



RANS S-9 Chaos / SPARK ONE



Spark one is a big modification of well-known **RANS S-9**, a plane designed for recreational aerobatics. The story about my aircraft... I started this project in 2013. I bought the RANS S-9 kit and I redesign the aircraft in order to give it a new fresh and dynamic look. It included engine covers, canopy, fuselage covers and a cabin. I invited my friend - a professional aircraft engineer, to run all construction works of this project. We manufactured several moulds and produced all new covers out of carbon and aramid fibres, according to new design. With support of **professional aircraft engineers** we made improvements of: the wing structure (we stabilized and supported tube ribs with composite carbon fibre and aramid profiles), wing mounts (they were redesigned and manufactured for us in the company that builds commercial aircraft parts, in order to improve strength and avoid material fatigue problems), steer drives (we used Teflon bushings in all drives support points), light aluminium fuel tanks as an option, and many more.



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Additionally, we upgraded the cabin, paying attention to the pilot ergonomics. We provided dedicated composite carbon – aramid fibre seat, carbon front panel and an aluminium – carbon power handle.

The plane is equipped with brand new **100hp Rotax 912** with an **inverted flights system** (both oil and carburettors), **Warp Drive** propeller, **BRS**, **MGL** glass cockpit, **Funkwerk** ATR 833 Radio, **Funkwerk** Transponder, **Winter** speed indicator, **Winter** altitude indicator, professional **smoke system**, **Hooker** aerobatic harnesses and more. The plane is covered with **ORATEX** 6000 – very strong, light and UV resistant material.









From the beginning the plane was built under Polish Aviation Authorities - one of the most strict in the world. We were visited by Authority Inspectors that controlled the quality of work at all of its stages. After every visit they concluded :"Gentleman, the work is excellent, you can continue and go ahead!".

Unfortunately at certain moment we had to pause the project, so the plane has not been flown yet. There are still missing small parts with the canopy mount, seat mount and BRS lines covers. All the rest is ready to fly. The aircraft is registered SP-YWK.

When I started this project, my idea was to create modern aerobatic aircraft for aerobatic enthusiasts, based on well-known, proofed base as Rans S-9. This plane can give opportunity to do almost all aerobatic manoeuvres at low speed, with little G loads for very small money. Both investment in aircraft and cost of operation will be low, as the fuel (car gasoline) consumption will be around 20 litters per hour. It can operate from small airfields and it is very easy to fly and land. I wanted to manufacture these aircrafts in small production series, so I already investigated the market. I showed this plane in Friedrichshafen Aero International Exhibition in 2017 where I met very big interest and applause from many people from all around the world, interested to get one like this or parts to rebuild their Rans.

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When I started to build this project, I just started flying aerobatics. Now I take part regularly in aerobatic competitions, I own EXTRA NG, so the planes for "recreational" aerobatics is not fun for me anymore. I am looking for someone who would like to buy a whole project to continue it or just to have the plane. I estimate that till now I have spent over 100.000 Euro for this project.

Location: Krakow, Poland. Contact: Wojciech Kotulski, wk@ingremio.com.pl, +48 604 19 03 74

Description:

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1	RANS S-9 Chaos kit for ROTAX 912 ULS with
	options:
2	Aerobatic Package
3	Prime Fuselage, Powder Coat Engine Mount and
	Tail Frames Grey
4	Tinted Lexan
5	Heater (muffler style)
6	Super Deluxe Upholstery
7	Streamline Foot Step
8	Main Gear Fairing
9	Aileron Spades
10	Strobe Mount Kit
11	Gascolator
12	9 Gal Extra Fuel Tank
13	Adjustable Lift Strut Kit
14	Hooker Harness (recommended purchase with
	Aerobatic package)
16	Worpdrive propeller 3 blade
17	Rotax 912 ULS
18	Smoke system SA-101
19	BRS 1050 softpack
20	MGL Voyager
21	Carbon / aramid aerobatic seat
22	Bubble canopy
23	Carbon engine cover
24	Carbon fuselage cover
25	Wing cover Oratex 6000
26	Inverted system for Rotax 912 (oil and fuel)
27	Radio Funkwerk ATR833
28	Transponder Funkwerk TRT800
29	Winter bank indicator
30	Winter airspeed indicator
31	Winter altimeter
32	Additional accesories
33	Mould for bubble conopy
34	Mould for engin cover
35	Mould for fuselage cover
36	Other moulds
37	Additional light weight aluminium wing tanks
38	Labor work, including the profesional aircraft
	engeneers, consultants, etc for sure
	underestimated: 4000 hours

EXW Price: 78.000 Euro (VAT free)





