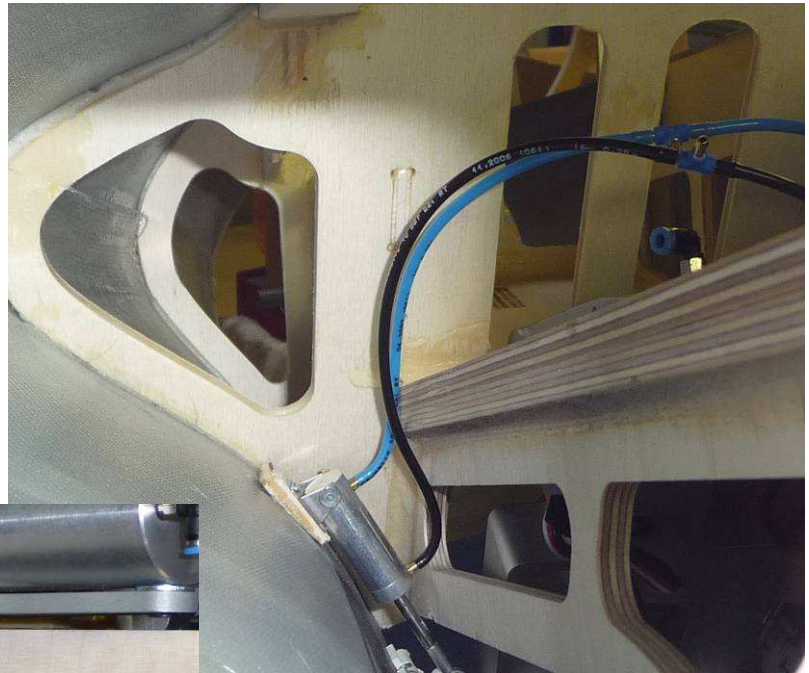


Fit one air cylinder for each rear doors





Glue the wood block to the fuselage with door fully open



Glue the internal gear door reinforcement on the front gear door with epoxy

### Small rear door

The small rear door will be connected the rear aluminium strut by a spring  
Drill a 1 mm hole in the rear aluminium strut  
Connect the spring to the strut



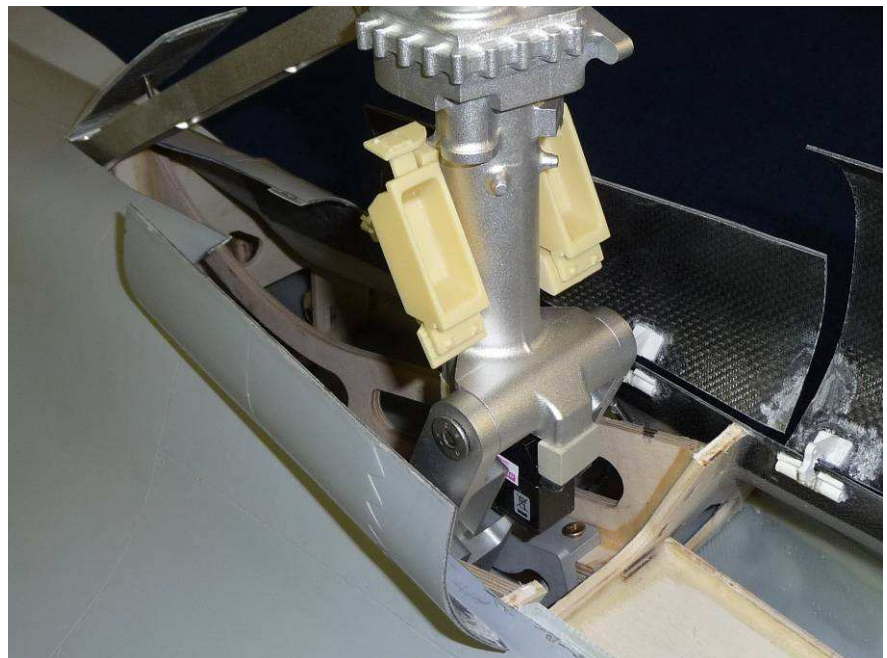
Drill a 1 mm hole in the fiber gear door in front of the strut  
Connect the strut to the door



**When the gear will be extend, the rear door will stay open and the front door will stay closed. For this reason, connect the front cylinder to an electrovalve and the 2 rear cylinder to a second electrovalve. The door sequencer will make the correct sequence**

#### **Front Navy details**

Glue the 2 lights on each side of the gear



## FOR ALL VERSIONS

### CANARDS

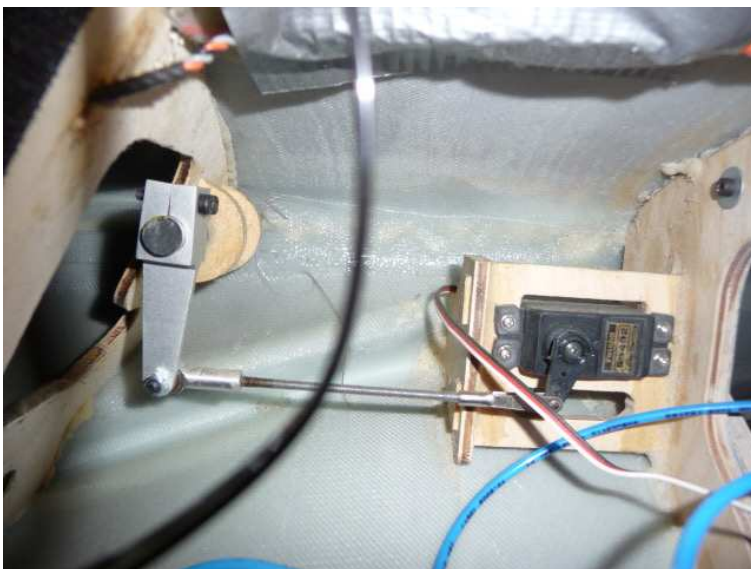
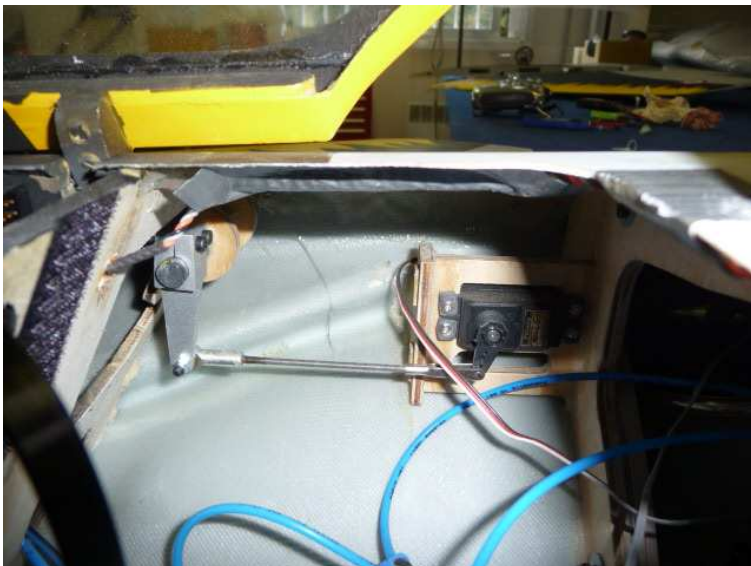
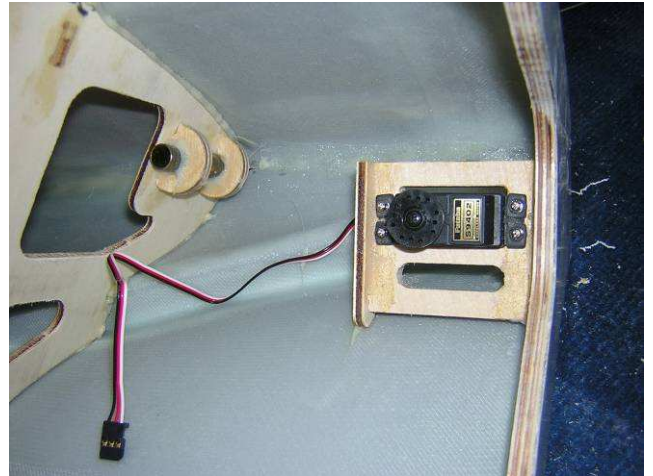
Servo must be a 9 kg.cm servo (ex S 9402)

Screw the servo on the plywood support.

Fit the canard in the tube.

Fit the aluminium control horn on the carbon rod and secure it with the 2 screws.

Connect the servo with steel link and M3 rod



## Main gear doors :

Assemble the aluminium gear doors according to the photo



Cut just one side of the main gear doors according to the engraved panel lines and photos. Cut them only close to the gear door hinge position. Glue the 4 metal door hinges with cyano (take care of the position according to the photos). Finish to cut the main gear doors.

Secure all door hinges with small parker screws (due to aerodynamic loads)

Glue the internal gear door reinforcement on the main gear door with epoxy.



Glue a plywood reinforcement in the fuselage closed to the door hinge limit so that the fuselage will not bend and don't block the door rotation

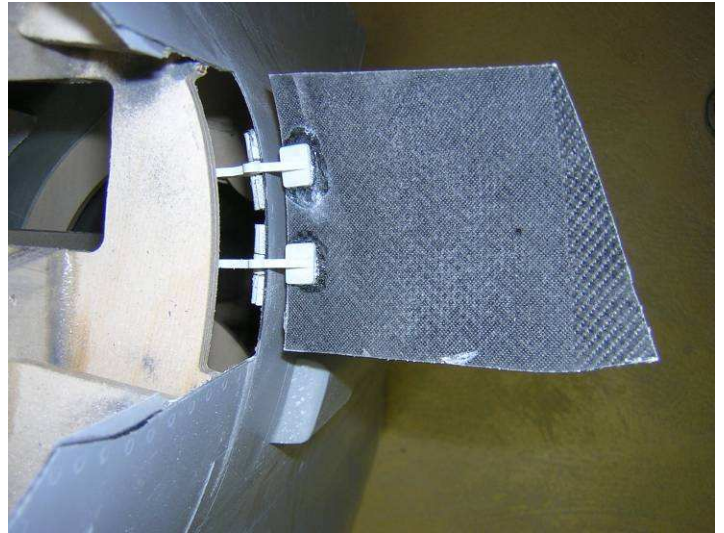


Glue with cyano some tape of fiber to make some door lips

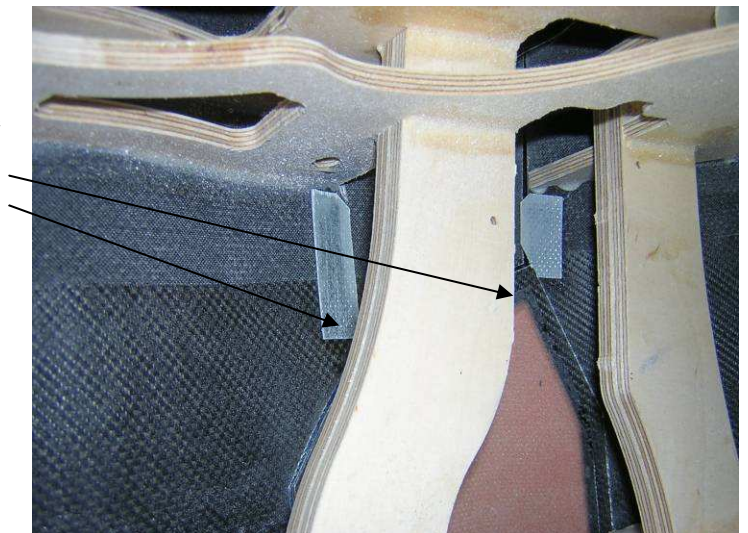


Cut just one side of the small rear gear doors according to the engraved panel lines and photos. Cut only the rear limit.  
Glue the 4 plastic door hinges with cyano (take care of the position according to the photos).  
Finish to cut the rear gear doors.

Secure all door hinges with small parker screws (due to aerodynamic loads)



Glue with cyano some tape of fiber to make some door lips



## Door air cylinder

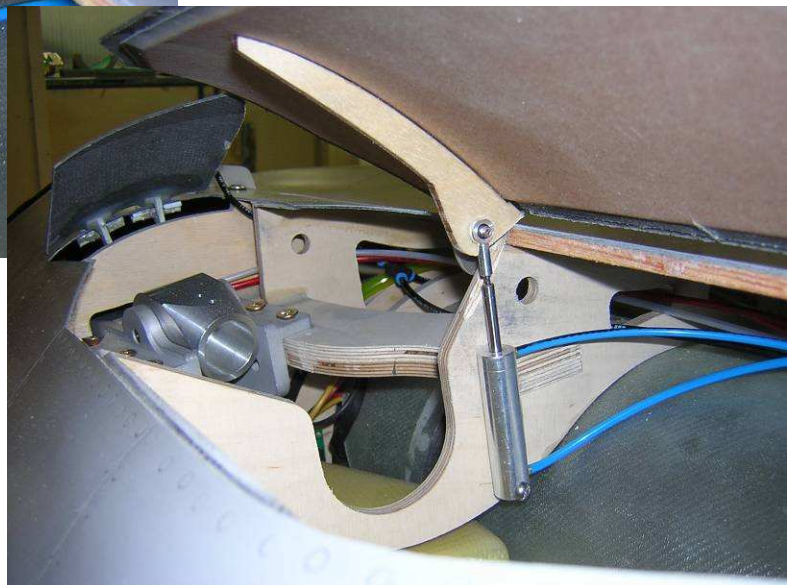


Screw a M2 aluminium ball link to a small air cylinder  
Screw the air cylinder to the plywood frame according to the photo



Screw the ball link to the plywood reinforcement  
Glue the plywood support to the gear door with the air cylinder fully extended

Check the gear door can open and closed without trouble



## Main wheels and brakes

Fit the aluminium hub on the tire

Check that 3 holes are in front of the rubber

Drill the 3 x 3 mm holes in the rubber for the screws

Fit and glue the bearing in the aluminium hub.

Assemble the wheels and tires with the 9 screws.

Do not overtight them. Stop to screw them when the 2 hubs touched together

Don't forget to secure the screws with threadlock before to fly .....



Screw the air nipple to the brake drum  
Put some silicon glue in the brake drums  
and on the special ring.  
Insert the ring in the drum.





