

# User Guide

rev. 2020/09



Fully 3d printable upgrade to short wing for

## Focke-Wulf Ta 152 C

scale 1:12, wingspan 960 mm / 37.8 inch

# Focke-Wulf Ta 152 C

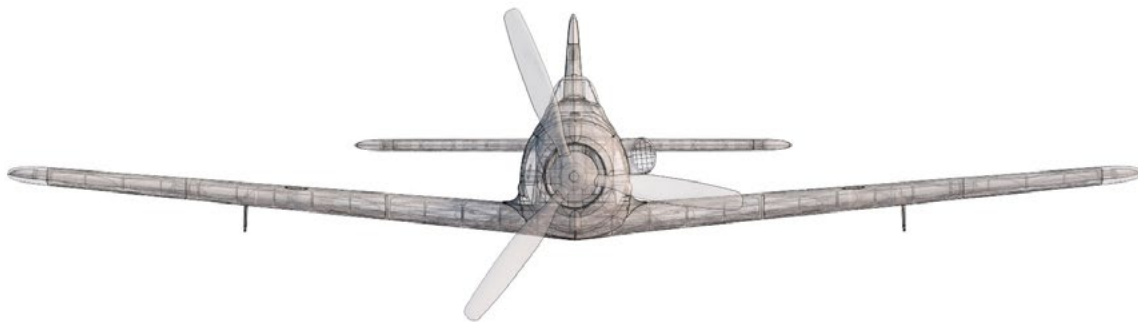
— fully printable update for Ta 125 version C - short wing

**Extensive hi-tech 3d structural reinforcement** making the model very rigid while maintaining a lightweight airframe and exact airfoil even it's just a plastic. This perfect and exact 3d structure is possible only thanks to additive 3dprinting technology. So welcome to the 21st century of model flying and be the first at your airfield.

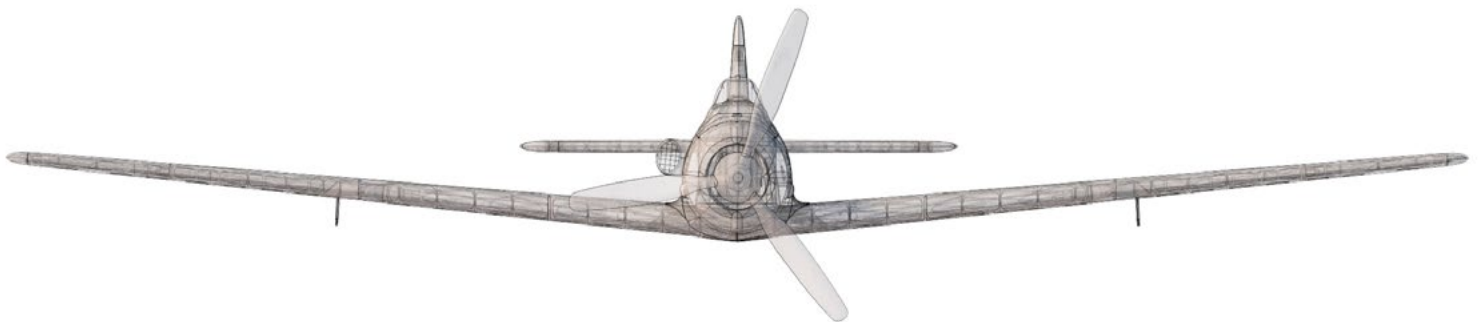
**Easy to assembly**, you don't need any extra tools or hardware, just glue printed parts together and make pushrods for control surfaces. The rest of the assembly is very easy. Simply add brushless motor, ESC, servos and radio system. Don't worry, detailed step by step PDF/VIDEO is included.

You'll get a superb performing airplane with highly efficient powerplant capable of flying 7+ minutes at full throttle and speeds exceeding 110 kph (HP setup). Low stall speed is achieved for easy landing on the other hand.

