PULSAR 2008

F5J Electric Sailplane.

Pic. 1

PULSAR 2008 requires some assembly, but the high standard of prefabrication make this a breeze. These instructions are kept to a minimum, since most flyers will may choose to install equipment in their own tried and tested way. (Pic. 1)

PARTS LIST (Pic. 2):

CENTRAL WING PANEL - composed of a carbon/balsa "D" box, covered with ORACOVER, plus a carbon spar.

WING TIPS - composed of a carbon/balsa "D" box, covered with ORACOVER, plus a carbon spar and joiners.

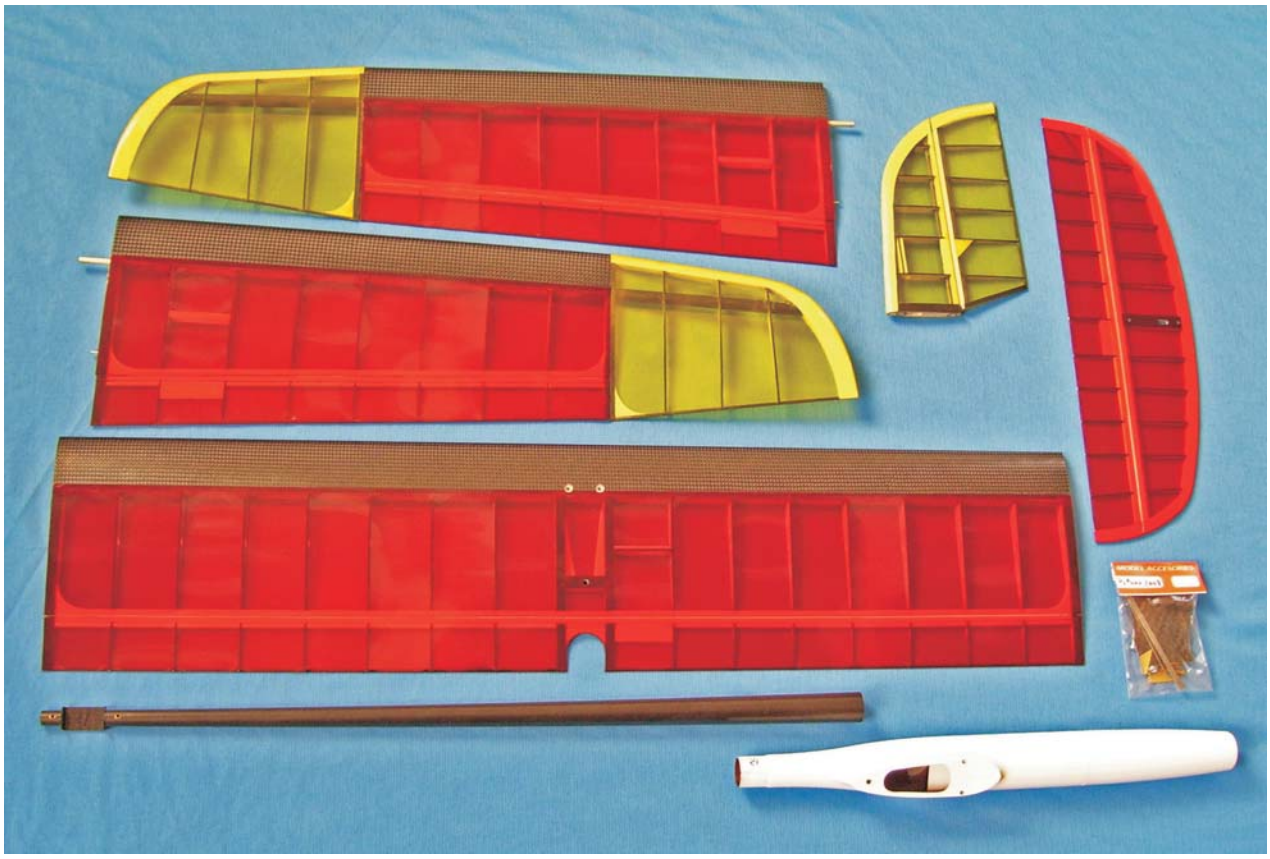
FLAP and AILERONS are complete and hinged.

STABILIZER - a carbon/balsa design covered with ORACOVER. The elevator is complete and hinged.

FIN - a carbon/balsa design covered with ORACOVER. The rudder is complete and hinged.

FUSELAGE (composed of three parts)

- a pre-painted and laminated removable kevlar nose cone.
- a pre-painted and laminated kevlar fuselage.
- a high tech carbon Tail Boom



Pic. 2

ACCESSORY PACK - servo covering plates, screws, metal plug pushrods and plastic horns.

