

# EM-2

Thanks to Ed Olsewski  
from Propbusters Club  
for this set of plans.

And thanks to Bob Branch of the Flyn Wolverines for sharing this with us.

## Site for the Depron foam

<http://www.depronusa.com> (find someone to share an order with)

1 piece 19x27- 3mm (Tail feathers & ailerons- you will have lots extra)

1 piece 19X27-2mm (1 wing)

## Sites for the electronics

<http://www.aeromicro.com/> or <http://www.foamfly.com>

*Aeromicro has very good service, most often receiving stuff within 2 days of order.*

*This is the stuff I bought for one plane (and approximate prices):*

1 - GWS IPS-DX2BB (AXCS) @ \$17.45 (motor and gearbox)

1 - GWS 4-Channel Pico Receiver-horizontal pin  
(chose: Futaba or JR/Airtronics compatible) @ \$19.95

1 - GWS Micro Crystal for GWS Pico (your channel), @ \$7.45

1 - E-tec High -C Lithium-Polymer 700 mah 2-cell (7.4v) Pack @ 22.95

1 - GWS ICS-100 ESC @ \$19.45 (speed control)

2 - GWS Pico BB Servo @ \$21.95

1 - GWS 2.0 Ultra Light Shock Wheels (1 Pair/Pack) @ \$1.95

1 - GWS Slow Flyer Propeller EP1047 @ \$2.15

3 -micro control horns (come 2 per pack) @ .95

## Hobby shop and Hardware store items:

1/16 X 3/4 X 27" balsa (wing spar)

3/16 X 5/16 X 24" bass wood or spruce (Fuselage)

1/32 piano wire (control rods)

1/16 piano wire (landing gear)

1/32 plywood (small amount)

Bamboo skewers (grocery store)

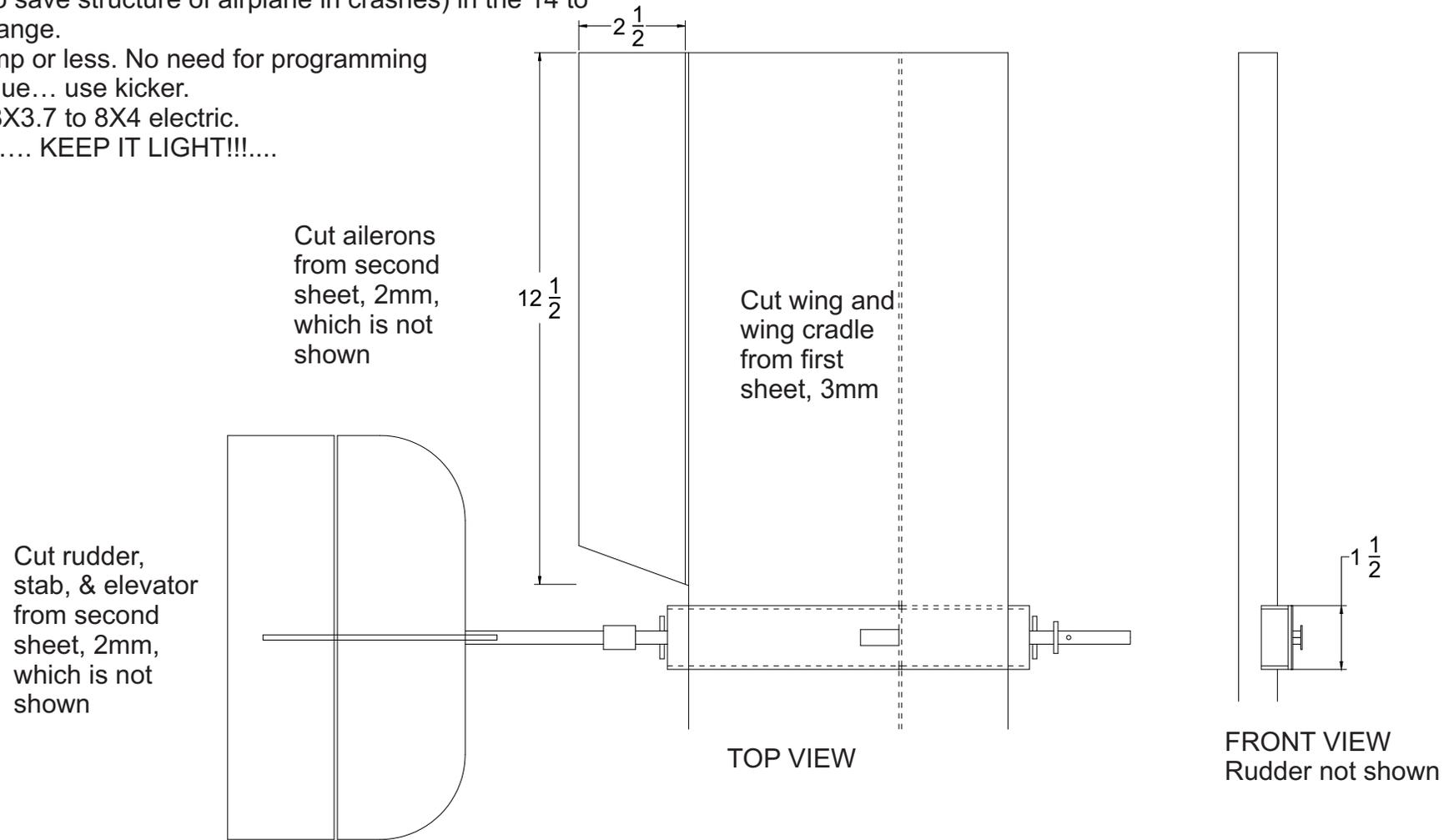
5 minute epoxy

Double sided tape ("Frost King"-found with window insulation kits)

