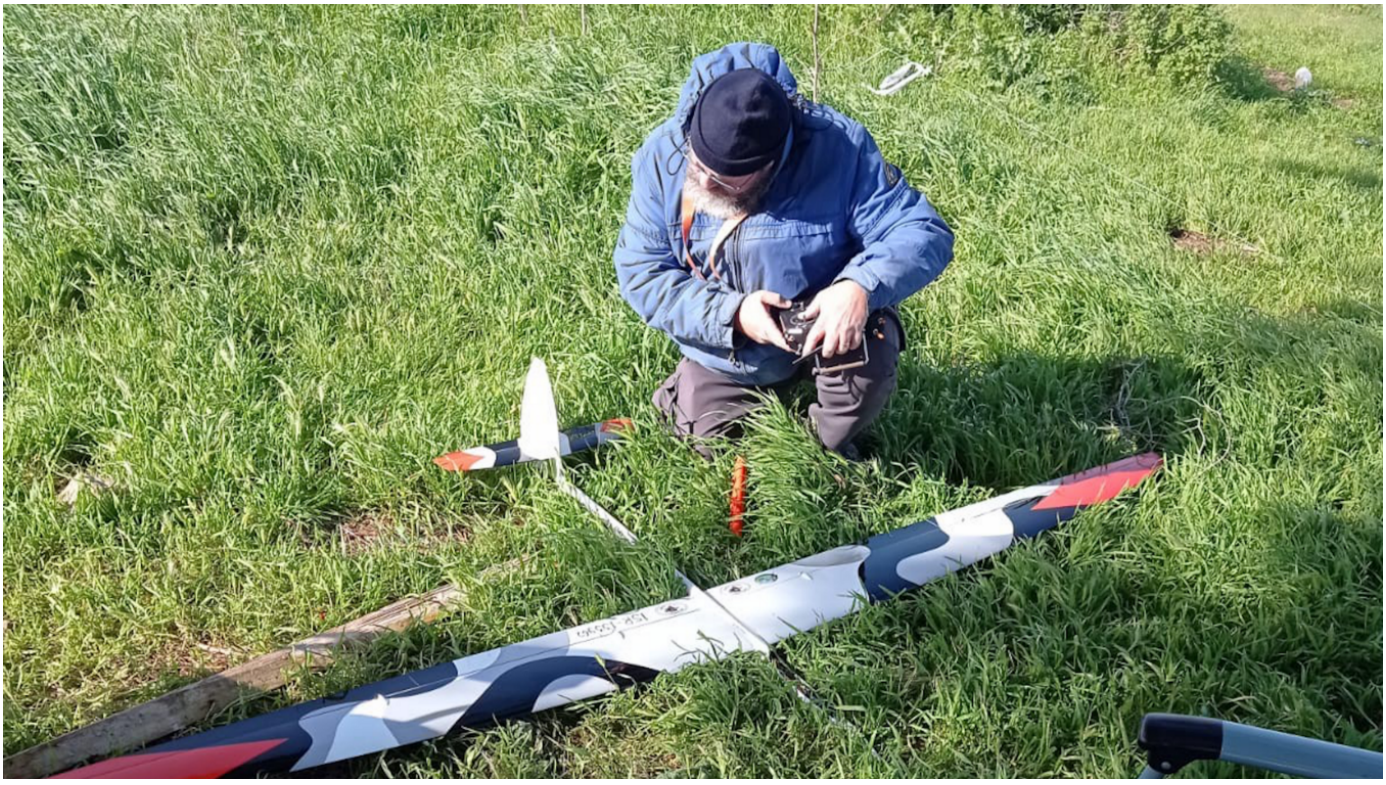
Pre-Flight Check

Because you know you should.