**Note: this upgrade includes only shorter C version wing, F2 and F4 fuselage parts with ACES wing holder and motor holder. You will need [basic 152H version](#) for all mandatory parts.**



version C 960 mm / 37.8 inch



version H wingspan 1236 mm / 48.2 inch

## General specifications (HP setup):

Wingspan:	960 mm / 37.8 inch
Length:	870 mm / 33.9 inch
Height:	178 mm / 6.95 inch
Wing area:	18 dm <sup>2</sup> / 1.93 square foot
Wing loading:	46 g/dm <sup>2</sup> / 15.3 oz/square foot
Center of gravity:	60 mm / 2.34 inch from leading edge
Airfoil:	LHK508 modified by 3DLabPrint
Print weight:	624 g / 22.01 oz
Print weight of hybrid version:	490 g / 17.31 oz
Empty weight (w/o battery):	680-890 g / 24-31 oz
Takeoff weight (6s 1500 lipo):	810-1190 g / 28-42 oz
Max takeoff weight:	1300 g / 46 oz
Never exceed speed, VNE:	150 km/h / 93 mph
Design maneuvering speed, VA:	100 km/h / 62 mph
Stall speed, VS:	30 km/h / 18.6 mph

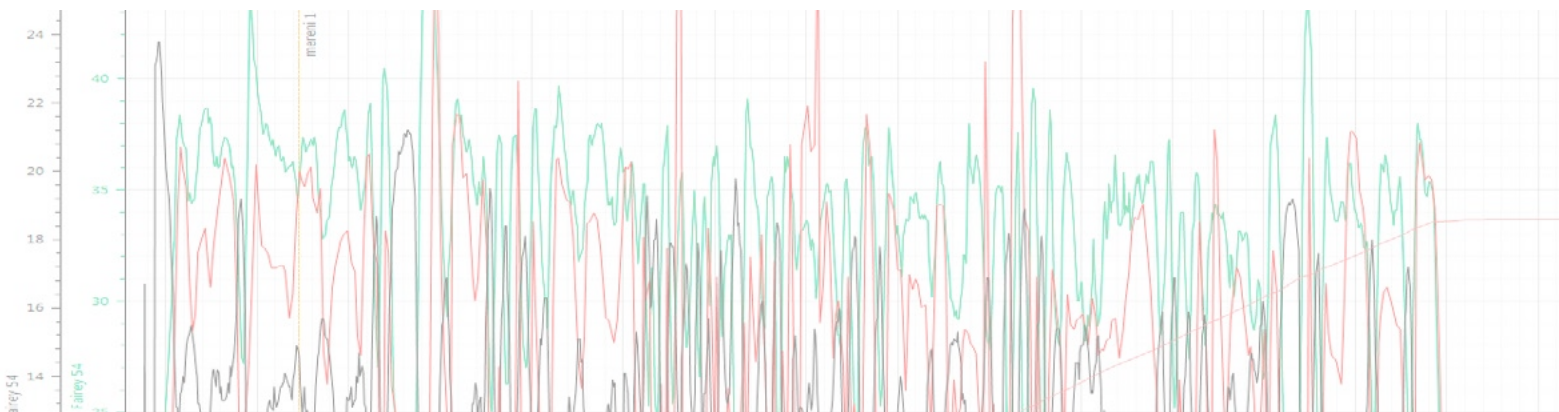


## Recommended setups

Motor:	EMAX MT 3510 600KV (for 6S setup) DYS D4215 650KV (for 6S setup) AX-4008Q 620KV (for 6S setup, motor is discontinued - use it from your old planes)
ESC:	<u>YEP 40A/6S</u> or similar
Propeller:	two blade APC electro 9 x 5,5 or Aeronaut CAM Carbon Light 9 x 6
Battery:	Li-Pol 1500-1800mAh 6S1P Battery Pack printed PET motor mount with aluminium cross mount

## Performance measurement

Max speed VH (level flight):	105 km/h – 56.7kn – 65.2mph with APC 11x5,5
Rate of climb:	20 m/s (5 373 ft/min) with APC 11x5,5
Flight time (6s 1700mAh/full):	7:30 with APC 10x5,5