Parts not included: R/C equipment, motor, battery, spinner, propeller.

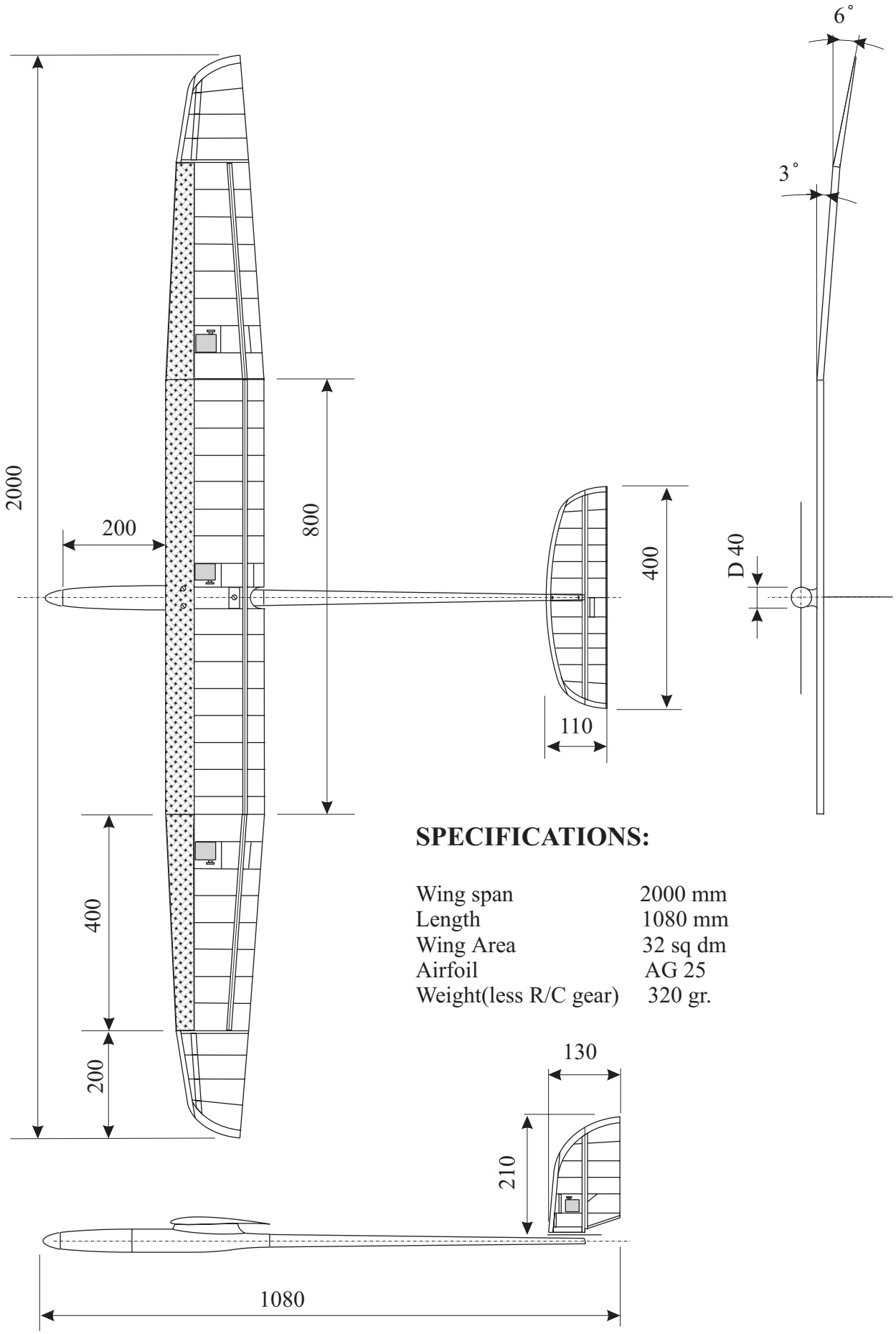
Recommended equipment:

For competition:

Motor	SPEED-400 with Cosmoteh gearbox
Speed Controller	25A
Battery pack	8 cells 1100 NiMh
Spinner	D = 30 mm
Propeller	folding 12” x 7,5”
Servo	3 x 11mm for flap/ailerons (DS 281/JR)
	2 x 8 mm for rudder/elevator (FS 31/Robbe)

For Fun Fly:

Motor	Hacker B20-15L
Controller	Phoenix 25
Battery pack	2-3 LiPo
Propeller	folding 10” x 7”

