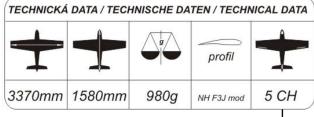
REICHARD MODELSPORT Palackého 134a, 612 00 BRNO,CZ www.reichard.cz





# **CIRRUS**

Made in Czech Republic



# Cirrus

Dear friends,

Thank you for purchasing our F5J competition high performance electric-powered glider Cirrus.

Cirrus is made from slected special light balsa wood.

#### Special Features:

- Carbon fuselage ; carbon gondole and carbon / kevlar tail tube
- Foam core balsa sheeted two-piece wing
- Made by CNC technology
- Pre-made servo trays
- Two carbon wingjoiners
- Fibreglass canopy
- Pre-hinged ailerons
- Oracover on wings and balsa tail parts
- Tight covering, with all seams hand-sealed
- Includes all necessary hardware

#### RC function:

- Rudder
- Elevator
- ailerons
- flaps
- motor

#### <u>Fuselage:</u>

Glue together assembly of No.1, 2 and 3 bulkheads (see fig. 4 and fig 9). Insert bulkhead assembly into fuselage as deep as possible without problems and too force (fig. 16). Glue the assembly in this position by 5min epoxy. Glue the front motor mount bulkhead with  $-3^{\circ}$  down and  $2^{\circ}$  right angles (fig. 7). Fuselage pod is sharped in these angles. Glue the No. 4 bulkhead in the end of fuselage pod as rail of pushrods (fig. 8 and 14).

Attach the CFK piece to the end of tail tube, mark the position of holes for M3 aluminium nuts. Drill the holes carefully and glue CFK piece, M3 nuts and tail tube together by 5 min epoxy (fig. 6, 10 and 15). Glue hinges into rudder (fig. 6). Screw the elevator to the place, use fiberglass underlayers. Attach rudder sca 10mm in front of elevator leading edge. Mark the position of rudder leading edge on the tail tube. Drill two holes for 1.5mm CFK pins which are used as reinforcement of rudder (fig. 6). Glue the rudder upright to elevator. Drill and sharp hole for rudder pushrod in place where the leading edge of rudder is placed (fig. 13). Insert pushrods into fuselage pod. Attach wings to fuselage pod by crews. Find the right position of tail tube, and carefully glue the tail tube to the fuselage pod. Get down wings. Insert servos into fuselage pod. Glue the control horns into rudder and elevator. Connection is made by pushrods with " L-bend" in the control horns and by clevises in servo horns. The "L-bend" is possible to fix by piece of heatshrink tube.

#### Wing:

Find the pre-drilled servo bays and cut-off the covering film with sca 3mm offset. Iron the overlaps into servo bays (fig. 5). Remove the foam from servo bays, see the balsa reinforced by fiberglass (fig. 5). Extend the servocables (solder them). Try the right position of servos in bays. Some types of servos you have to wedge by balsa wood underlayers (fig. 2). Glue the underlayers and servoframes. The servocover frame have to be sca 0.5mm deep under surface. Be careful to place servo under this frame (fig. 1). Glue the servocover frame with drops of CA.

Glue the control horns into ailerons and flaps. Connection is made by clevis in control horn and "Lbend" in servo horns. Drill the 2mm holes in servo horns. Servocovers is possible to fix by screws 1.6mm or by power tape.

#### Canopy:

Drill the 1.8-2.0mm hole in the front of canopy and srew into the 2.2mm screw (fig. 11 and 12). Sharp the groove in the fuselage in place where canopy screw would be placed. Make a hole for 3mm magnet in the bottom of fuselage (fig. 11 and 12) and gle the magnet in. Mark the right position of magnet in the canopy, sharp the groove and glue the magnet in.

#### **Reccomended equipment:**

- 36mm diameter motors, 300-400W, weight 180-220g
- 3s LiPo 1300 1800mAh
- 50A ESC
- servo HS-81 (rudder, elevator) servo DES-448MG, HS-125MG, HS-81 (ailerons) servo DES-448MG, HS-125MG, HS-82MG (flaps)

25 mm

#### **Reccomended settings:**

- ailerons: +18 / -10 mm
  - +- 15 mm
- elevator:rudder:
- CG position: 110-120mm from leading edge

Many happy flights with Cirrus wishes to you

**Reichard Modelsport** 

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Hobby Club

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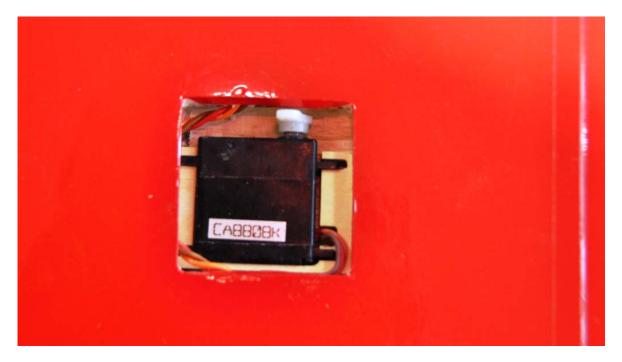
## Parts list of Cirrus :