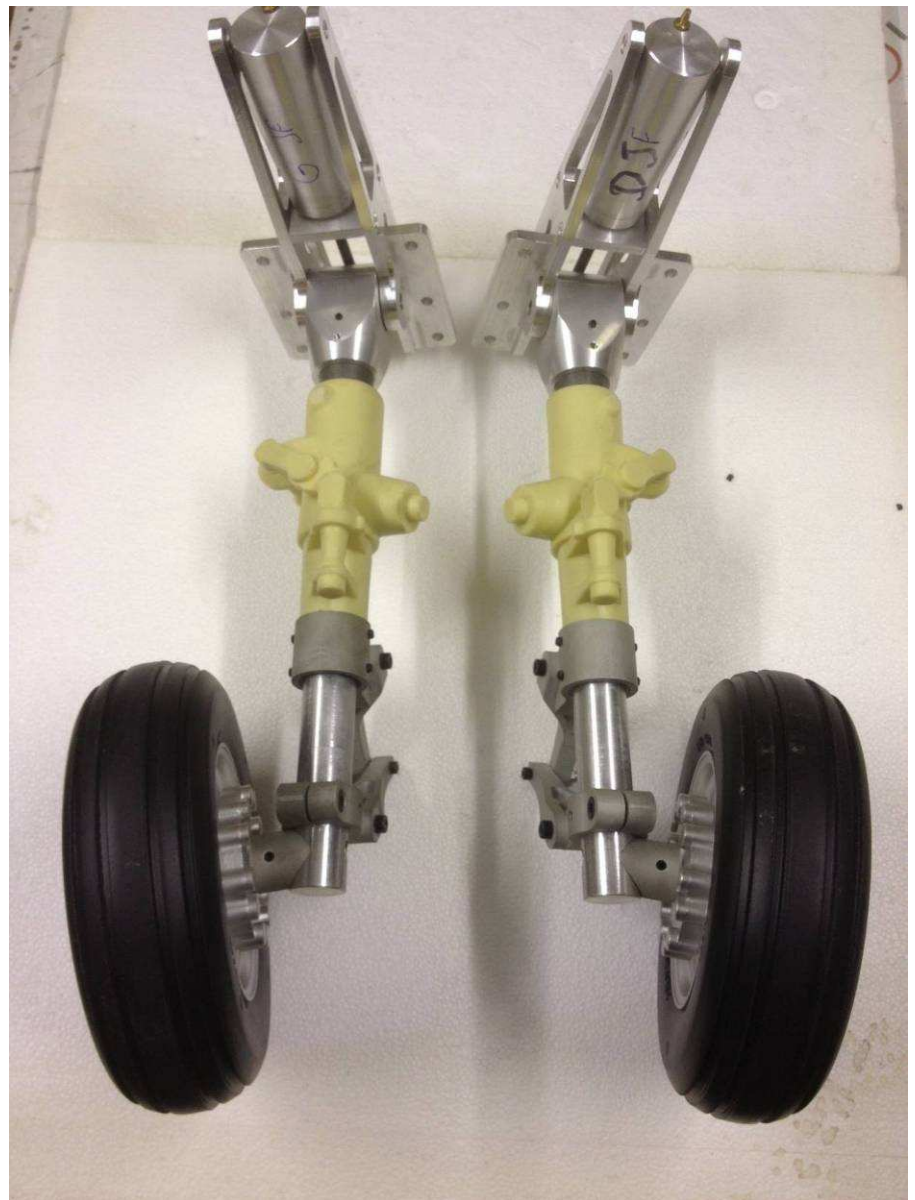
## Assembling the main gears

Assemble the complete main gear according to the photo

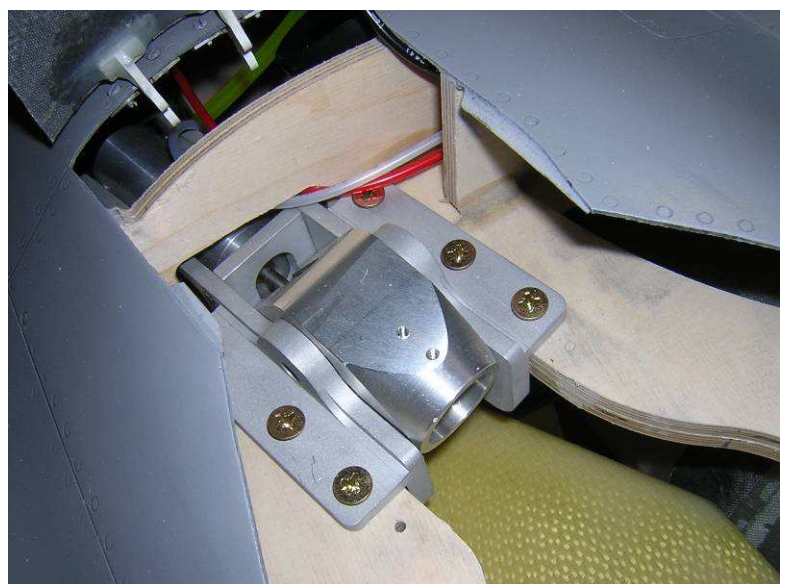


## Main struts covers

Fit the 2 main strut cover on the steel tube  
Paint them in silver



Screw the main landing gear box on the plywood.



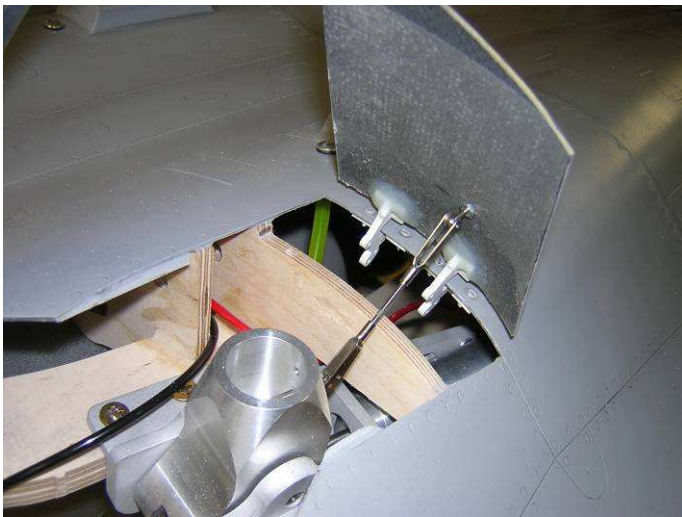
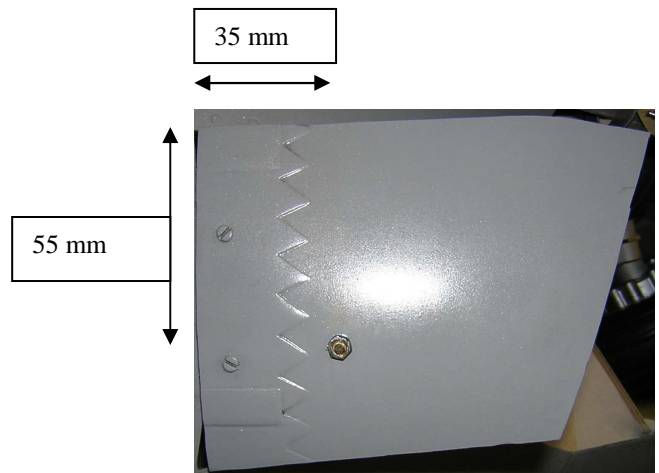
## Rear gear doors

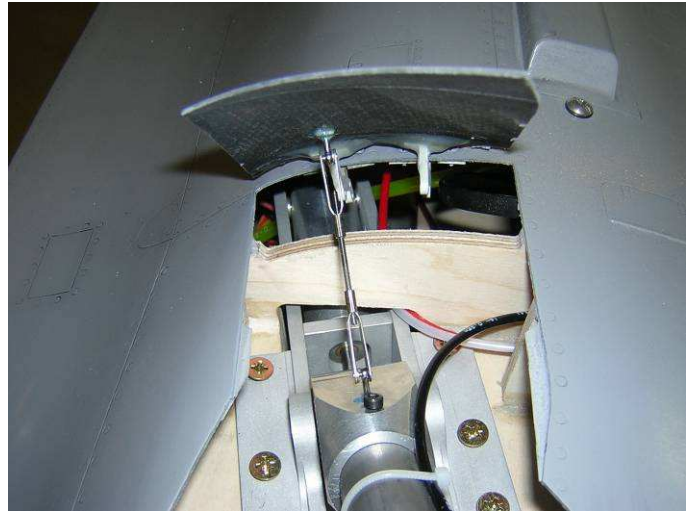
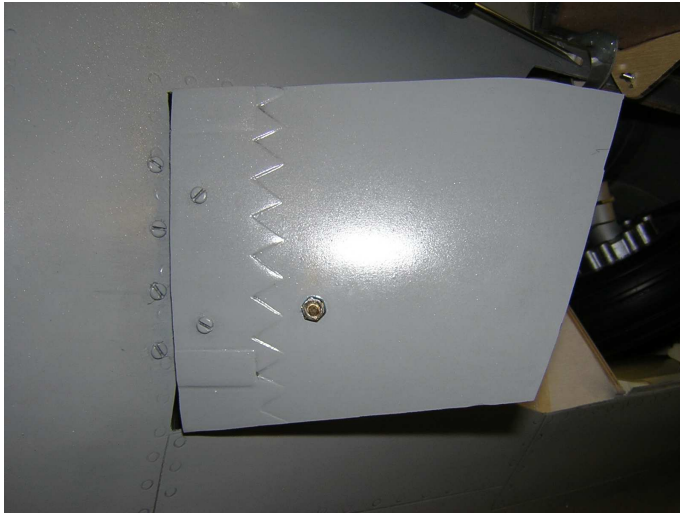
Drill a 3 mm hole according to the drawing

Screw the steel link with 2xM3 bolts through the gear door

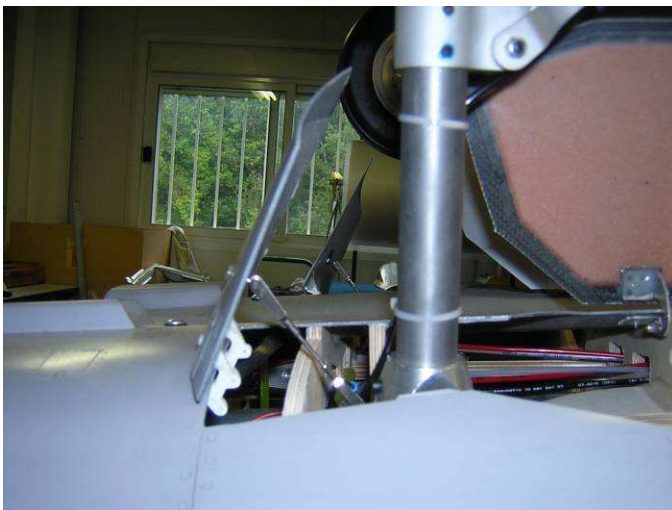
Screw a steel link to the gear pivot (bottom hole)

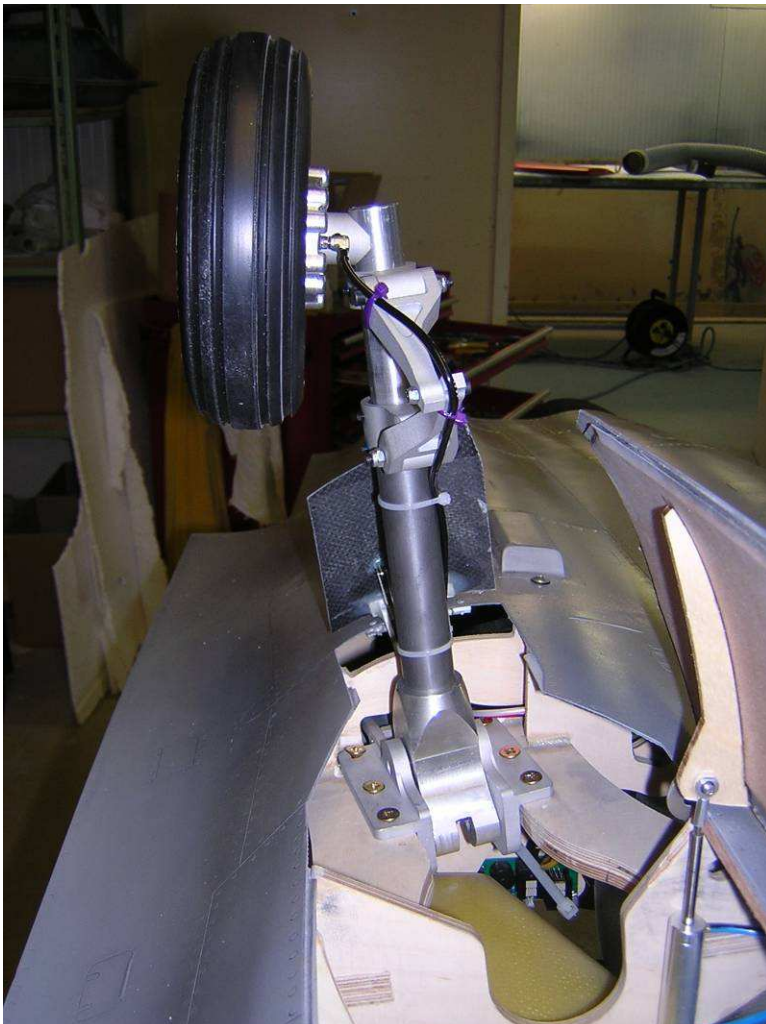
Connect the 2 links with 2xM2 link and M2 threaded rod





Fit the leg in the gear

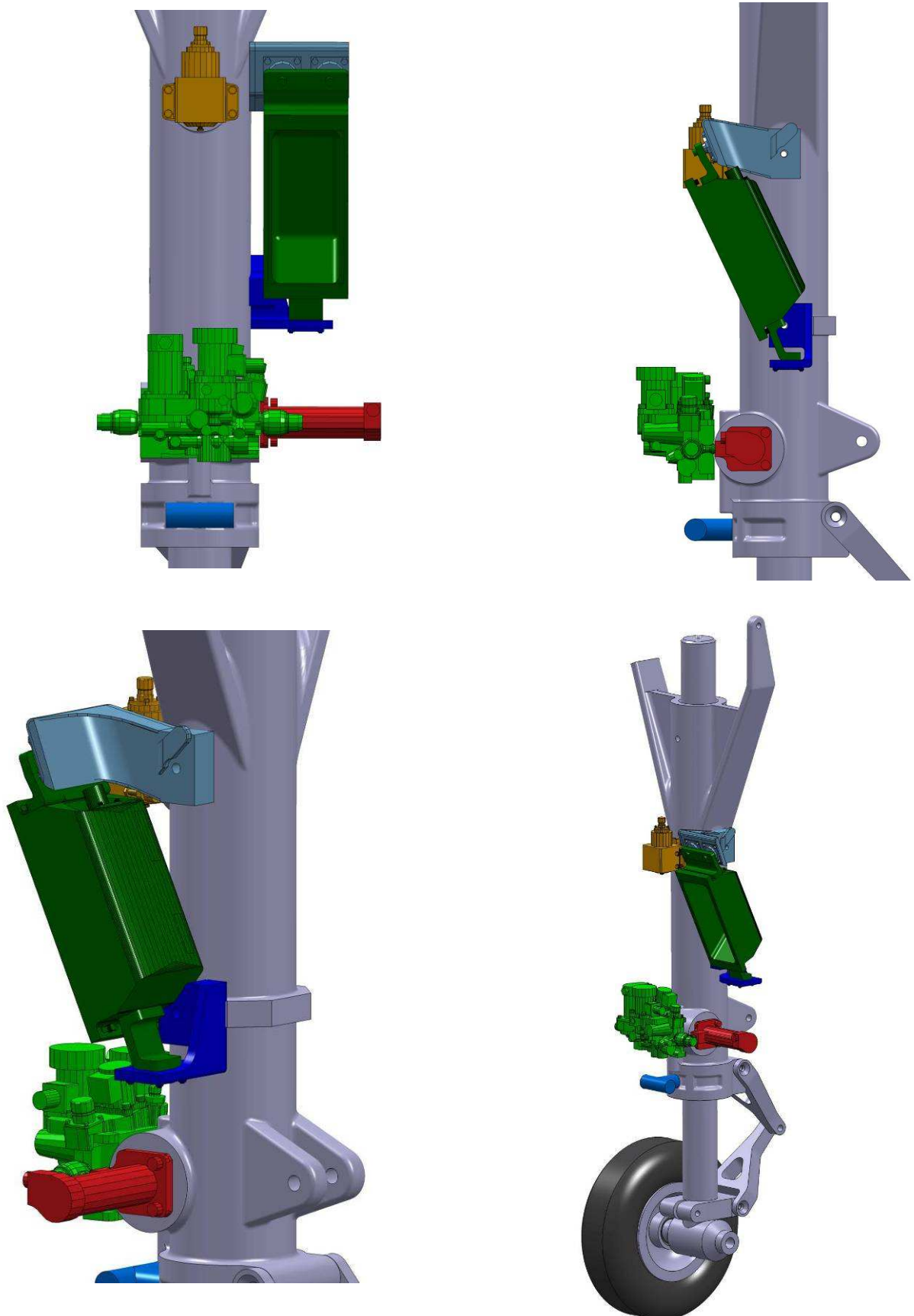




## Front strut details and landing lights

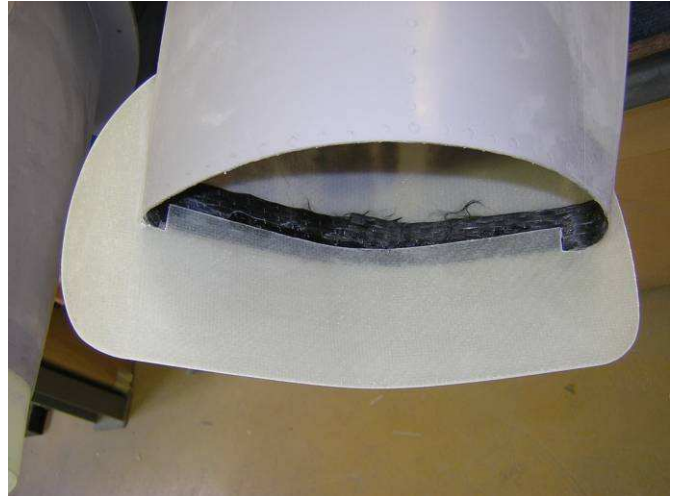
Insert and screw the M2 threaded rod in the front leg to fix the resin parts on them

All resin details will be glued to the threaded rod according to the following drawings



## INLETS

Cut the inlet plates according to the engraved lines



Fit the inlet plate on the inlet and adjust it in perfect position.  
Glue it with cyano  
Finish the external with filler



Sand the inlet edge and air intake edge to remove loose fibers.  
Put the inlets in the fuselage. The inlets should jut out over the air intakes by a few mm.