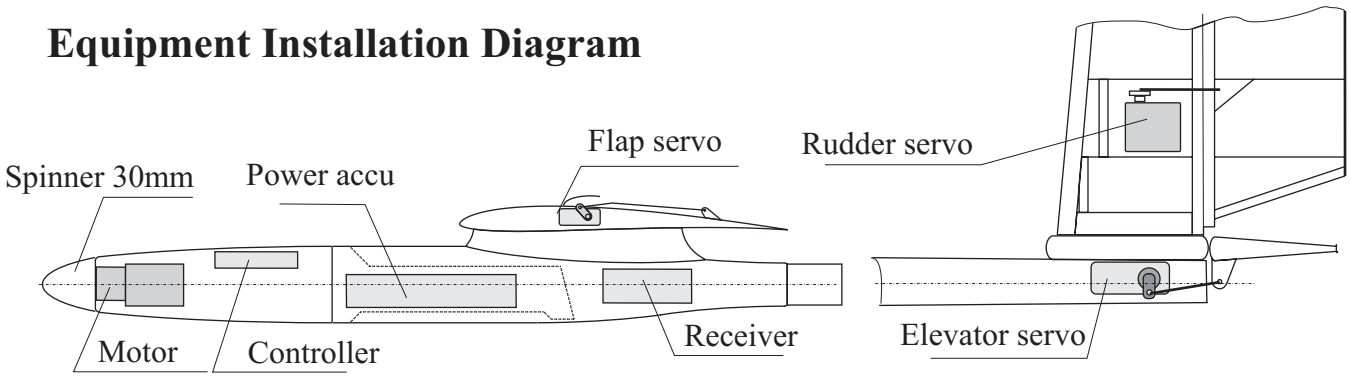


SPECIFICATIONS:

Wing span	2000 mm
Length	1080 mm
Wing Area	32 sq dm
Airfoil	AG 25
Weight(less R/C gear)	320 gr.

Pic. 3

Equipment Installation Diagram

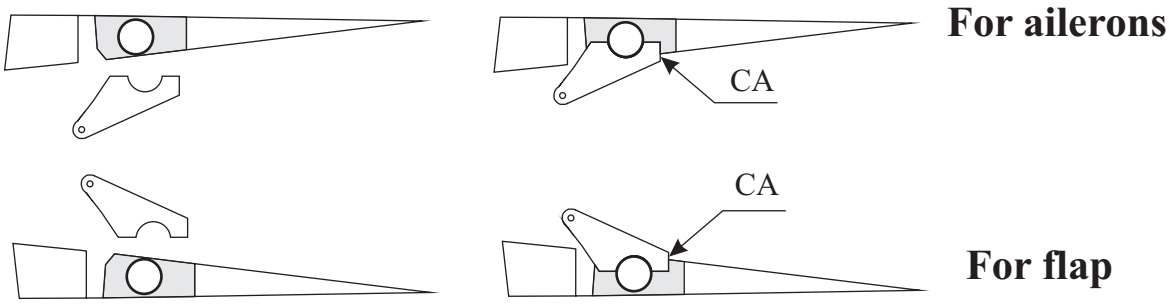


Pic.4

Servo mount.

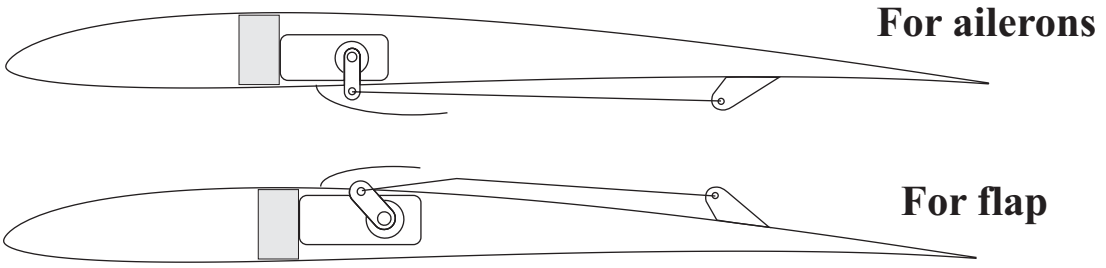
Aileron/flap.

Cut out slots in the aileron/flap for the fiberglass horns and CA them in place (illustration 5).



Pic.5

Mount the servos into the wing and epoxy in place. Adjust the length of the aileron/flap pushrods, bend as shown in illustration 6. Connect the servos with the pushrods to the aileron/flap. The servos may now be covered by taping the servo covers in place, again noting a right and a left cover.