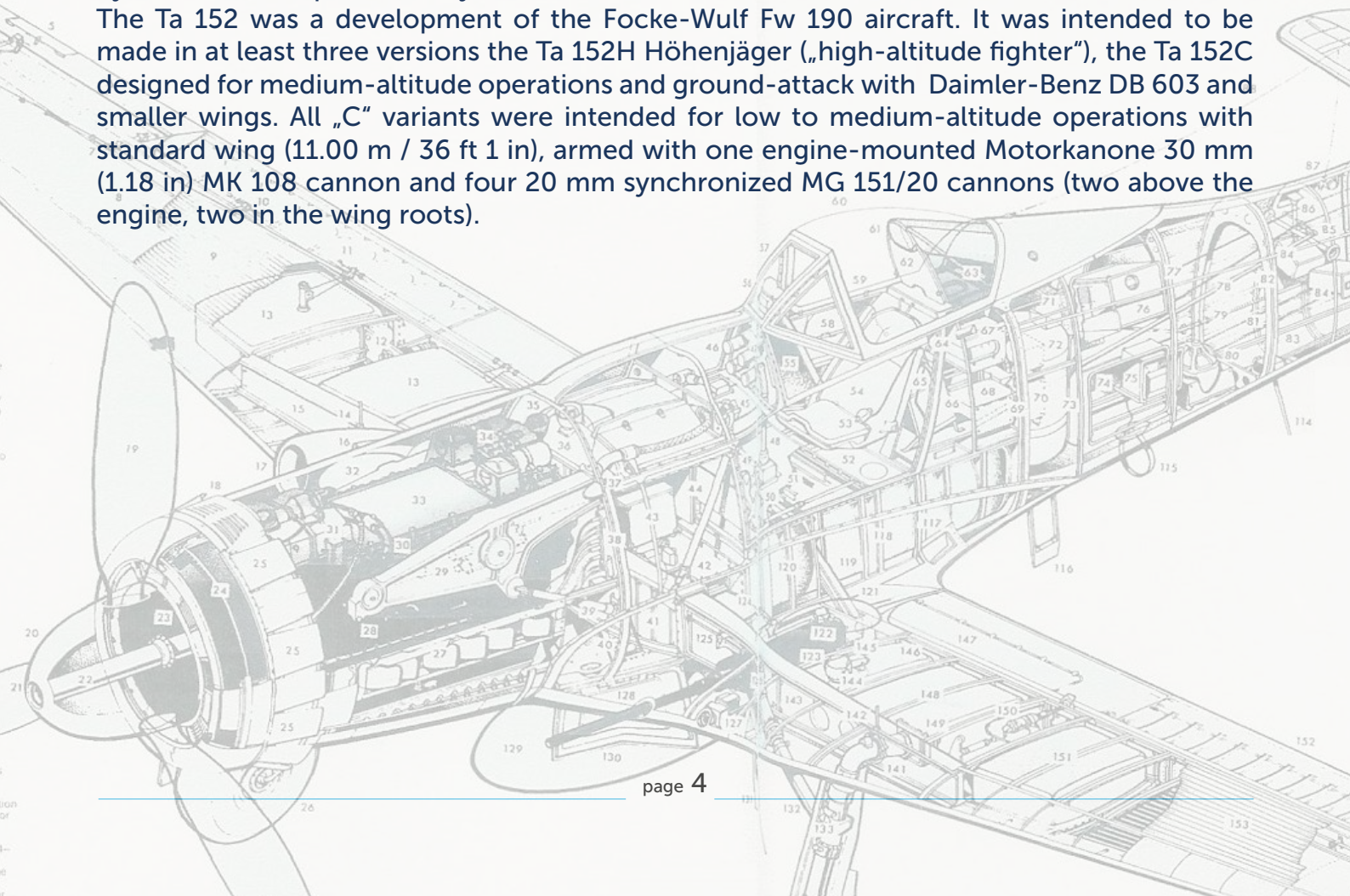




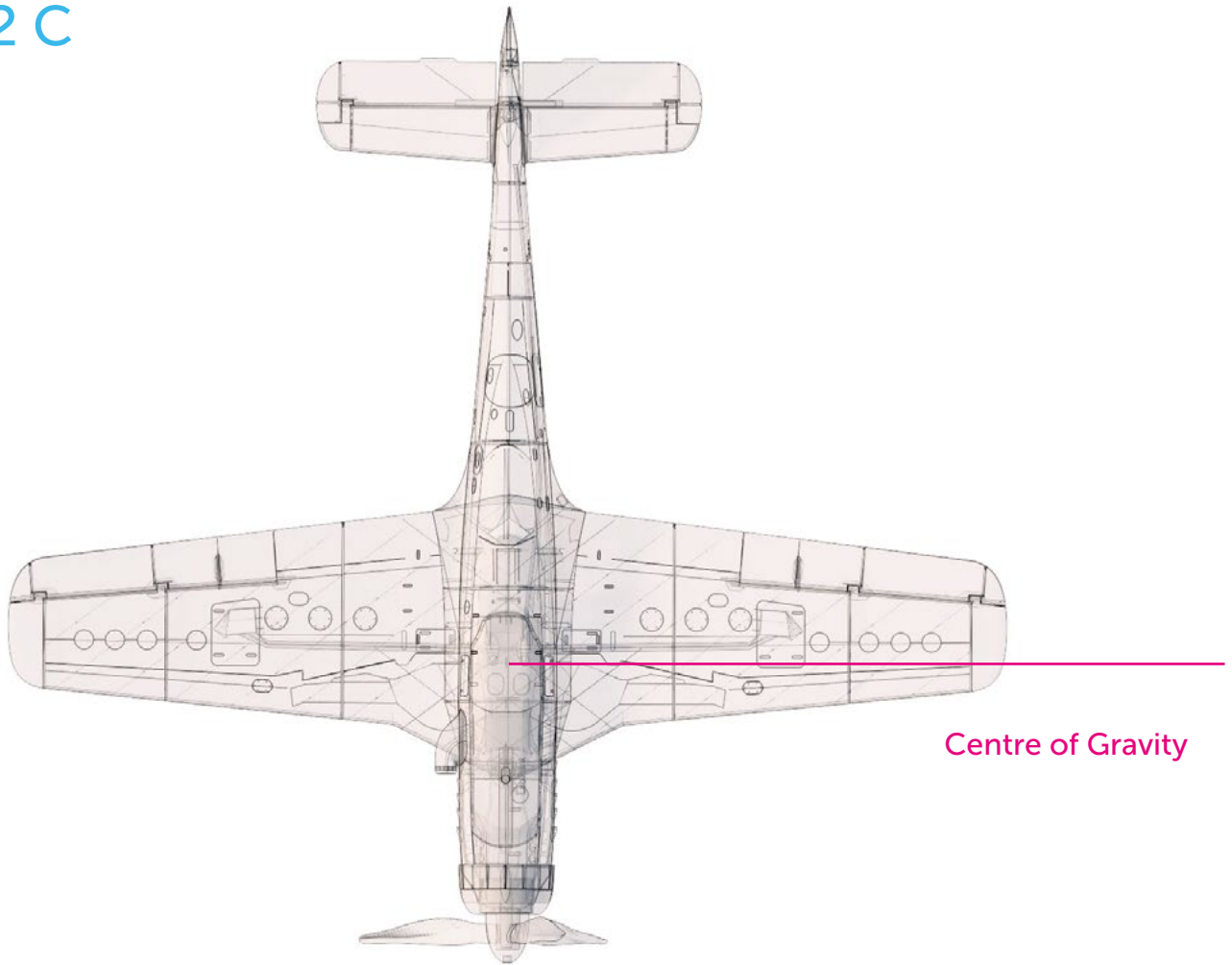
## Focke-Wulf Ta 152 C, History

The Focke-Wulf Ta 152 was a World War II German high-altitude fighter-interceptor designed by Kurt Tank and produced by Focke-Wulf.