### Single turbine version :

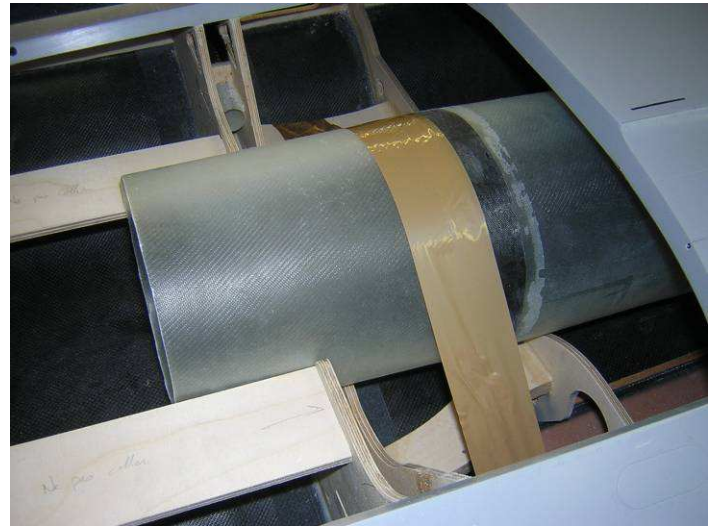
Remove the inlets from the fuselage and apply some epoxy to the inlets and the air intakes.

Put the inlets in the fuselage. Insert also the central ducting to center the inlets in the fuselage.

Put some clothes pegs on the edges of the inlets in the fuselage and in the air intakes.

Let them dry overnight.

Remove the surplus inlet from the air intakes.

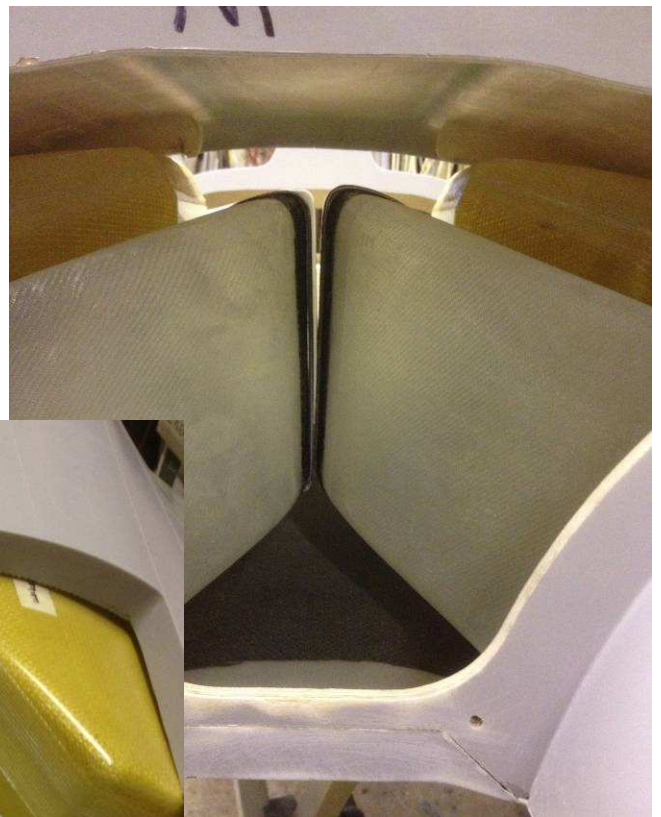




### Twin turbines version :

Remove the inlets from the fuselage and apply some epoxy to the inlets and the air intakes.

Put the inlets in the fuselage. Insert also the 2 rear ductings to center the inlets in the fuselage but DON'T GLUE them.  
The 2 edges of the front ducting must be separate from about 5 mm.  
Let them dry overnight.  
Remove the surplus inlet from the air intakes.



## Fuel tank support



Assemble the plywood tank support according to photos

Fuel tank is held between the plywood frames  
Rear frame should be glued in the fuselage between the 2 inlet ductings

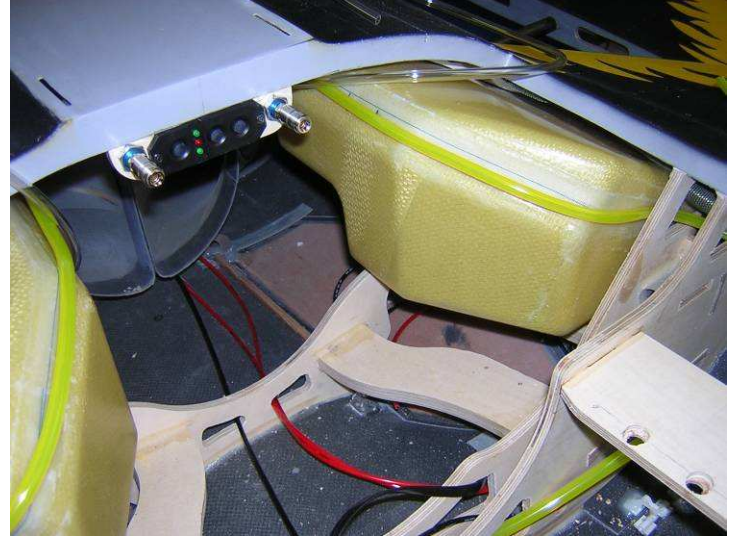
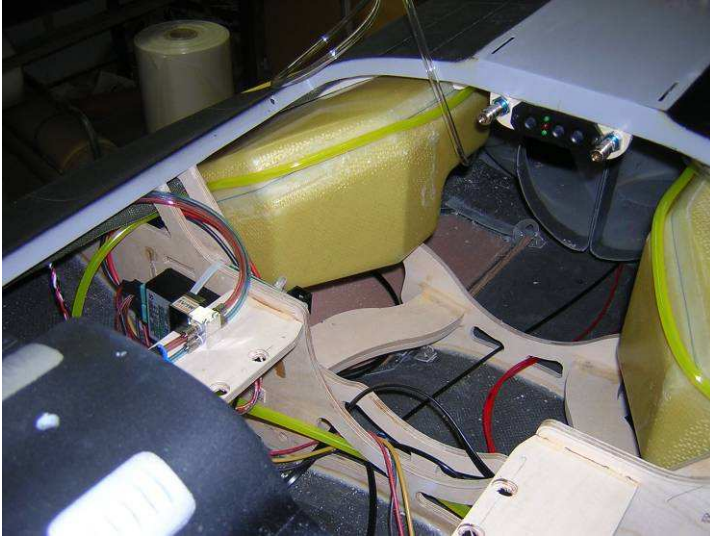
Glue the plywood frame to the fuselage with epoxy



## Fuel tanks

Connect the fuel tank to the clunk as the photo.  
Check that there is no leak before to fit them in fuselage.

Drill a 3 mm hole in the bottom of the fuselage for the fuel vent  
Hold the fuel tanks with silicon glue



The fuel tanks will also be hold by a plywood frame separator. This separator can be also used to hold the air fill valves and powerbox switch



Single turbine version

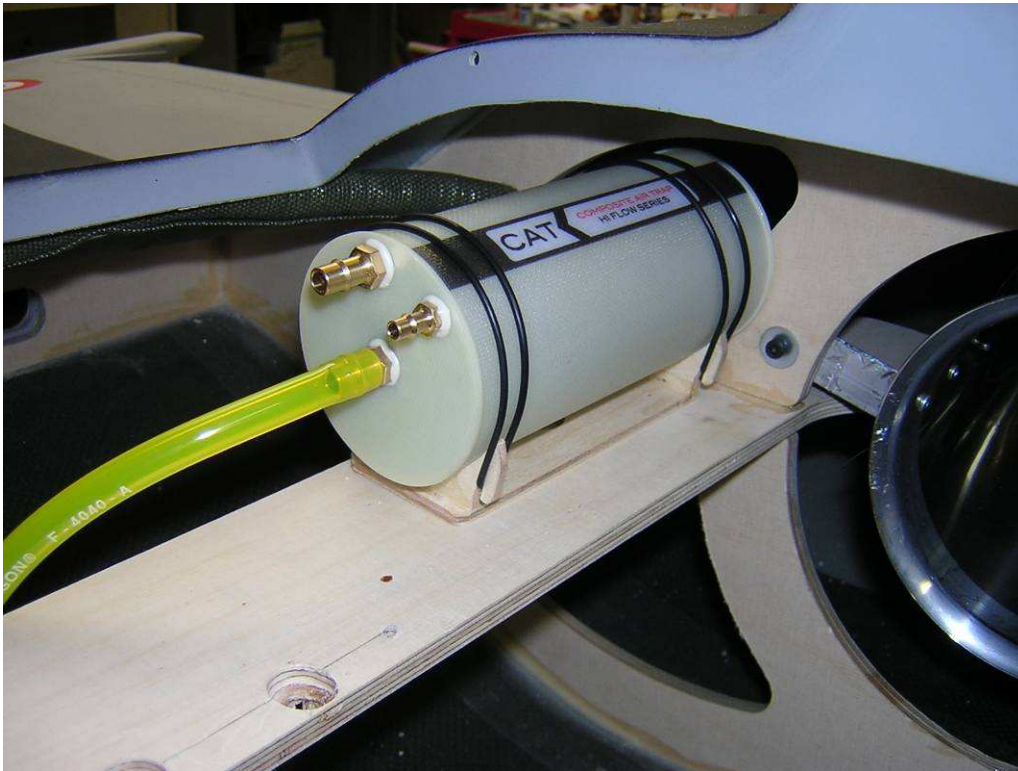


twin turbine version

The fuel tanks are connected to a catch tank to be sure that there is no bubble in the fuel line. The tubing from the main tank to the catch tank and to the catch tank to the fuel pump must be gasoline tubing (no silicone tubing). Also for the air vent tube. The catch tank is fixed to the engine support.

In case of used of a single turbine, we hardly recommend to use a single high flow air trap instead of a BVM UAT.

In case of used of a twin turbines, we recommend to use 2 BVM UAT for the 2 turbines.

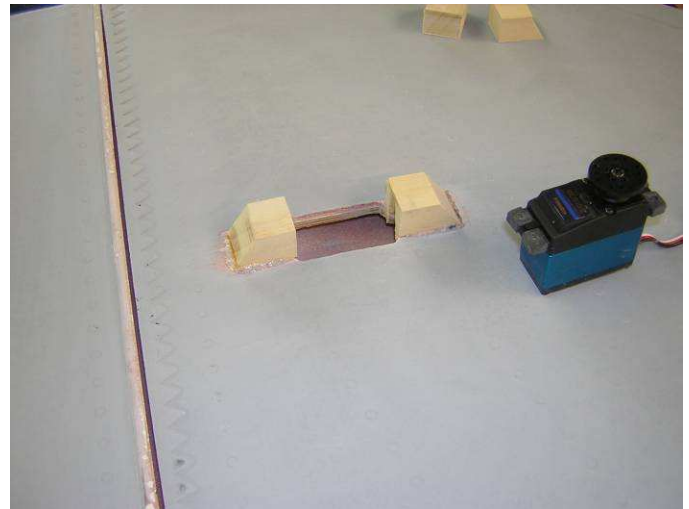


# WINGS

## Wings servos

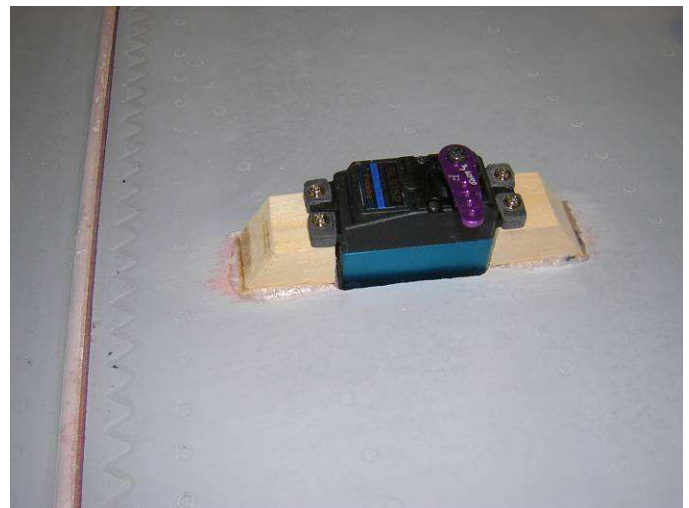
Servos **MUST** be very high quality servos, minimum 25 kg torque, with metal gear

Cut the servo location according to the following drawing and photos

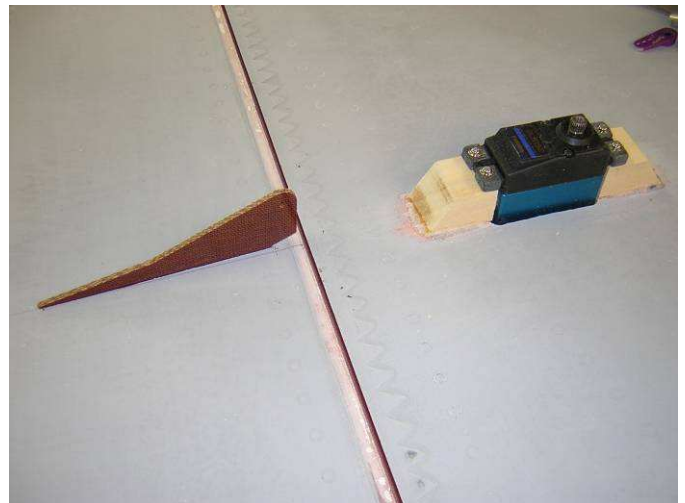
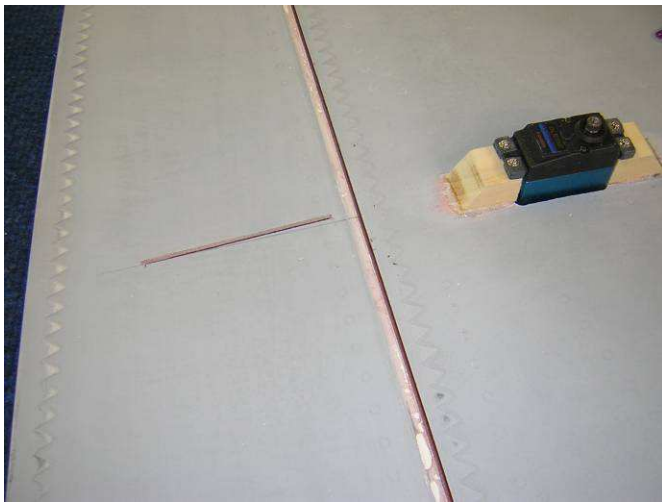


Glue the 2 x 15 mm high wood block on the wing for the servo

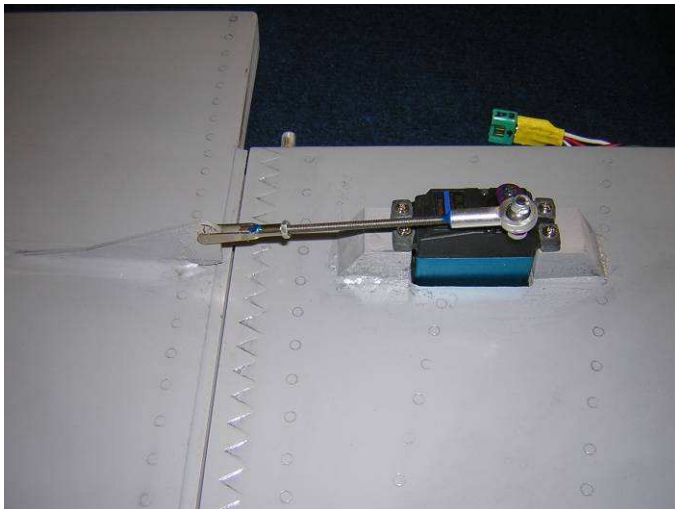
Screw the servo on the wood block



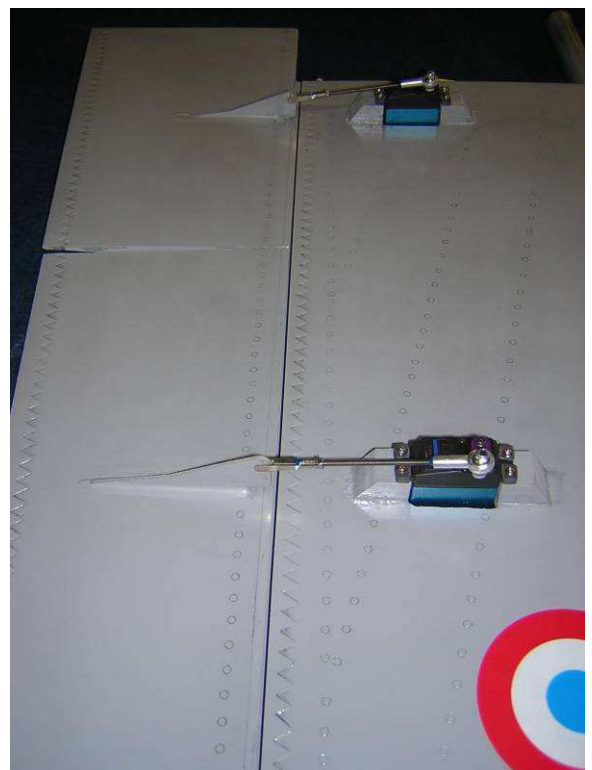
Cut a slot in the elevon in front of the control arm  
Glue the fiber control horn with a lot of epoxy in the elevon  
Connect the servo and the control horn with 2 x M3 links and M3 threaded rod.