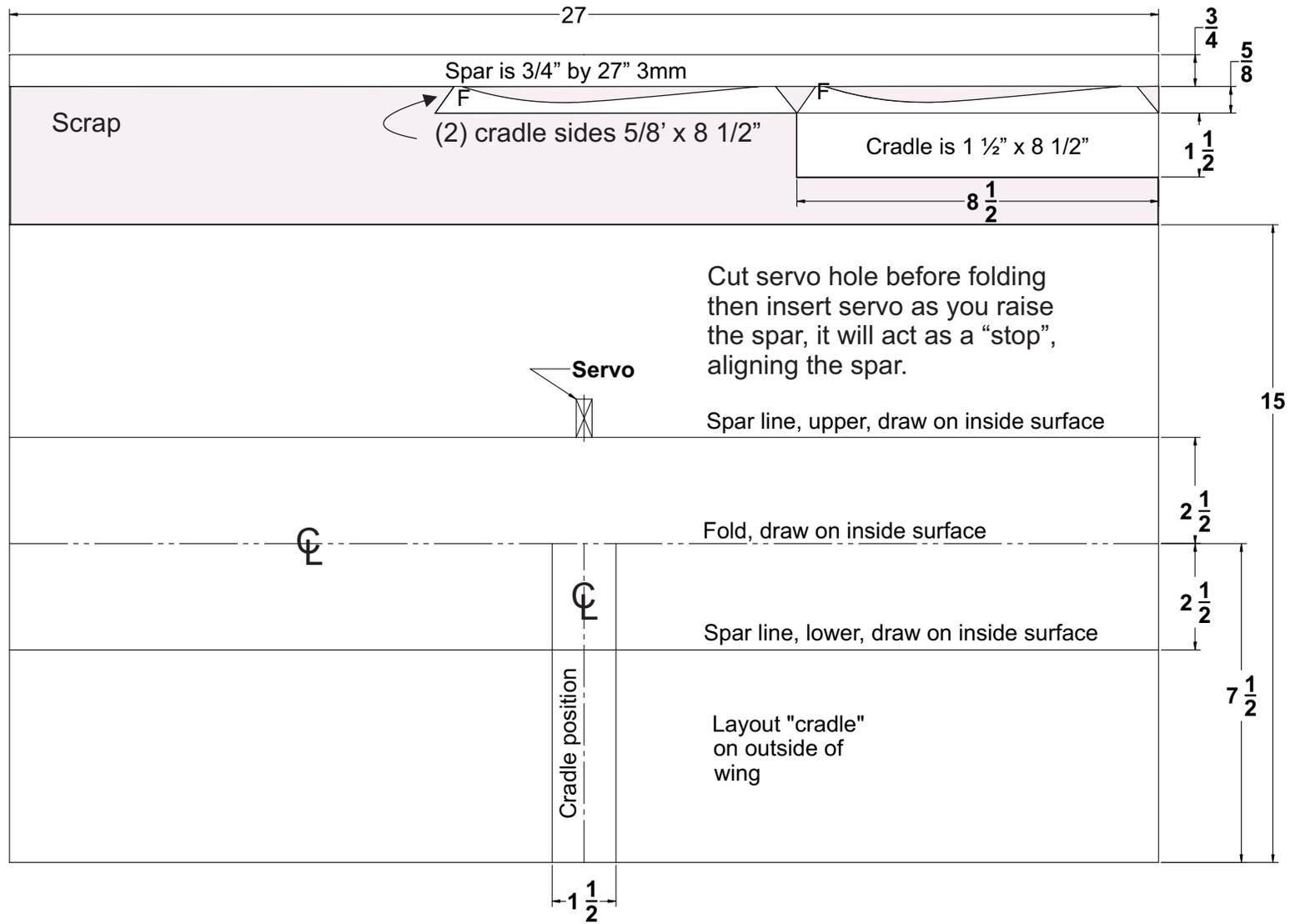
Packaging tape (2 mil-extra hold. Do not use "easystart" types)