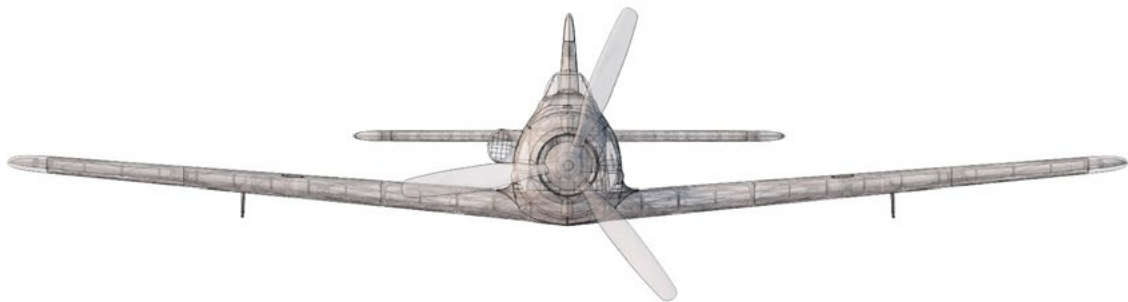
The Ta 152 was a development of the Focke-Wulf Fw 190 aircraft. It was intended to be made in at least three versions the Ta 152H Höhenjäger („high-altitude fighter“), the Ta 152C designed for medium-altitude operations and ground-attack with Daimler-Benz DB 603 and smaller wings. All „C“ variants were intended for low to medium-altitude operations with standard wing (11.00 m / 36 ft 1 in), armed with one engine-mounted Motorkanone 30 mm (1.18 in) MK 108 cannon and four 20 mm synchronized MG 151/20 cannons (two above the engine, two in the wing roots).



## Ta 152 C



Wing area: 18 dm<sup>2</sup> / 1.93 square foot



Wing span: 960 mm / 37.8 inch

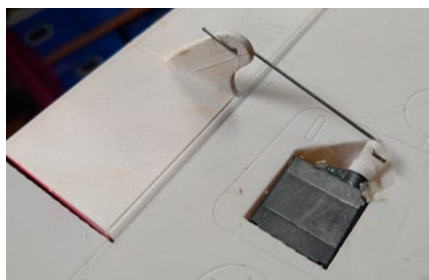
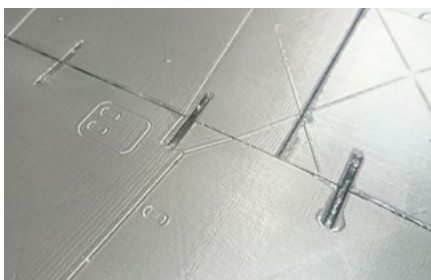
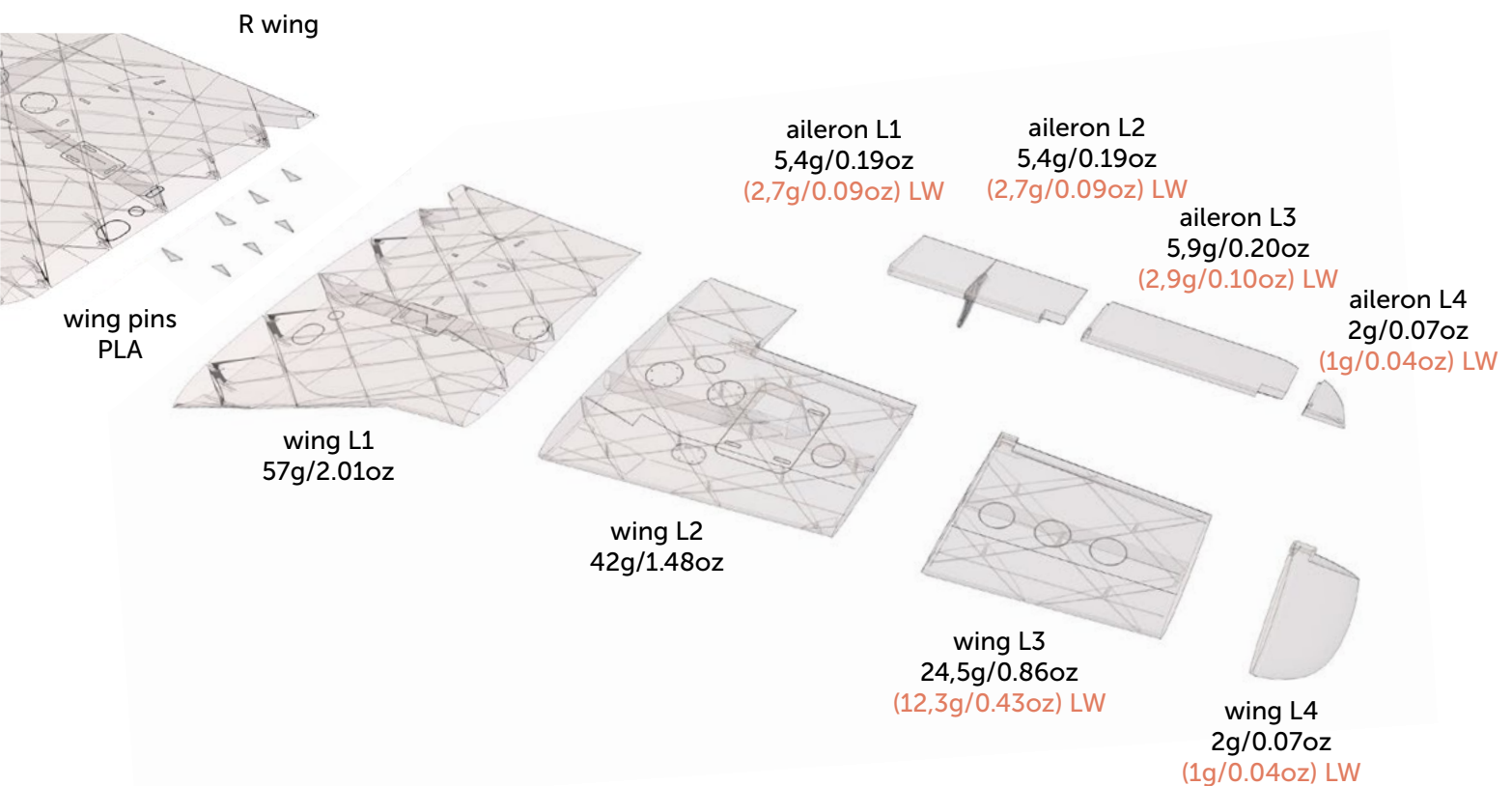
## 5. Assembly of printed parts