Connect the servo and the control horn with a steel M3 links, M3 aluminium ball link and M3 threaded rod.



Use aluminium control arm for the servo. The ball must be screwed at 15 mm from the axis.  
Apply thread lock on all screwed.

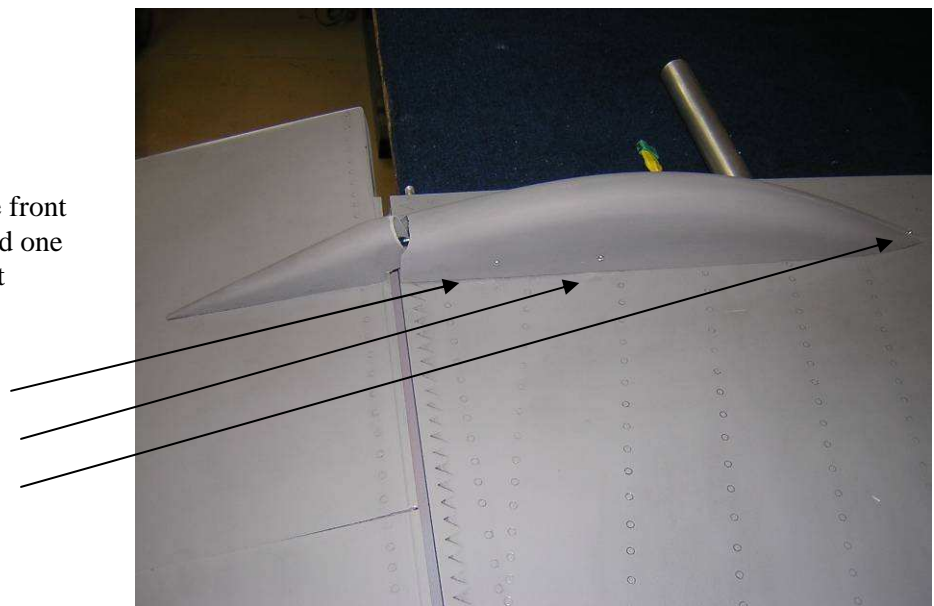


## Fairings :

Glue the rear servo fairing under the elevon.



We recommend to screw the front fairing to the wood block and one additional screw on the front



## **Elevon throws :**

To have the necessary elevon throws, you will have to send the top of the elevon to have the necessary up movement



For down movement, you will have to cut the fuselage root.





## Wings locking system for single turbine version:

Drill a 4 mm diameter hole through the fuselage root and wing root from the fuselage hatch

Fit a M4 blind nuts in the wing and glue it with epoxy.



## Wings locking system for twin turbine version:

Fit the 2 wings on the fuselage and take care they are perfectly adjusted against the fuselage.  
Glue 2 plywood reinforcements up and down of the fiber wing tube

Drill a 4 mm diameter hole through the plywood reinforcement, fiber tube, wing carbon tube

Glue a M4 blind nut under the plywood reinforcement.



## Assembly of the fin :

Fit the rudder on the fuselage

To secure the rudder, drill a 2.5 mm hole and insert a 3 mm screw to lock the fin.

### Rudder :

It is possible to fit a rudder on the fin.

If you have choose to fit a rudder take care to have no play in it. Otherwise, you risk tail flutter.

Cut the rudder according to the engraved line with a dremel saw (fine saw).  
Glue a 10 mm large balsa rib in the fin and a 10 mm large balsa rib in the rudder with fast epoxy

Position 4 hinges and glue them with a lot of epoxy.

Servo is fitted in one side of the rudder

Servo is a 25 kg.cm with M3 link

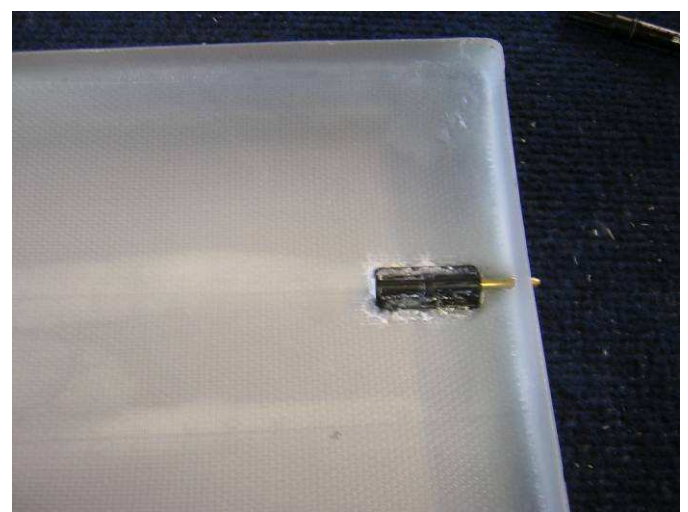


## MAIN FUSELAGE HATCH

Glue 2 wood hatch pins with CA on one side of the hatch..



Glue the 2 hatch latches on the opposite side



Drill the corresponding holes in the fuselage.



## FRONT FUSELAGE HATCH

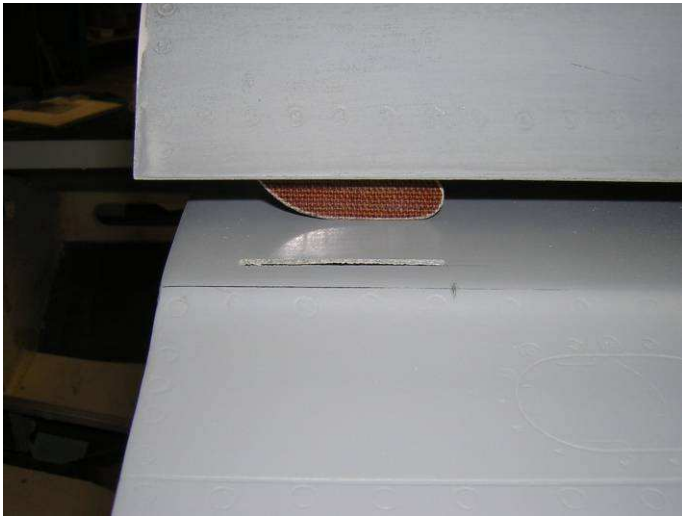
We recommend to let the front hatch dismountable to have an access

Make 4 slots to insert the fiber horns according to the following drawing and photos.

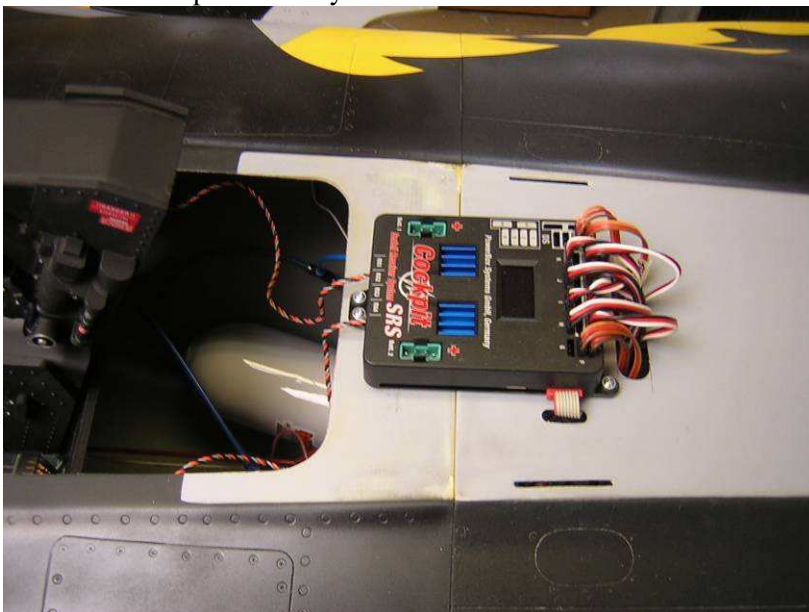
Glue the 4 fiber horns with CA in the hatch.



Drill the corresponding holes in the fuselage.



You can fix the powerbox system and batterie under this hatch.



## FRONT FIBER CANOPY

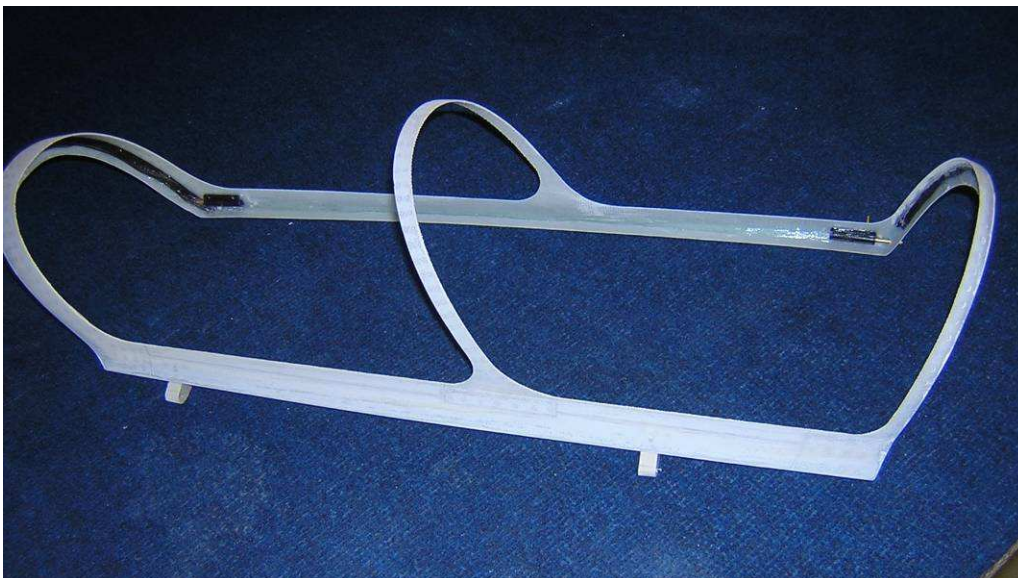
Glue 2 wood pins with CA on the rear and one pin on the front.  
Cut fiber canopy as engraved.

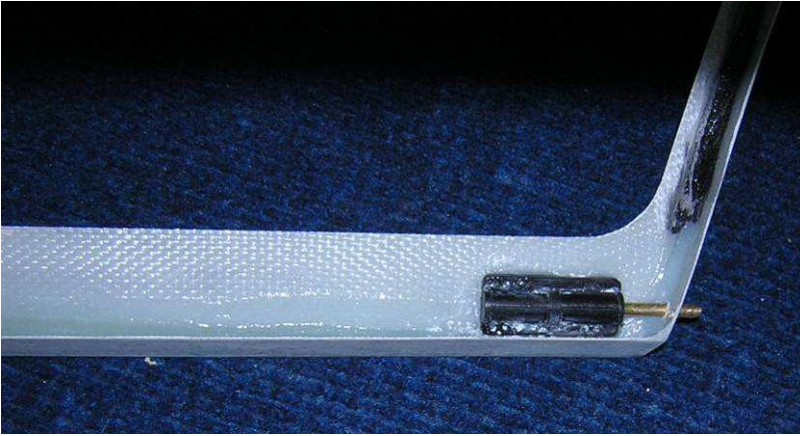


Drill the corresponding holes in the fuselage.  
Cut fiber canopy as engraved.

## REAR FIBER CANOPY

Glue 2 wood pins with CA  
Glue the 2 hatch latches on the opposite side  
Cut fiber canopy as engraved.





Drill the corresponding holes in the fuselage.

## **CLEAR CANOPY**

Put fiber canopy inside the clear canopy  
Draw with a pen the limit of the canopy.  
Cut the canopy as drawn

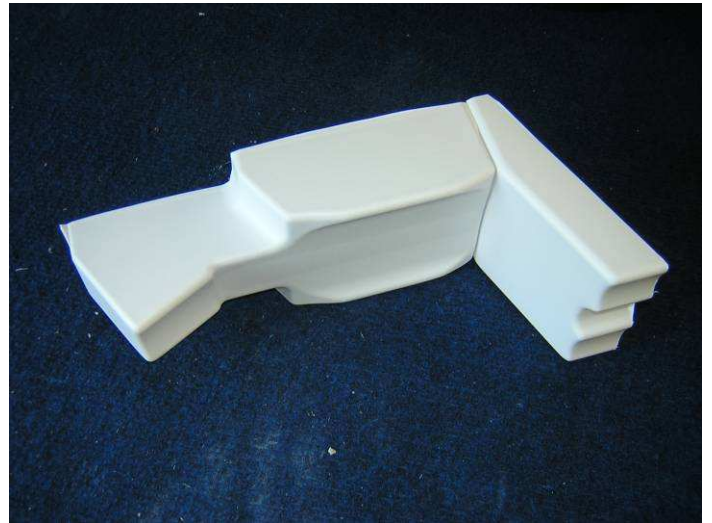
Glue the canopy on the canopy frame with ZAP canopy.