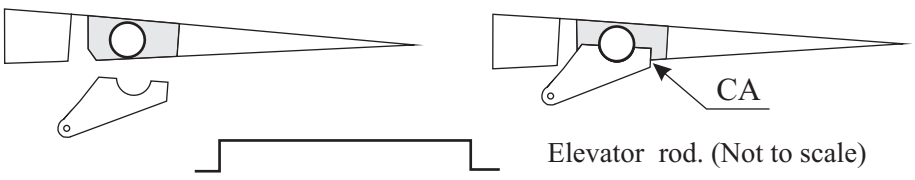


Aileron/Flap pushrod (Not to scale)

Pic.6

Elevator

Mount the elevator servo into the tail boom and epoxy in place, as per illustration 4. Cut out slot in the elevator for the fiberglass horn and CA it in place, see illustration 7. Mount the stabiliser to the tail boom. Adjust the length of the elevator pushrod, bend as shown in illustration 7. Connect the servo with the pusrod to the elevator.

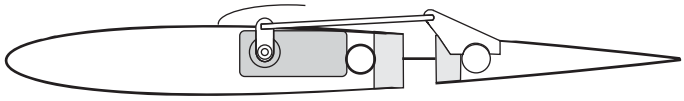


Elevator rod. (Not to scale)

Pic. 7

Rudder.

Cut out slot in the rudder for the fiberglass horn and CA it in place as per illustration 7. Mount the servo into the fin and epoxy it in place. Adjust the length of the rudder pushrod, bend as shown in illustration 8. Connect the servo with the pushrod to the rudder.
Use tape to secure the servo covering plate over the servo.

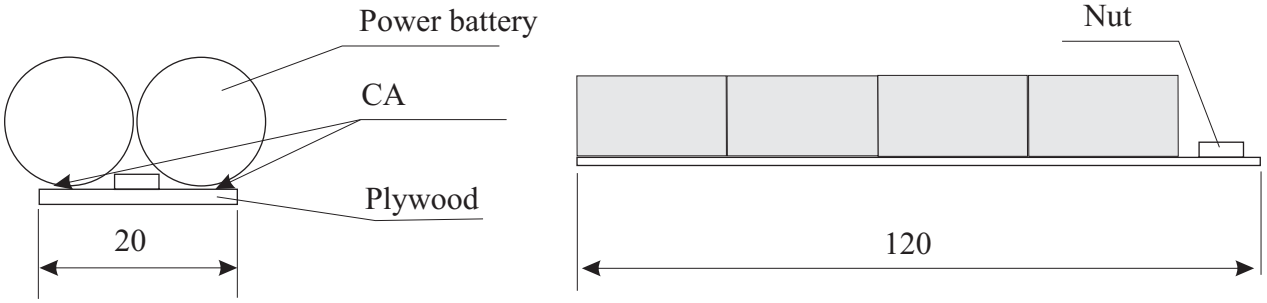


Rudder pushrod. (Not to scale)

Pic. 8

Power Battery Plate Mount.

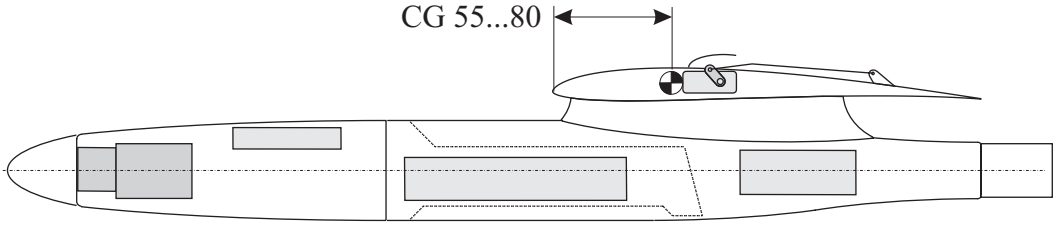
You will need a plywood 2 mm. Cut pice of plywood 120 x 20 mm. Fix the power battery to plywood (CA or thermo film). Drill the needful hole for the nut and epoxy it in place, see illustration 9.



Pic. 9

Center of Gravity.

The location of the CG is approximately 55-80 mm back of the leading edge of the wing.
The CG location can be regulated by moving the power battery location forward or backwards in the fuselage, as per illustration 10.



Pic. 10

Recommended Control Travel:

Ailerons	+ 5 mm / - 5 mm
Elevator	+ 3 mm / - 3 mm
Rudder	+ 6 mm/ - 6 mm
Flaps	Full down

Tape down all removable parts before flying!

GOOD LUCK!