Wings	- 1 pc
Fuselage pod + tail tube + canopy	-1 + 1 + 1 pc
Rudder	- 1 + 1 pc
Elevator	- 1 pc
CFK elevator plate	- 1 pc
M3 aluminum nut	- 2 pc
Nylon screw M3	- 2 pc
Fiberglass underlayer M3	- 2 pc
Steel screw M4 x 20	- 2 pc
Steel screw M4 x 25	- 2 pc
CFK wingjoiner dia. 10mm + dia. 6mm	-1 + 1  pc
Bulkhead č. 1, 2, 3, 4	- á 1 pc
Motor mount bulkhead	- 1 pc
Magnet	- 2 pc
Screw 2,2mm	- 1 pc
Pushrod	- 2 pc
Control horns set (6 pc)	- 1 pc
Pushrod 80mm	- 4 pc
Clevis	- 6 pc
Servocovers	- 4 pc
Carbon pin 1.5mm	- 2 pc
Rudder hinges	- 2 pc
Servoframes	- 4 pc
Balsa wood servo underlayer	- 8 pc
Servo cover frame	- 4 pc
Screws for servocover fixing	- 16 pc
Decals	- 1 pc

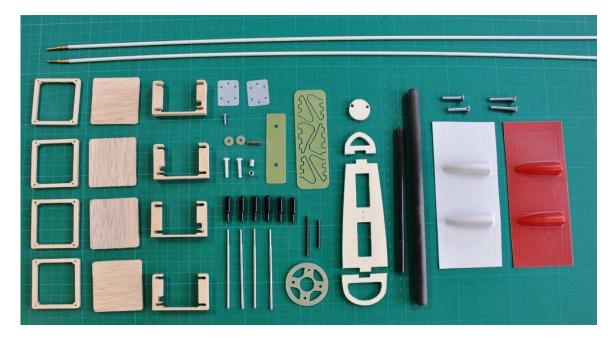
#### **Building instructions**

## fig. 1







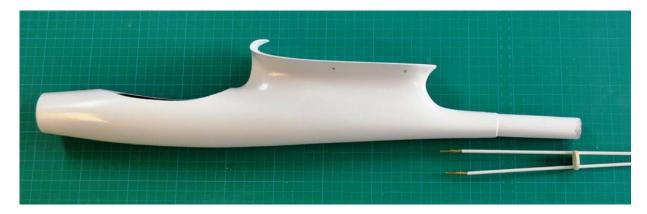


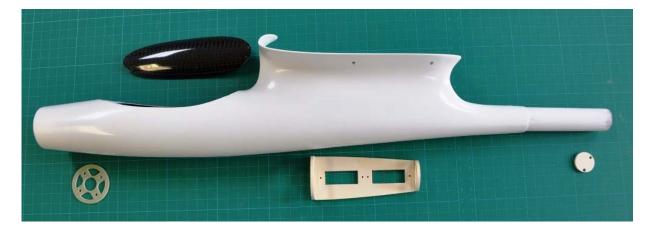


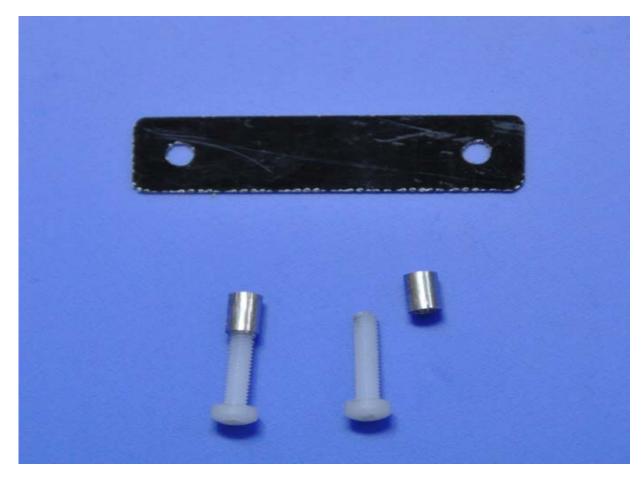








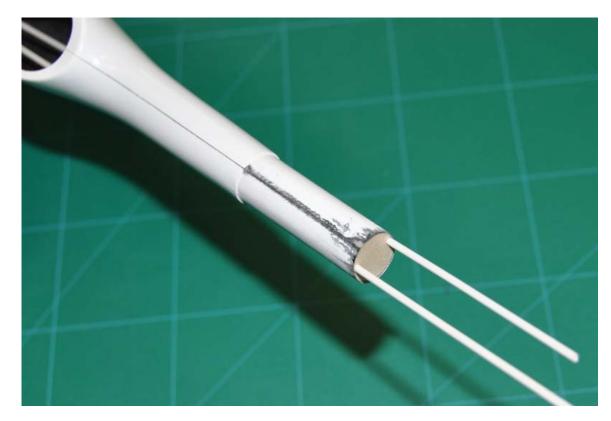




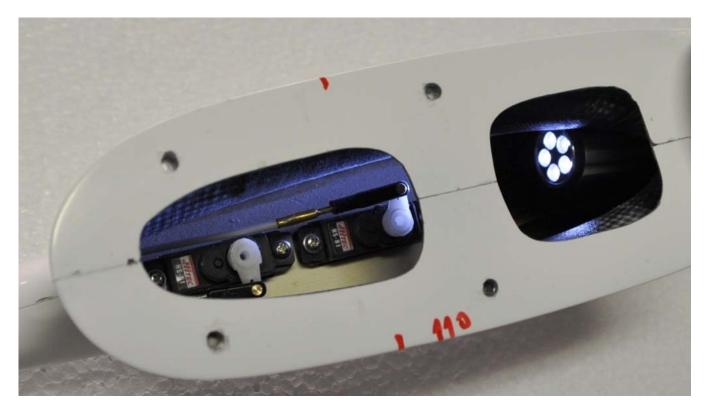














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