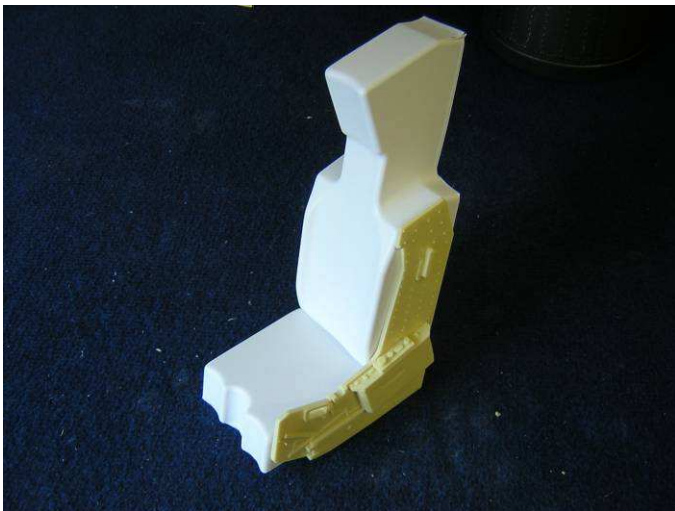
## Ejector seat :

Assemble the ejector seat as the photo :

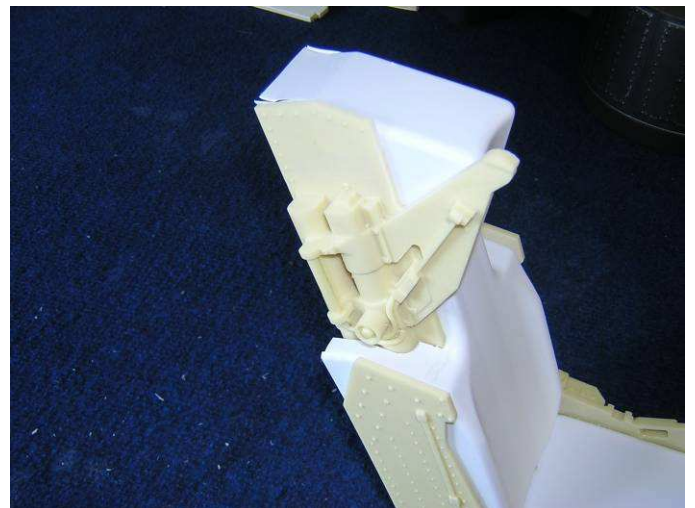
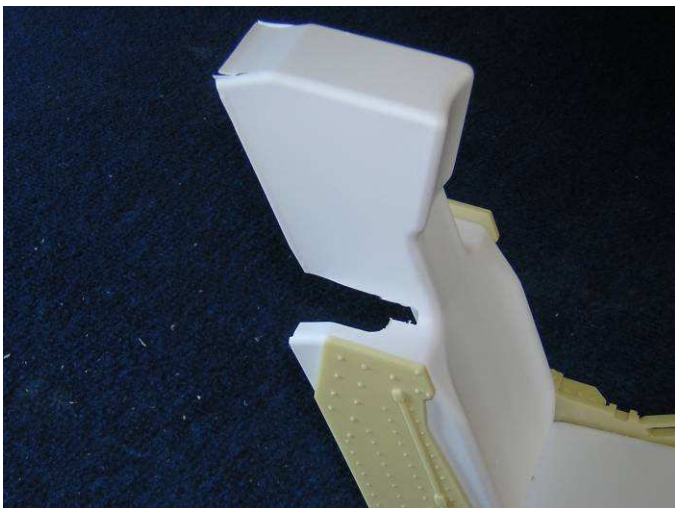
Cut the vacuum parts as shown

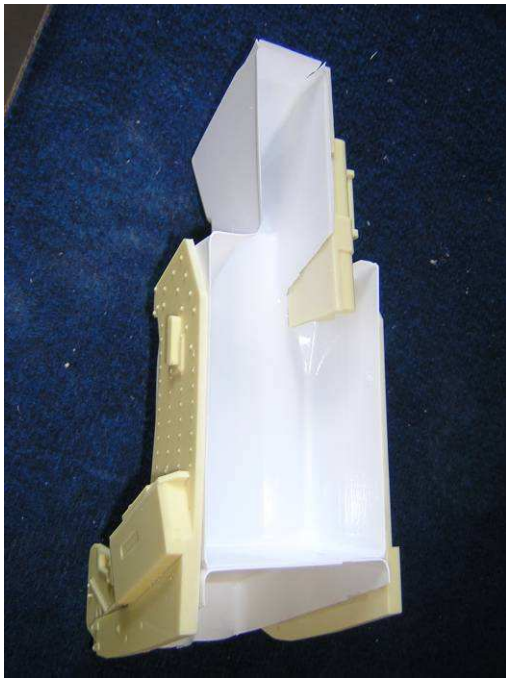


Glue with CA the 2 vacuum parts and the 2 plastic parts according to the plan.

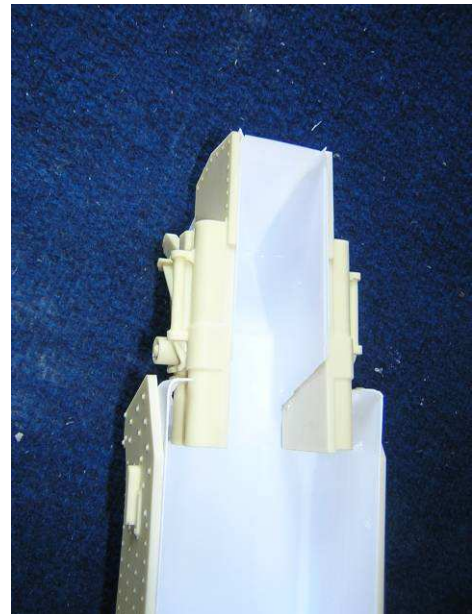
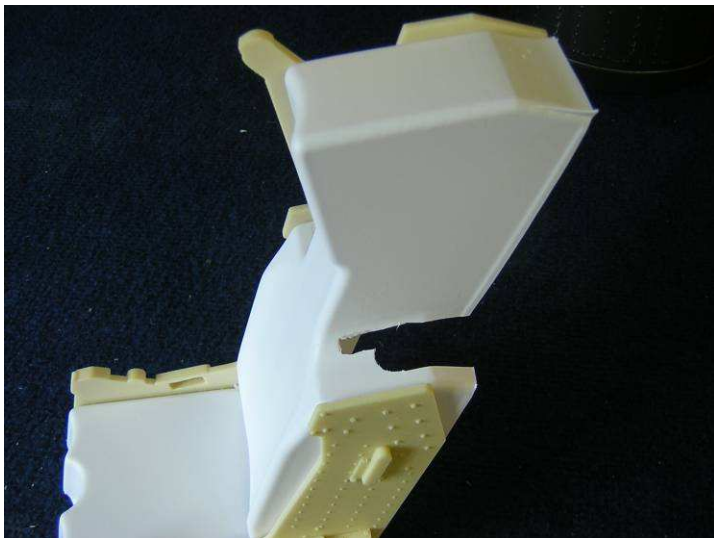


Make a slot for the upper plastic part and glue it with CA.

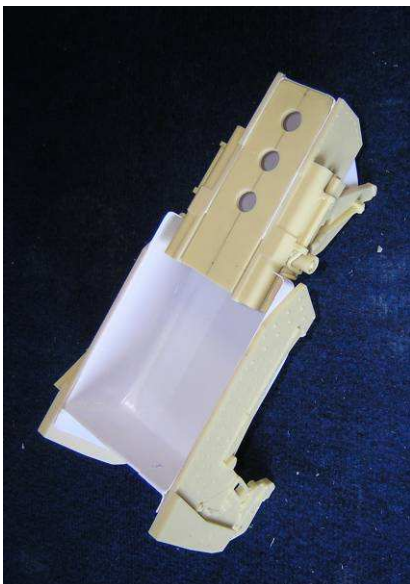




Make a slot in the opposite side.

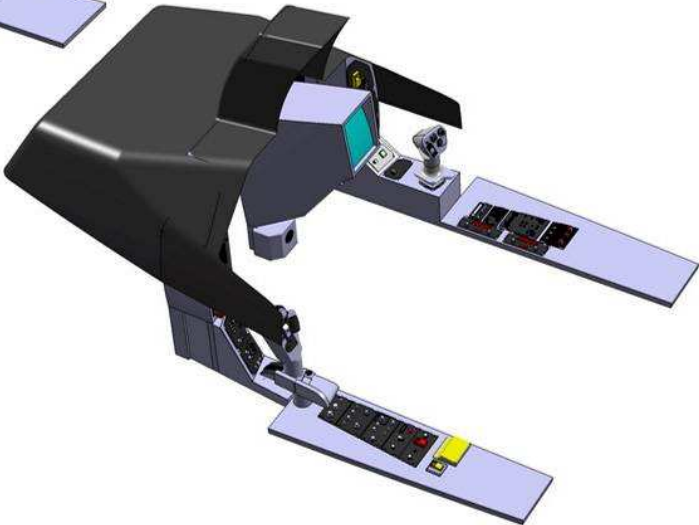
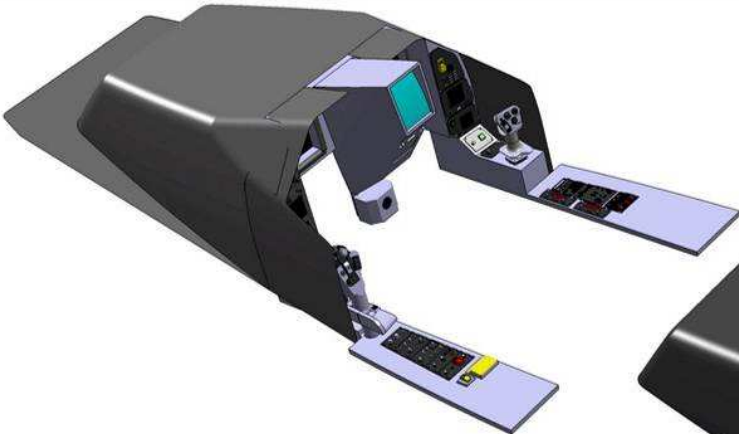
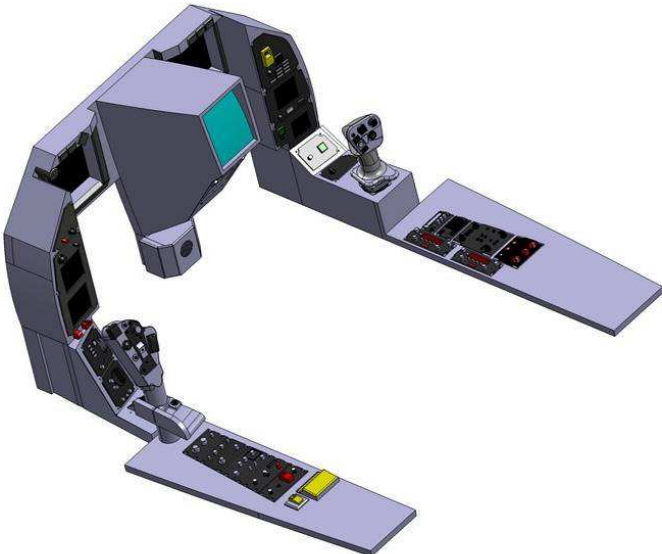
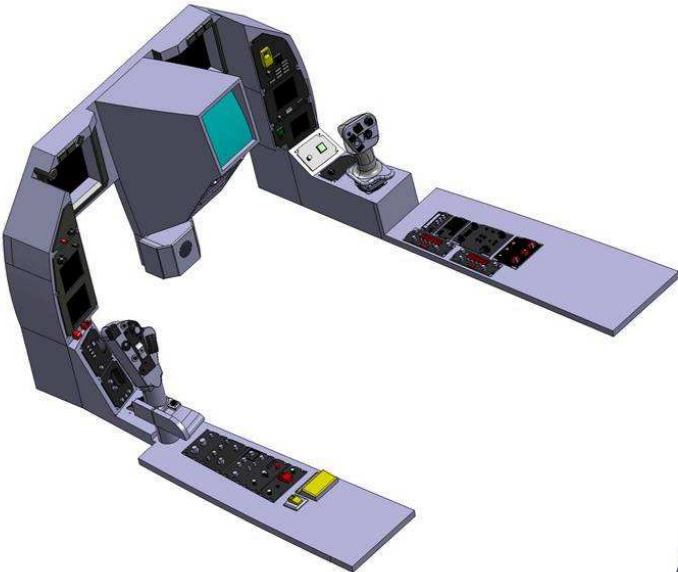


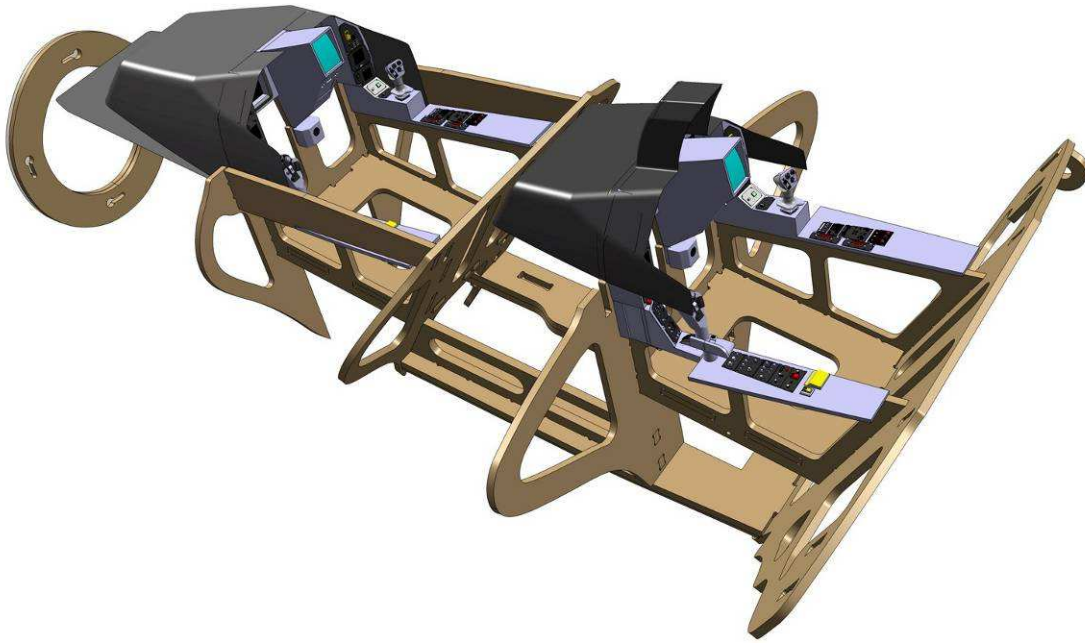
Glue with CA the plastic part at the rear of the ejector seat.



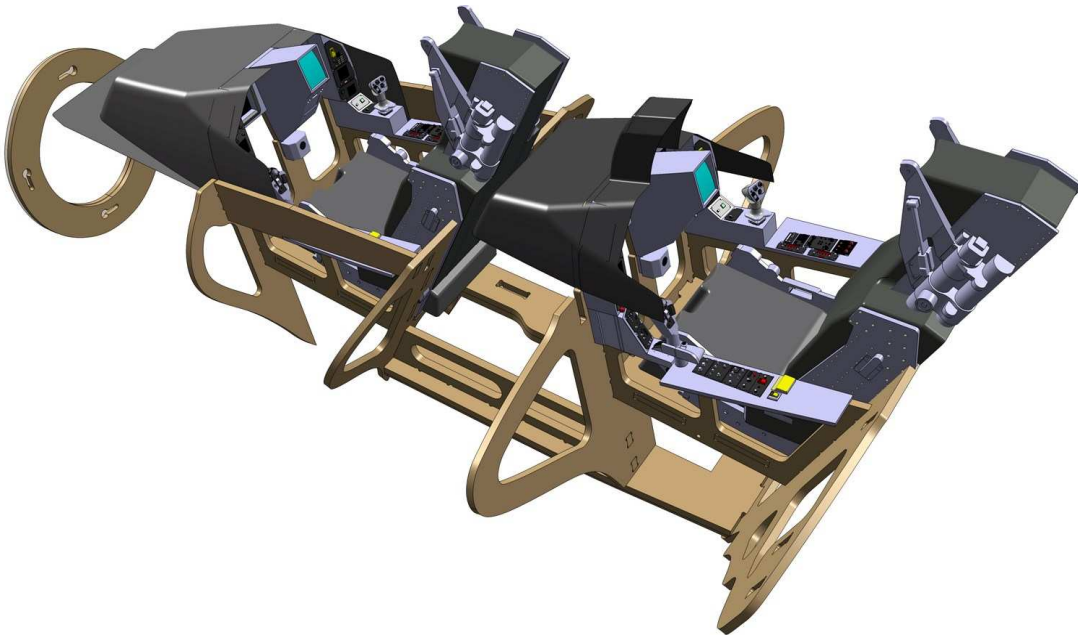
**Cockpit :**

Paint and assemble parts as following drawings





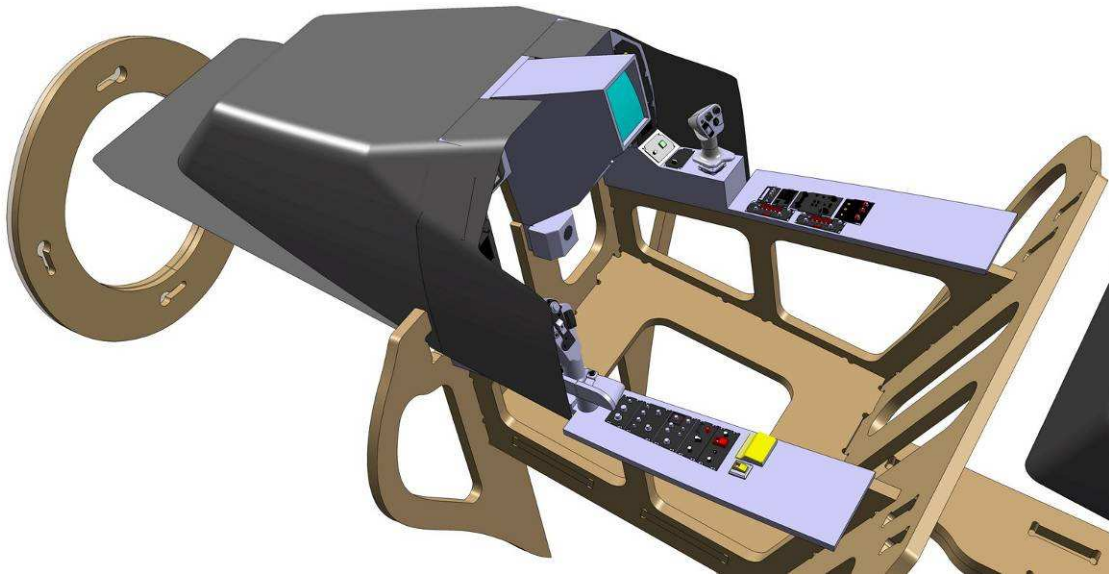
twin seat  
version without  
ejector seat