### 5.1 Wing assembly Ta 152 C

Glue wing parts L1-L4 perfectly together. The new 3DLabPrint lock system will help you. Repeat for the right side. Glue both halves of the wing together. Use the CA glue, (position locks and pins will help you to align the parts), and use activator to speed up the glue curing. On a flat surface glue the ailerons L1-L4 and repeat for the right side. Use a suitable 0,8mm - 1,2mm carbon rod or wire as a hinge for the ailerons. Just slide it in, there's no need to glue the hinge for easy aileron or servo replacement.

[See example video guide for H version of Ta 152 #4](#)

you will need: CA Glue medium viscosity+ activator  
 0,8 - 1,2 mm carbon or steel wire for aileron hinge  
 Snap knife, Some cloth for wiping CA glue...

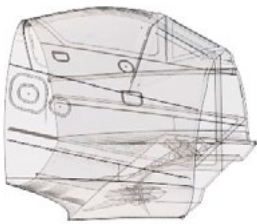




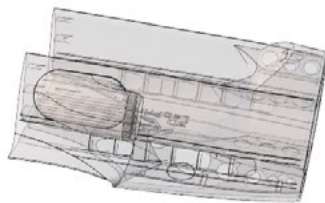
## 5.2.1 Fuselage Ta 152 C update for rubber band

Parts F4 and F2 can be printed in improved ACES version for fixing the wing assembly with rubber bands. Use 3mm carbon rod for improved rubber wing fixing. Don't glue carbon rod in part F4 for easy rubber change.

You will need: 2 pieces of 3mm carbon rod with 125mm length.