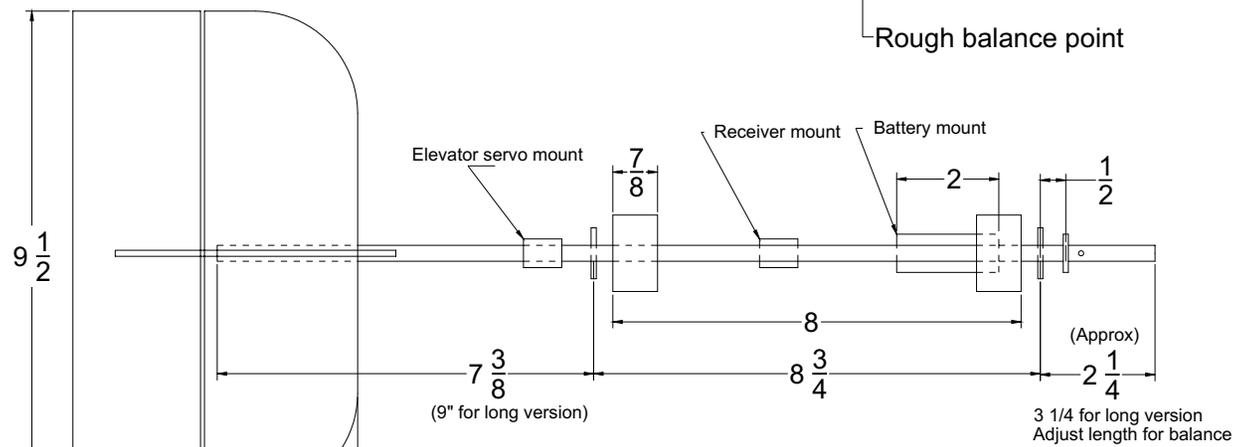
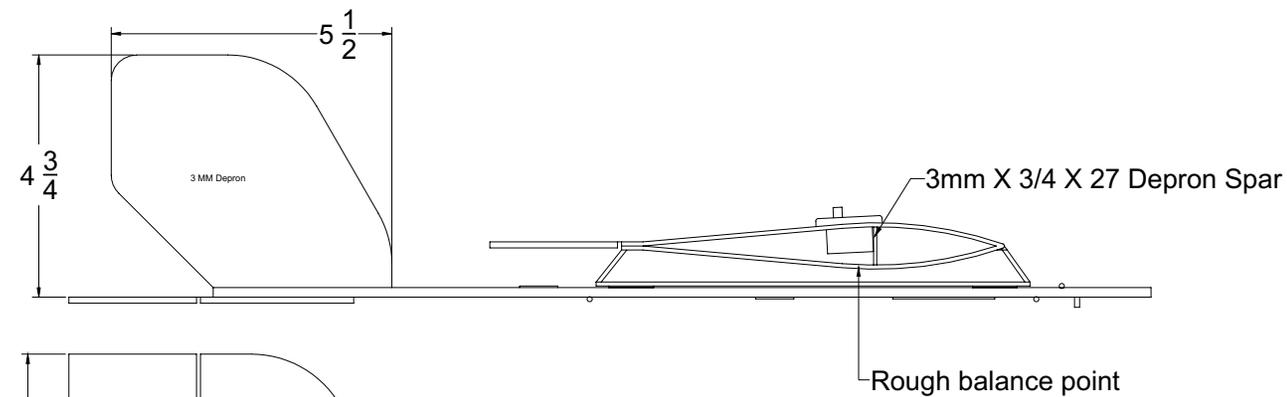
Bob Branch uses "Zagi" tape with great results.

Fuse stick carbon fiber tube 1/8 to 3/16 in diameter.  
 Motor stick standard GWS motor stick (10mm X 10 mm)  
 Motor mount standard GWS or similar 300 size mount with socket for 10mm X 10mm stick mount  
 Ailerons and tail feathers in 2mm depron foam instead of 3 mm depron.  
 Motor: Any 15 to 20 gram outrunner with prop save (very important to save structure of airplane in crashes) in the 14 to 1600 rpm range.  
 ESC: 10 amp or less. No need for programming  
 Thick CA glue... use kicker.  
 Prop: apc 8X3.7 to 8X4 electric.  
 Remember.... KEEP IT LIGHT!!!.....



# 3mm Depron Sheet (2mm sheet not shown)





Servo mount, receiver mount, battery mount and two cradle mounting pads are plywood, three are on top, two on bottom as shown.

Bob Branch suggests using a CF rod or tube for most of the fuse, inserted into the 10mm sq motor stick, drill about 1" into the back of the stick and CA the CF in to it. This will hold up better to abuse.

# Wing Construction

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1) After applying packaging tape to **outside** leading edge. On the **inside**, use the backside of a pen to crush along the fold line.



2) Fold wing completely in half, lay flat object to hold folded wing flat and use razor knife to trim both sides of the fold exactly the same length (very important) (Trimming the TE is shown below)



Below, the double-sided tape is for the TE



3) Use tape to secure bottom edge of spar to inside of wing, laying forward, so that it can be rotated up and against the servo after folding the wing and securing the trailing edge. Fold wing flat first.



4) Use stick to push spar horizontal, and align with spar lines, tack with epoxy every couple inches using long bamboo skewer. If servo was in place, it would act as an alignment "stop".



5) Glue sides on cradle, let cure then glue cradle to bottom of wing.