twin seat  
version  
with  
ejector  
seats

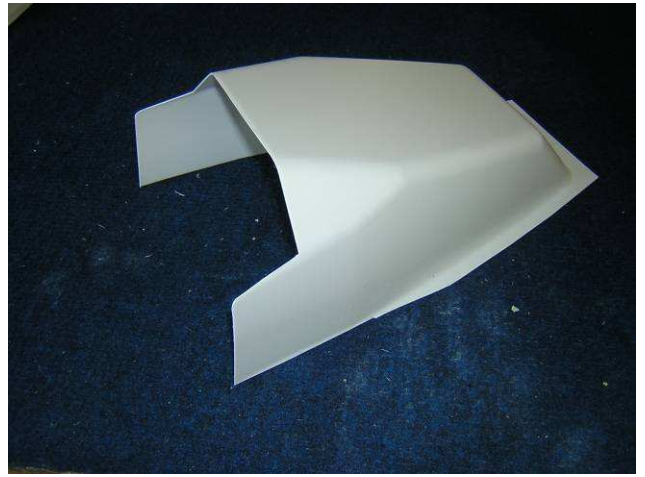


single seat  
navy version

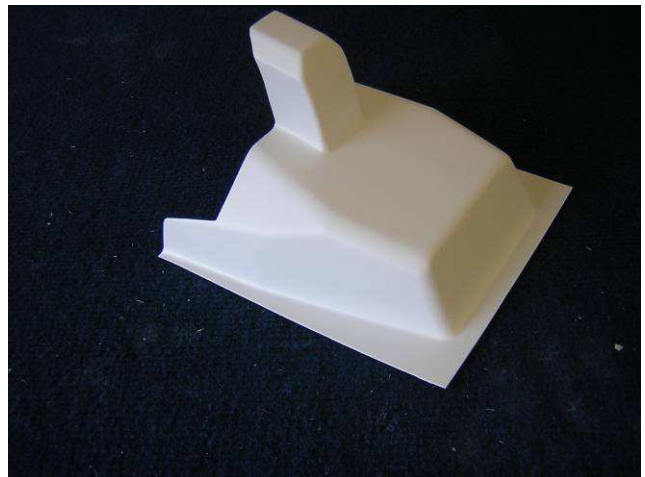
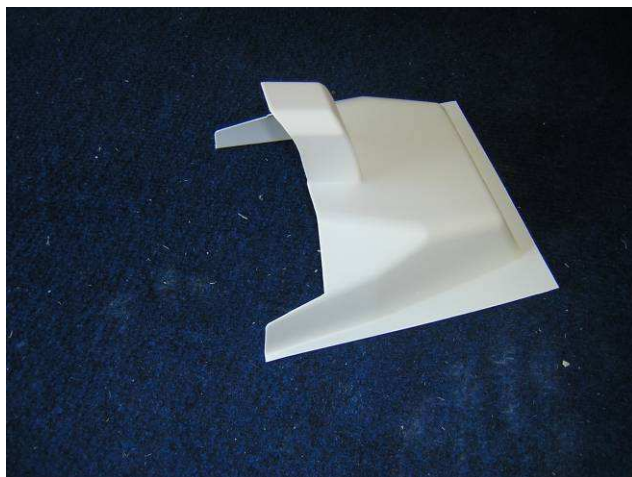


Cut the vacuum parts as shown

Front desk

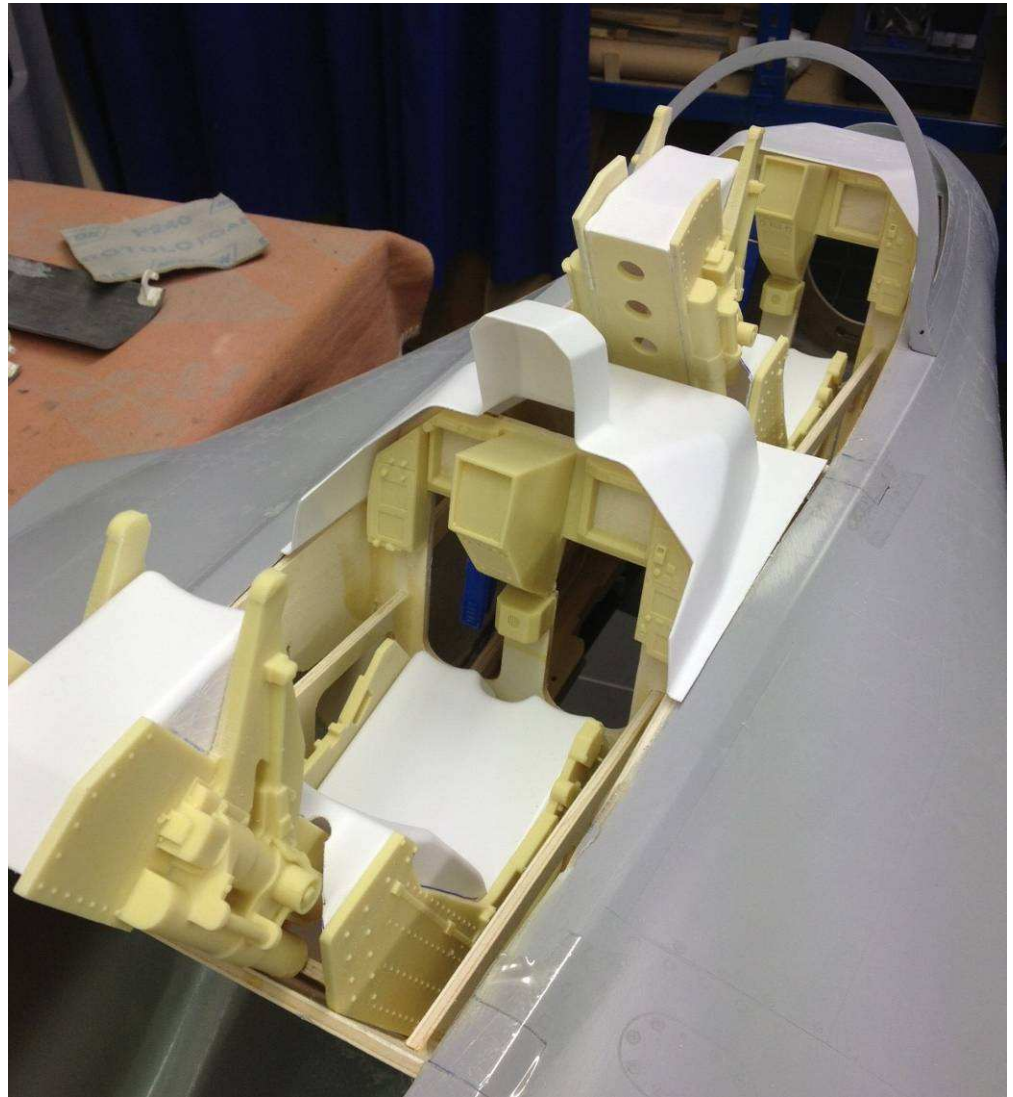


Rear desk



Glue with CA the vacuum parts and all plastic parts according to the plan.

Fit the ejector seat in the cockpit.

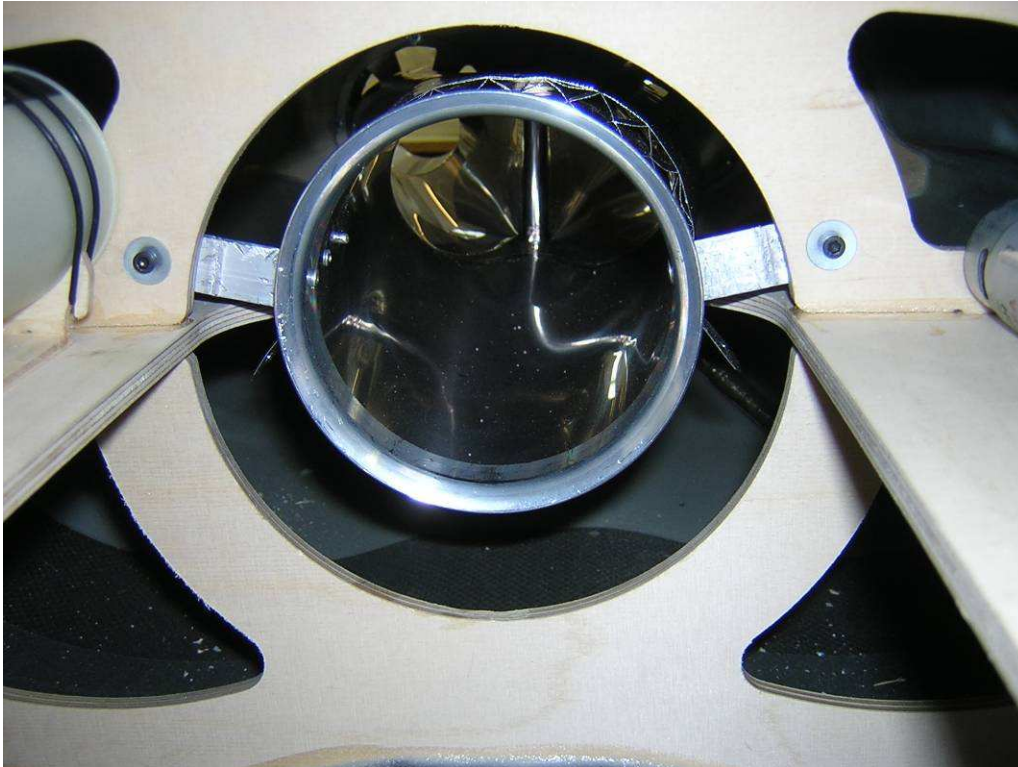


## **NOSE CONE**

Fit 4 screw at 90° in the nose cone  
Just secure the nose for flying  
There must be nothing in the nose for correct CG

## **TAILPIPE EXHAUST**

Fit the exhaust in the plane  
Put 2 screws on the front frame to hold it



## Air tubing :

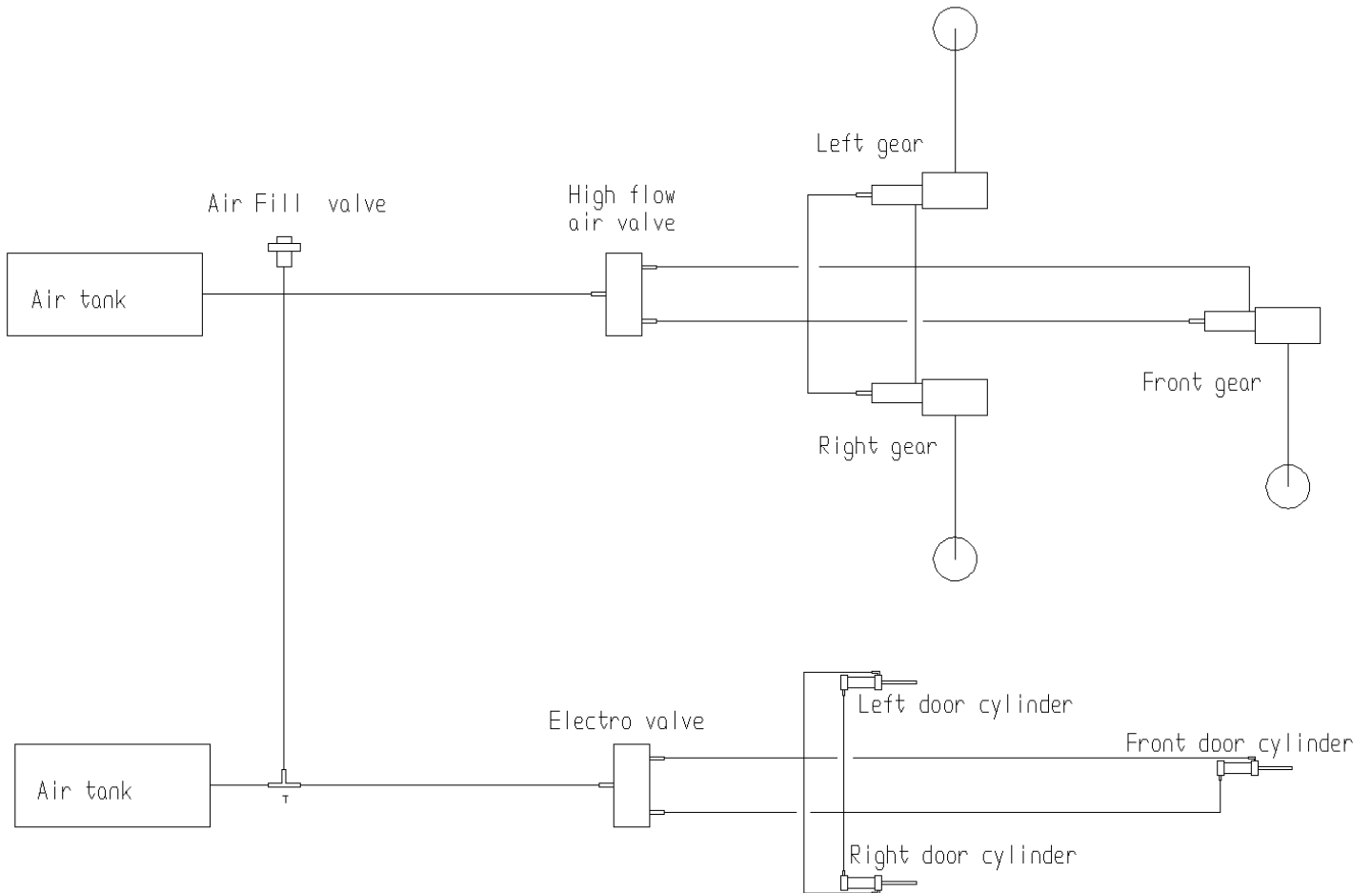
The 3 landing gear system have big section air cylinders.

Because they are big, they need a special high air flow valve to have perfect and necessary power in flight.

They also need 1 big air tank directly connected to the valve and one air tank for the door cylinders.

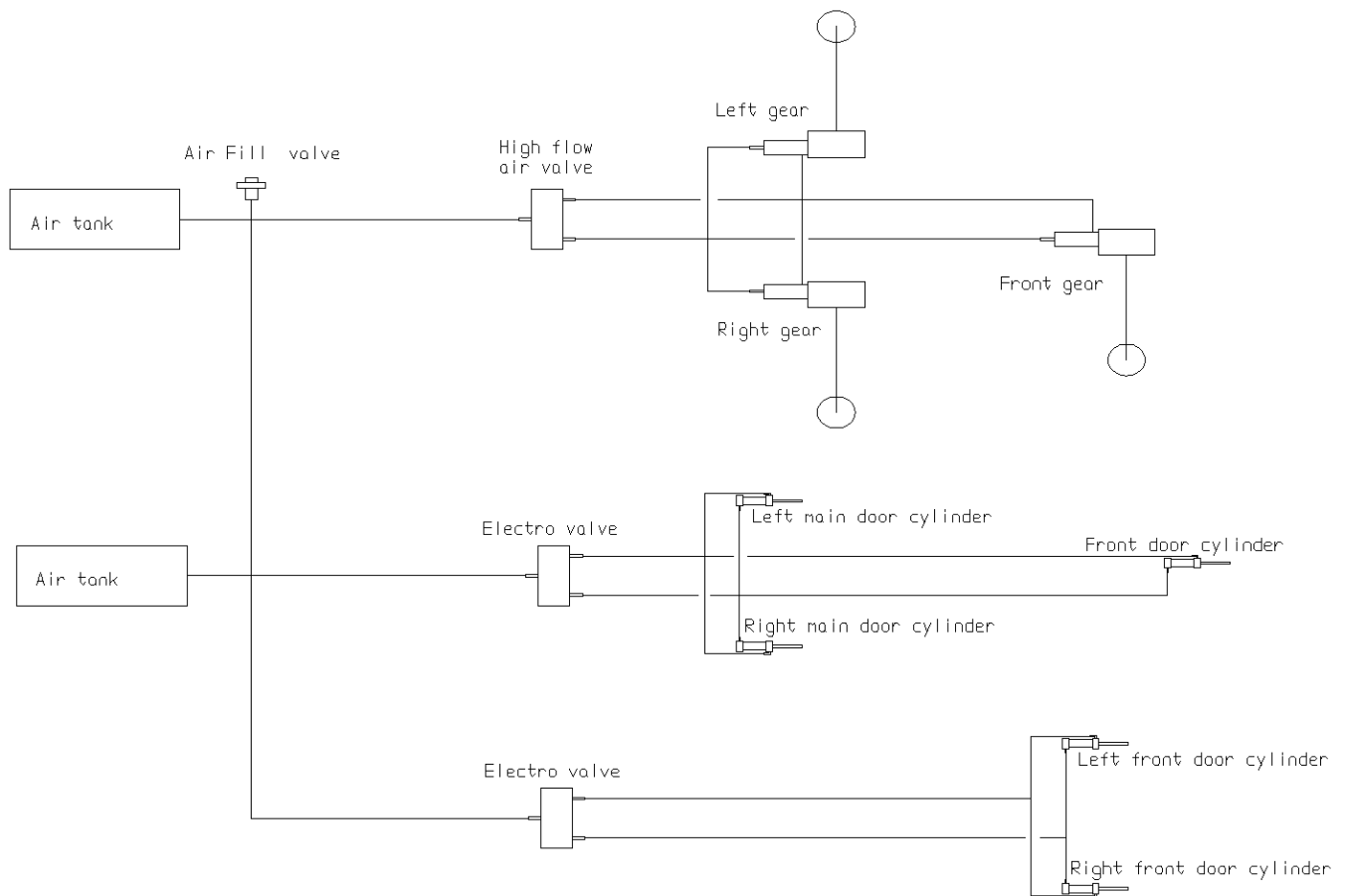
Connect the air cylinders and retracts according the manual.