Rene Wallage

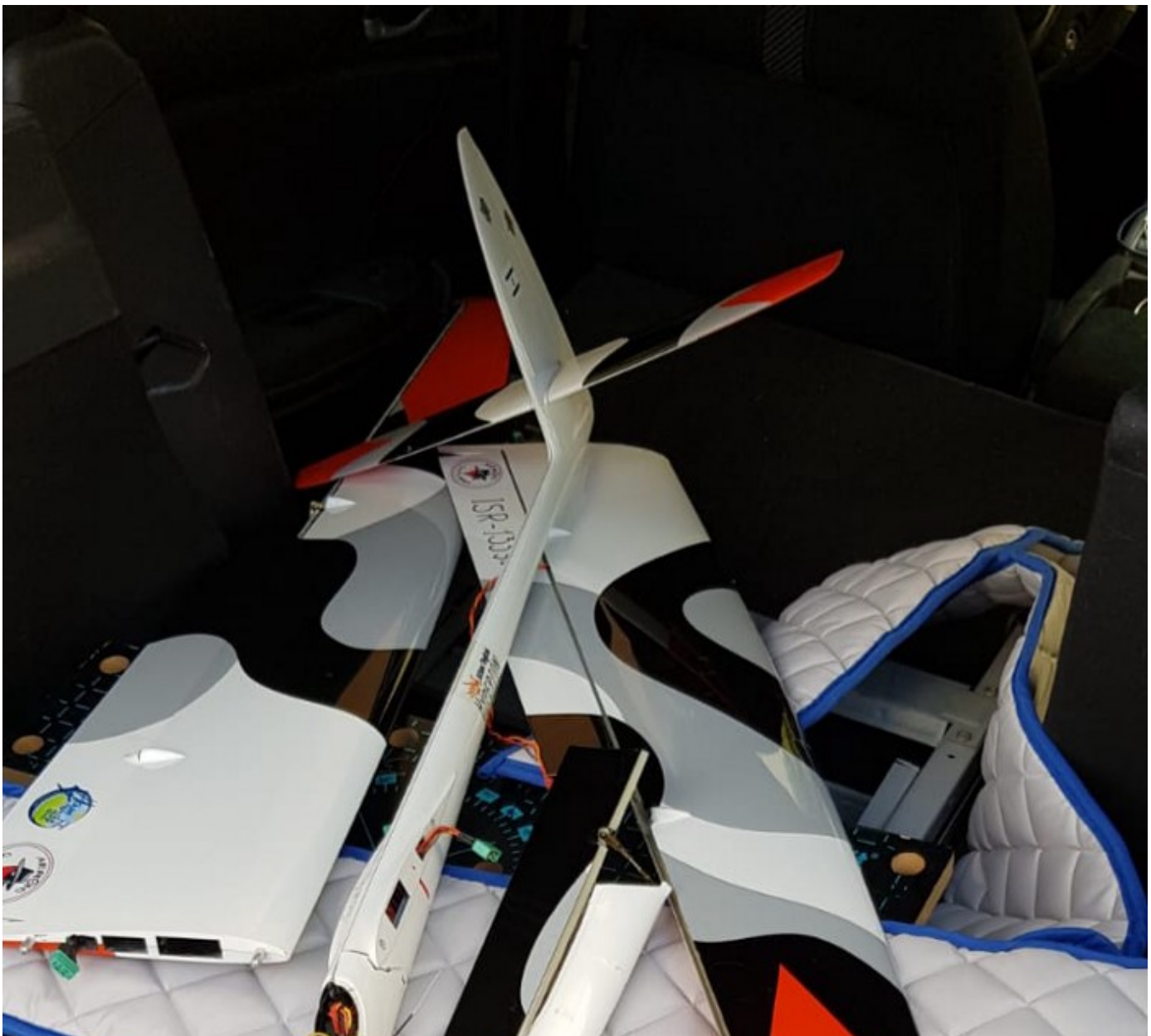


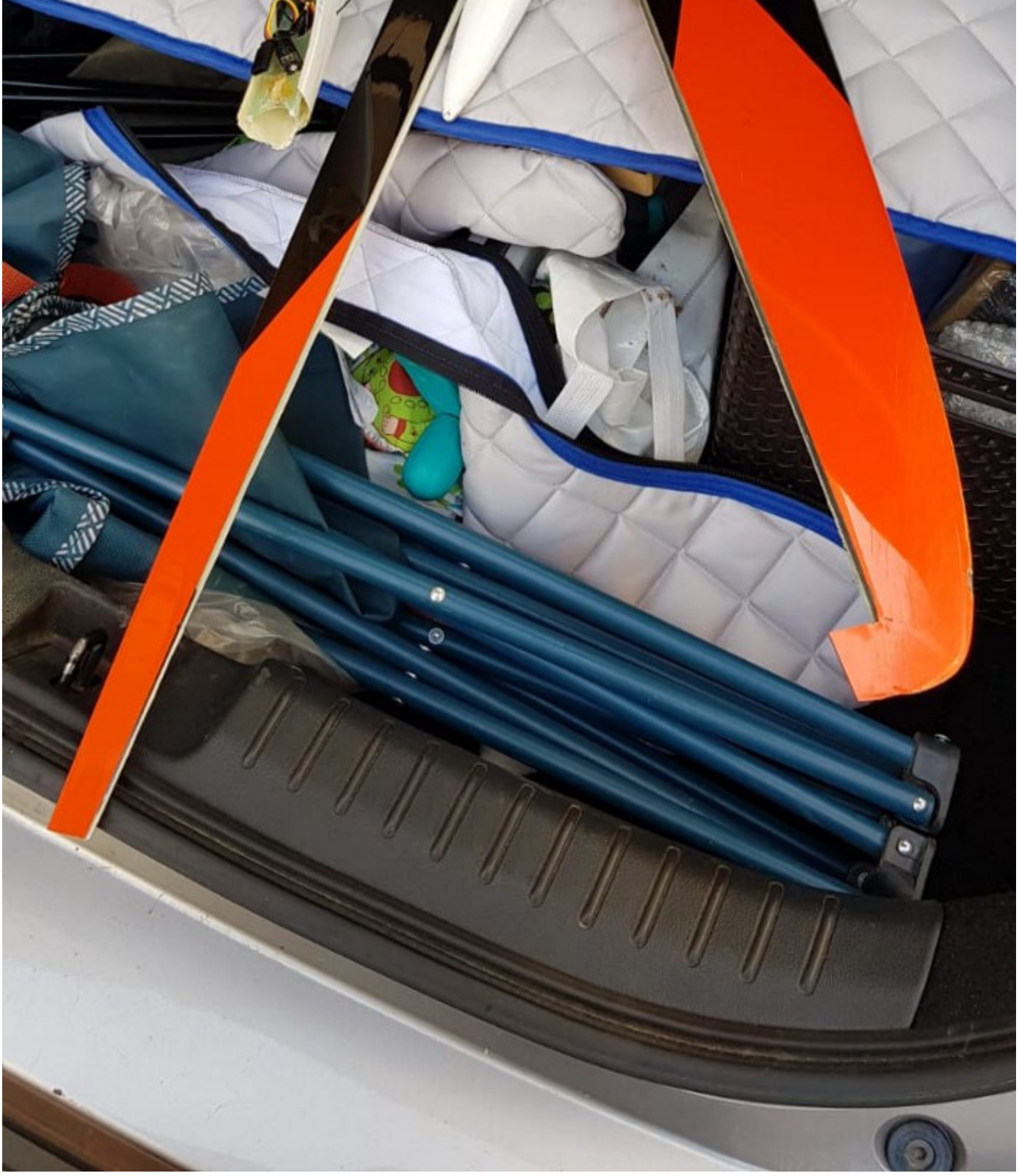
Just a few adjustments to the Tx settings, before the maiden flight.

Be honest, raise your hand if you ever crashed your model due to stupidity. Ok, anyone not raising his hand is either very lucky, has flown for less than a month, or is lying.