Connect the gear door air cylinders according the manual.



Rafale air installation for Air force version





Rafale air installation for Navy version

All the gear, door and brakes electrovalves can be fitted on the plywood mount glued between the 2 air inlets



## TAILCONE & AFTERBURNER LED

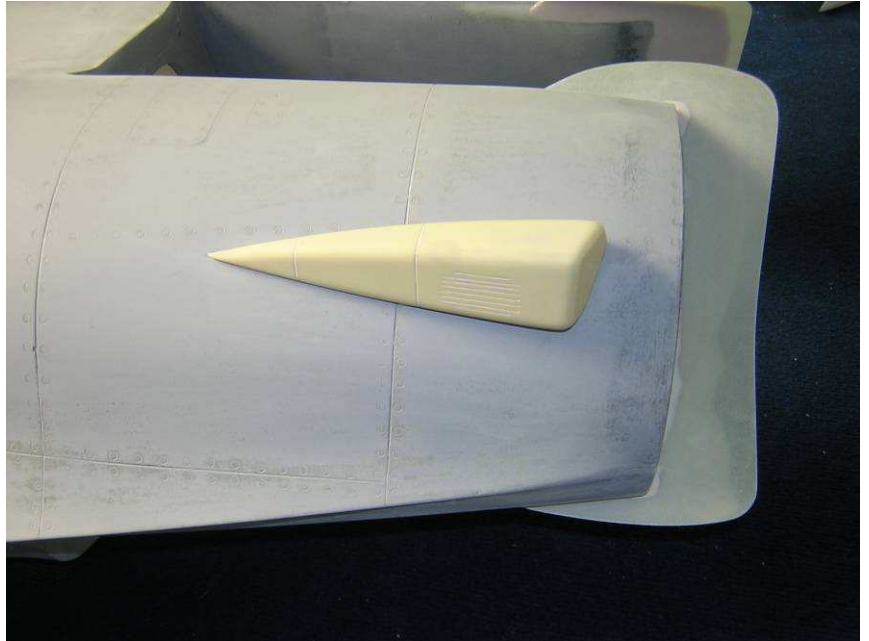
The 2 fiber exhaust cone will be glued to a rear removable frame.  
The central rear pod will also be glued to the rear frame  
This frame will also hold the exhaust pipe and the afterburner led



## ABS and plastic parts (details set)

All the following parts can be glued with  
CA according to the photos

Intake ECM pod

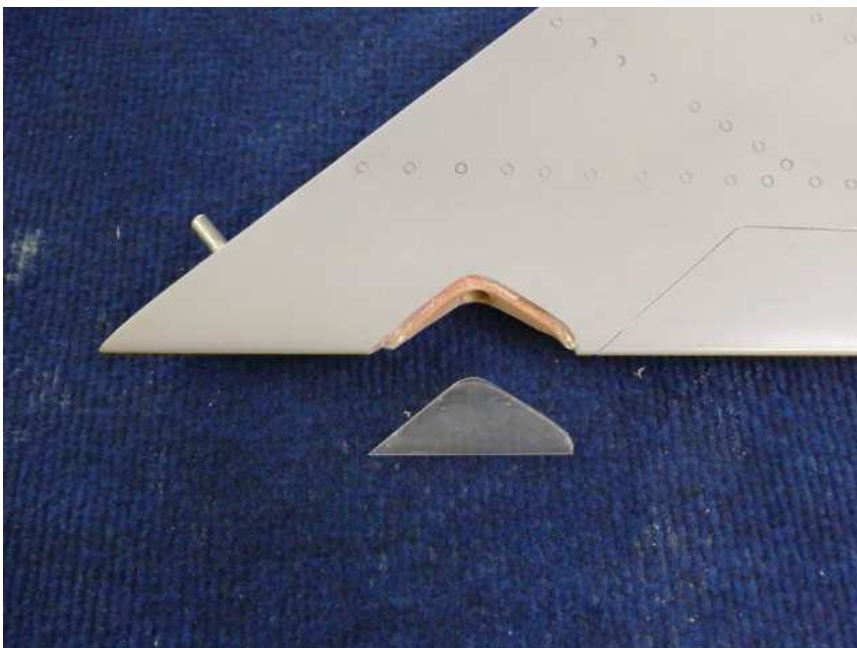
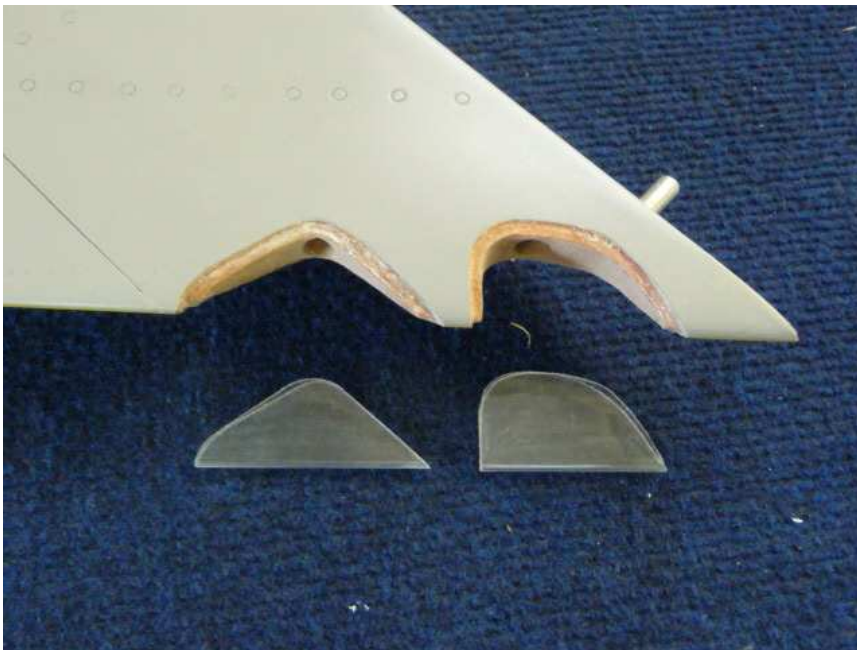


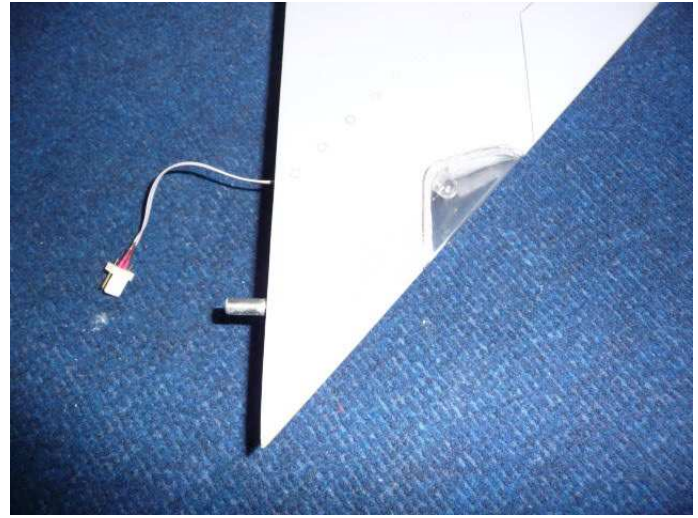
Nose ECM pod



## Light system

Cut the wing leading edge as the engraved line. Cut the clear parts as engraved.



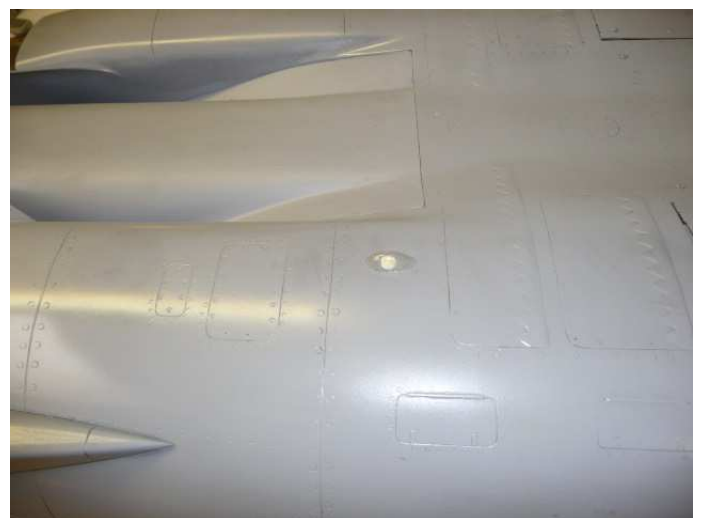


Insert the led system (green right and red left)  
Glue the clear cover

Glue the top strobe light on the top of the fuselage



Glue the bottom strobe on the right intake



## Installation of the single TURBINE :

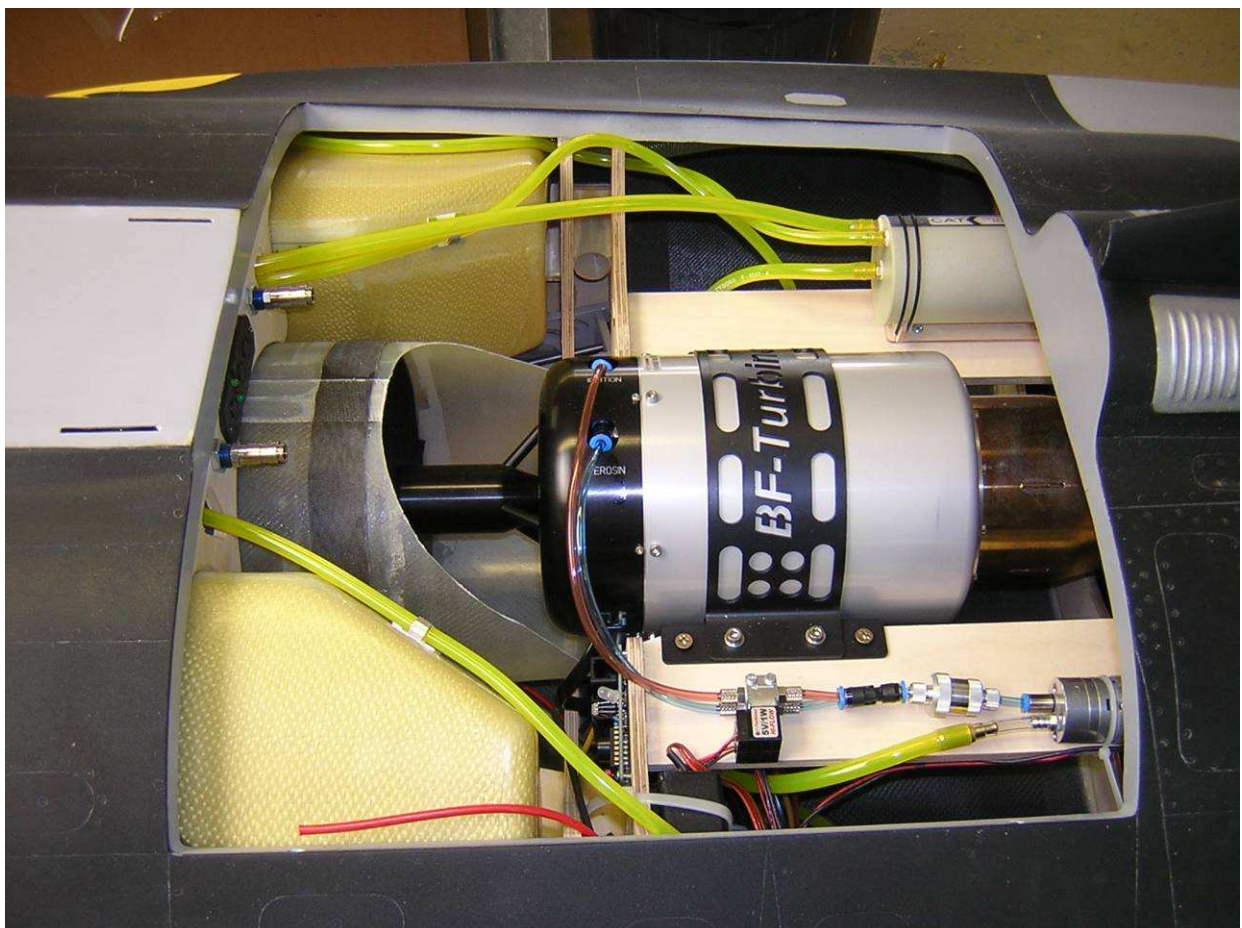
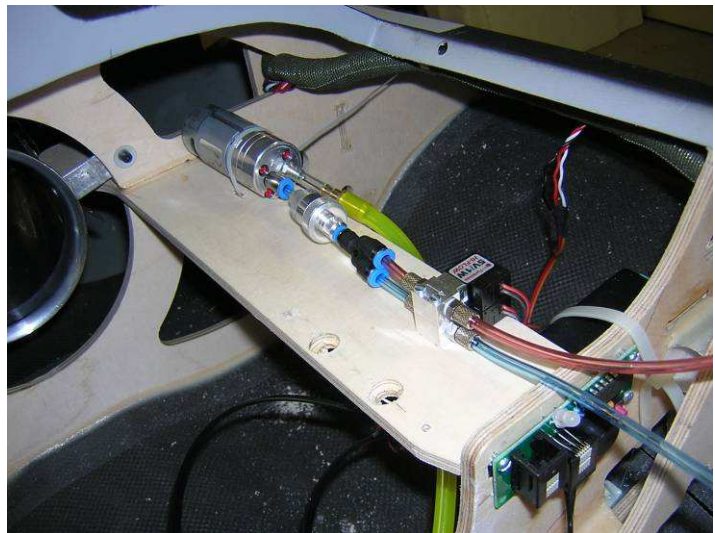
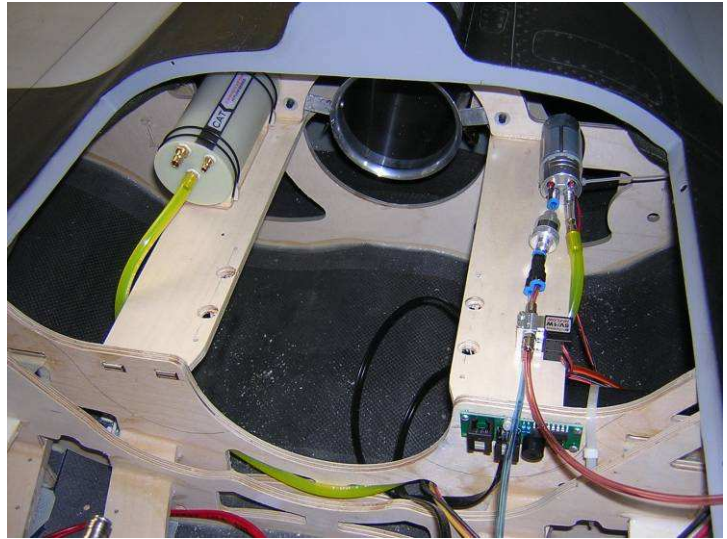
The turbine is just screwed with 4x 4mm diameter screws on the plywood mount.

The engine exhaust cone should go inside the exhaust pipe from about 2 cm .

The fuel pump and electrovalves are fitted on one side of the fuselage just in the fuselage hatch.

The ECU can also be fitted in the engine compartment on a plywood plate

The engine battery is in front top hatch and can be adjusted to obtain the correct CG.



## Installation of the twin Turbines :

The 2 turbines are just screwed with 4x 4mm diameter screws on the plywood mount.

The engine exhaust cone should go inside the exhaust pipe from about 2 cm .

The engine battery is in front top hatch and can be adjusted to obtain the correct CG.



## **FINISHING TIPS :**

Now you have to remove the wax from all the parts to paint.

Please use the white liquid product supplied with your model.

Apply the white liquid with a rag to wipe the wax from all the composite parts.

Remove all product and clean the parts with water after.

Before painting and for a best paint adhesion, we also recommend to sand all the surfaces with a "scotch brit" scouring pad used to wash up the crockery or with #800 grit paper.

## **PAINT :**

**Do not apply primer on the fuselage, wings and fin.**

They must be directly painted.

Think light : excessive paint build-up will add unnecessary weight to the model. Apply light, thin coats of paint and sand between coats to avoid excess weight.

## **Batteries**

Batteries can be located in the central position or in the front section according to the CG.





## **Radio installation :**

The Rafale needs a minimum of 7 good servos :

For the elevons, we **strongly recommend** to fit 4 servos (30 kg.cm torque, ex Futaba BLS 152) : 2 servos per wing

Canards : 2 servos 9 kg torque (ex : Futaba S9402)

NG steering : 1 strong metal gear servo 15 kg torque

Retract + gear doors + brakes : 3 electrovalves

Adjust batteries position to have the correct CG position.

Don't put the receiver and aerial antennae too close to the ECU

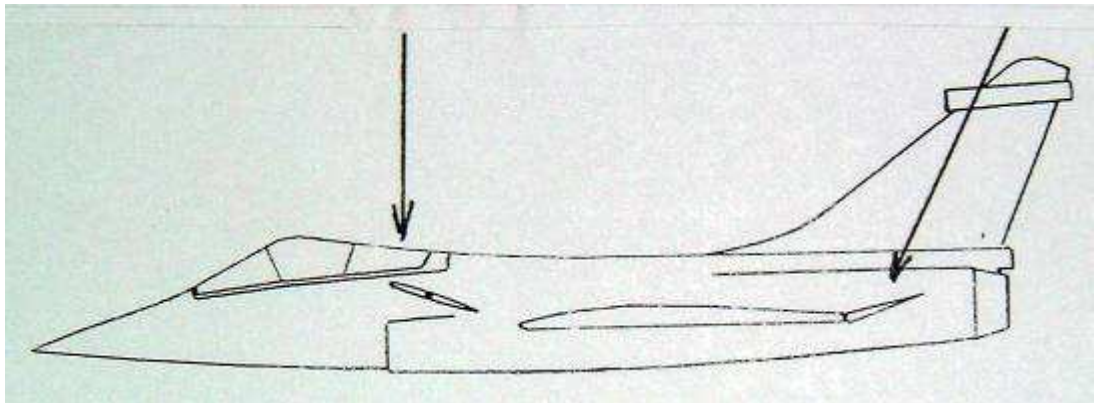
Retract valve and brake valve can be fitted between the air intakes

We also recommend the use of a Power box system or similar system required for the big number of high torque servos

You also need 2 electronic mixers on your radio.

You must mix the 2 elevons like a delta and you must mix the canard with the elevator.

When you pull the stick back, the leading edge of the canard should go up the same as the trailing edge of the elevons.



## **Recommended surface throws :**

### **Ailevons in pitch :**

**Up : 24 mm    Down : 24 mm**

**Exponential: 50**

All measured in the widest part of the surface

### **Ailevons in roll :**

**20 mm left and 20 mm right**

**Exponential: 30**

All measured in the widest part of the surface

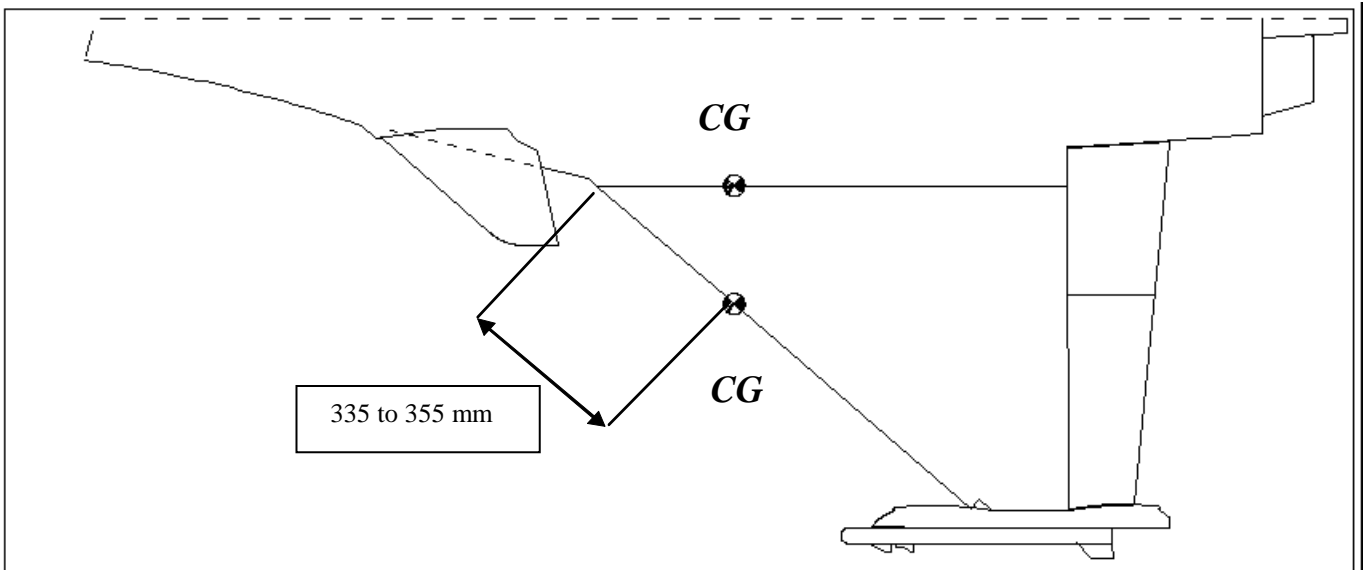
### **Canards :**

**55 mm up and 20 mm down**

**Exponential: 10**

measured at the leading edge of the canard

## Center of gravity



**Note :** balance the model with the gear down and the **tanks empty**.

The center of gravity (CG) must be located between **335 to 355 mm** rear of the wing leading edge. 355 mm is the maximum rear position.

We recommend to use 335 mm for the first flights

If you want to fly with underwing fuel tanks, we also recommend to fly the model with CG at 325mm

You must check it before the first flight, to do this with the aircraft in flight condition but without fuel lift the aircraft in this point, the aircraft must adopt a horizontal attitude. If the tail drops move the batteries forward or add weight in the nose.

In other hand if the nose drops considerably add weight in the tail or put batteries backward.

### **Total weight**

The total weight of the Rafale 27 to 30 kg tanks empty.

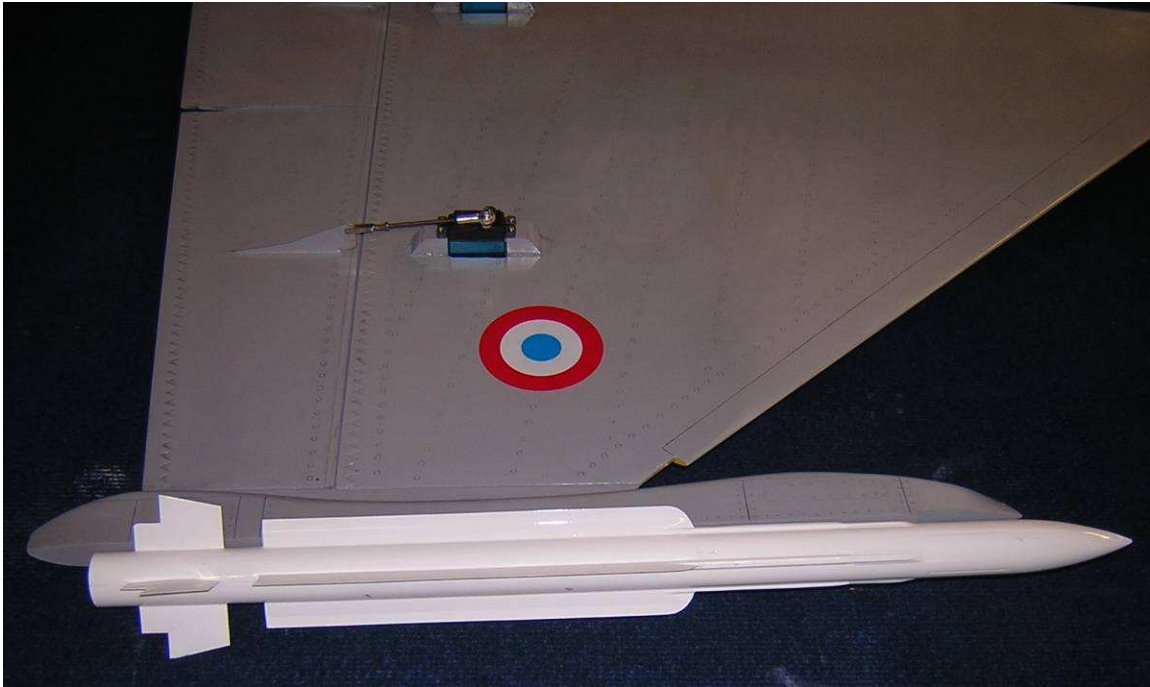
**Important note :** Pay very careful attention to structural integrity. This jet can reach speeds of over 400 KPH - 250 MPH. It is your responsibility to operate it safely.

**Specifications may change without notice.**



## Wing tip missiles and rails

Screw the rails with nylon screws at the wing tip. Blind nuts are already glued in the wing tips.



## Underwings fuel tanks

If you want to install the underwing fuel tanks, you have to glue some blind nuts in the wings at the correct location engraved under the wings.

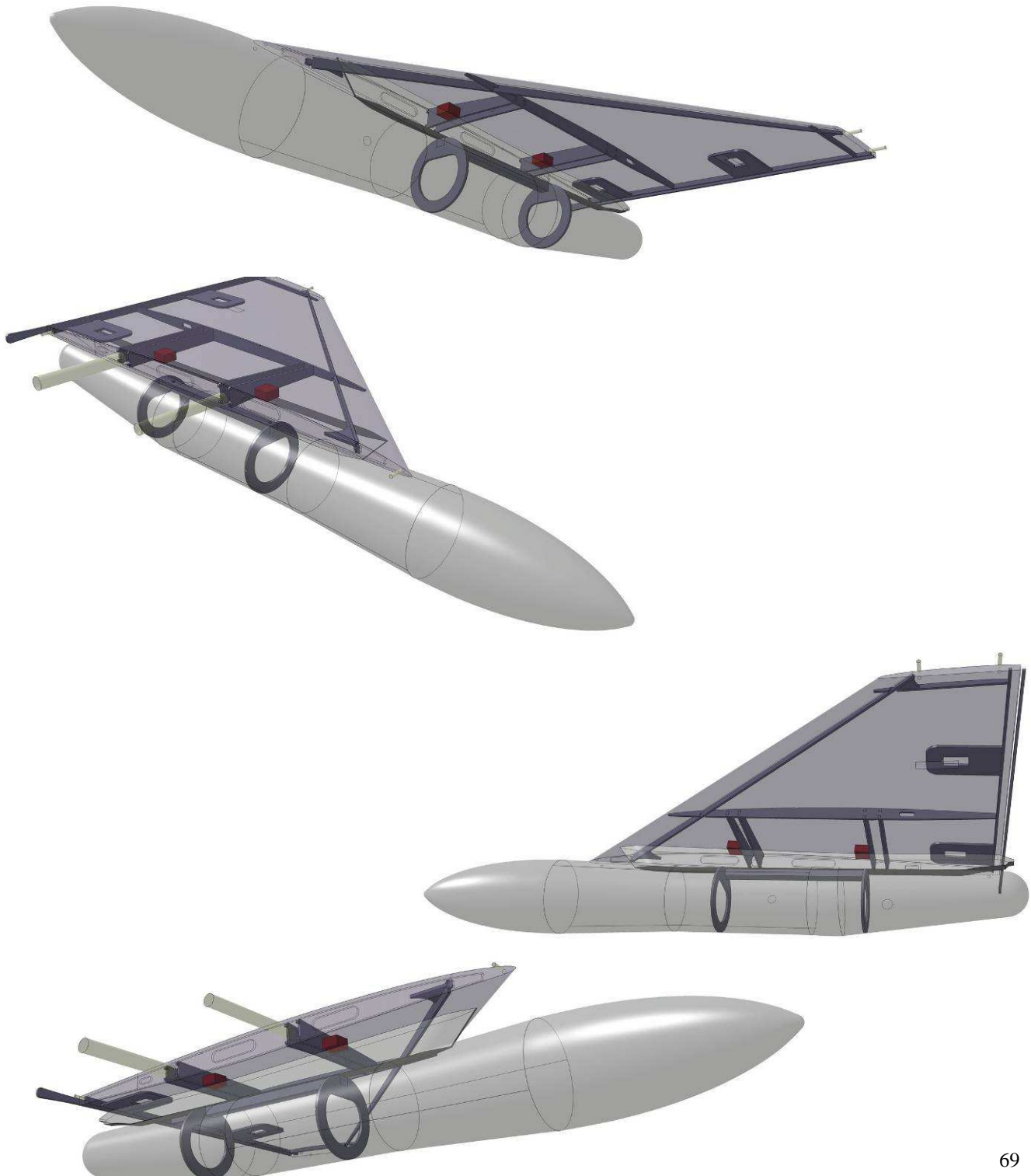
The location is pre-drilled under the wings (2 small 2 mm holes are pre drilled).

2 hard wood block are already installed ready to fit the blind nuts in the wing structure.

Drill the holes in 9.5 mm diameter in the wings

Insert the blind nuts in the wings and glue it.

A wood spare in also inserted and glued in the tank. So you can screw the tank with the rail under the wing with the 2x M5 long screws included (you will need to drill 2 holes in the tank for the screw driver)



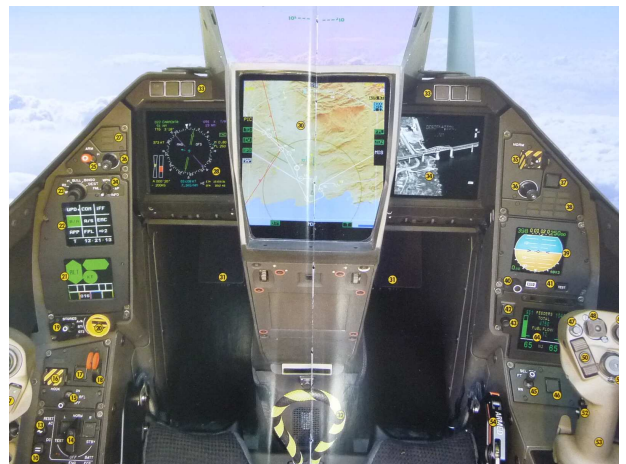
# Instrument panel

As an option you can use the LCD instrument panel

The instrument panel is just glue on the plywood frame



For standard version, find below all the instrument page from the real RAFALE. So you can print them and glued them at the back of you instrument panel



ALIGNMENT				28/01/08 13:17:23
MEM POS	GPS POS			
ALN	001	N 48.39,003	E 4.53,171	Z + 430
INU1	INU2	SH 200	DFT C/NL	

Avant alignment

ALN IN PROGRESS				28/01/08 12:07:03
GPS POS				
ALN	001	N 48.39,020	E 4.53,137	Z + 454
INU1	INU2	SH 200	DFT C/NL	

Pendant alignment