We've all done it. Call it what you will; a glitch (my speciality, although with 2.4 that doesn't work that well anymore), dumb thumbs, forgetting something like switching on the Rx, the list is endless. Or, like I did a couple of weeks ago, set up a brand new glider (a Schwing Corsa) in the comforts

of my salon at home, than on the slope made some adjustments to the ailerons differential values just before launch, launched and realized within the first 3 seconds that the value change I did, reversed ailerons: left was right and right was left. So the maiden flight was very short, and painful. I put the wreck in the car, and flew my e-Typhoon… The wreck stayed in the car for more than a week. I just couldn’t get myself to take her out of the car. I did take some pictures though, and saw that the damage is repairable.





Post launch, after a few ‘minor Tx adjustments’. Luckily, the walk of shame was short.

A few years ago, I wrote here about proper pre-flight checks, and how it saved my Bird of Time.

As I didn't save my Schwing Corsa, this calls for a refresher.

Pre-flight checks are vital. My late father was a pilot instructor in the airforce (T6, P51D), and taught me to fly 1:1 very young. He was old school, and wasn't afraid to use his hands to show me how big a mistake I made. I learned to fly the Super Cub often while leaning forward, so his hand couldn't reach the back of my head... And he drilled it in to me. E-v-e-r-y s-i-n-g-l-e flight, whether it's your first or your 6th of the day, you do a full pre-flight, including a walk around. Count the wings, blades, wheels, everything. What should move, moves. What shouldn't, doesn't. Once in the cockpit, checking stick movement, look at the surfaces to see they work, and move in the right direction. Say it out loud: "Stick left, left aileron up — right aileron down", etc.

The models we fly (big or small) stay in the air because of the same aerodynamic laws as full size ones. Ever been hit by a model that's landing? I have. It was my own EPP Unicorn flying wing (it's foam, what can happen?), and hit me squarely in the shins. It *HURT*! Models *can* cause injuries, and even death...

That being the case, it stands to reason that we, model airplane pilots, have a responsibility and should follow the same routine as full size pilots.

So make yourselves a checklist. Mine goes something like this:

Before packing the car: Tx charged? Rx batteries/flight batteries charged? What is the state of the rubber bands, where are spares? (if you use rubber bands to hold down the wing)

While loading the car: See any damage on the model(s)? (most damage occurs during transport and between storage and car)

While unloading the car: See loading the car...

While assembling your model:

- All parts fit easily?
- Moving parts (ailerons, flaps, rudder, elevator, etc) are properly attached? (give them a tuck)
- TE and LE are straight and undamaged? (close your eyes and run a finger over them)
- Is there play on the moving surfaces? (this could cause vibrations at speed; you don't want that, believe me)
- (If you have a motor) Check that the prop is undamaged, and moves (folds) freely.
- Everything that should be screwed in, is.
- Everything that should be taped, is.
- Insert the battery

When it’s all assembled, and you shake the model, does anything rattle that shouldn’t?

> ***If any of the above is not the way it should be, fix it. Now. Or don’t fly the model and fix it at home.***

Switch on your Tx. Have you chosen the right model? Motor is off (if there is one)? Flaps are neutral? Mixes are off?

Switch on Rx. Are all surfaces neutral? The next bit, do out loud:

- Aileron stick left; left aileron up right aileron down.
- Stick center; ailerons neutral.
- Aileron stick right; right aileron up left aileron down.
- Do this with all moving surfaces, flaps, airbrakes, landing gear, tow release.
- Are the throws correct? Do flaps come down equally?
- If you have elevator/flaps mix, check it.
- If you have ailerons differential, check it.
- Check all your mixes, and their directions.
- Check that all surfaces return to neutral when the sticks are released.
- Check flight conditions.
- Check high rates / low rates.

> ***If any of the above is not the way it should be, fix it. Now. Or don't fly the model and fix it at home.***

Now we're ready to launch. But before we do, while standing at the lip of the cliff, holding our glider (or a helper is holding the glider), the wind is howling around your ears, and trying to wrestle you glider out of your (or your helper's) hand, for the last time, check the directions of the surfaces out loud.

Then, ***and only then***, you can call for launch!

One day you'll thank me!

*All photos are by the author. Read the **next** article in this issue, return to the **previous** article or go to the **table of contents**. Downloadable PDFS: article issue*