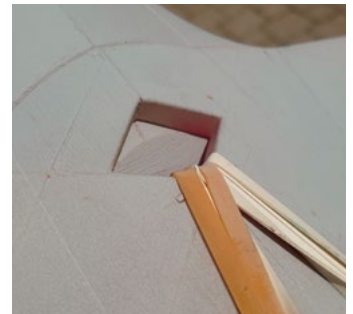


F4  
39g/1.37oz



F2  
50g/1.74oz

F2 & F4 for rubber  
banded wings

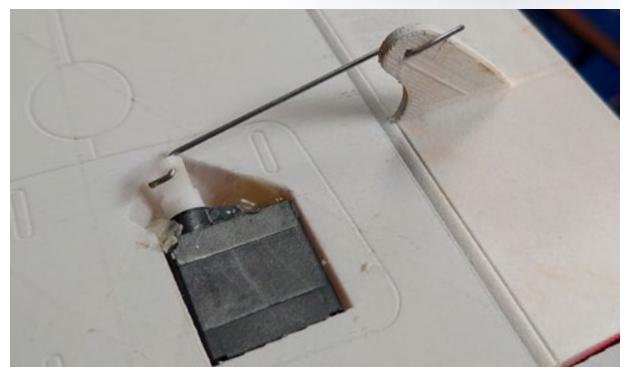
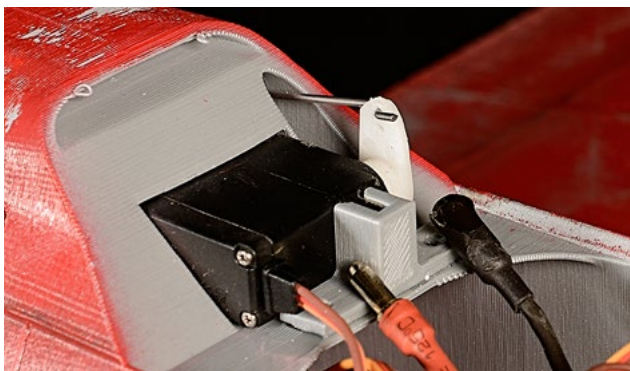


## 6. Servo installation

Extend the servo leads, remove servo brackets and install the prepared servos to the wing servo bays. Use a 1mm steel wire with Z bends as a linkage between the servos and aileron control horns. Elevator servo will be fixed by servo holder or glue in the fuselage.

[See example in video guide #6 for Ta 152 H version](#)

you will need: 3x [HXT900](#), or [opt1](#), [opt2](#), [opt3](#)  
 or any similar sized servos  
 23x12x26 mm / 0.74x0.42x0.78 inches  
 2x 300mm servo extension  
 Snap knife, Z pliers



## Use power by your skill !

Our inovative motor holder can be used with various motors. Every motor should fit at universal printed holder with alluminium cross or 16 x 19 or 25 x 19 (new in this update) printed holder. Insert the complete assembly inside the slot in position you need and glue it



## ACES performance setup - (530W)

Motor: DYS D4215 650KV (for 6S setup)  
 ESC: CastleCreation Talon 25A / 6S or similar  
 Propeller: two blade Aeronaut CAM Carbon Light 9 x 6 or APC Electro 9 x 5,5  
 Battery: Li-Pol TATTU GensAce 1500mAh 75C 6S1P Battery Pack  
 printed PET motor mount 25x19mm or universal with alluminium cross mount



## OFFICER normal setup - (440W)

Motor: EMAX MT 3510 600KV (for 6S setup)  
 AX-4008Q 620KV (for 6S setup, motor is discontinued - use it from your old planes)  
 ESC: [YEP 40A/6S](#) or CastleCreation Talon 25A / 6S or similar  
 Propeller: two blade APC electro 9 x 5,5 or Aeronaut CAM Carbon Light 9 x 6  
 Battery: Li-Pol 1500mAh 6S1P Battery Pack  
 printed PET universal motor mount with alluminium cross mount

## ROOKIE setup - (240W)

Motor: Leopard LC2830 980KV (for 3S setup)  
 ESC: [Turnigy 20A / 3S](#) or similar  
 Propeller: two blade GWS 9 x 7,5 (ugly orange)  
 Battery: [LiPol 1300mAh / 3s](#)  
 printed PLA mount 16 x 19 mm  
 (budget setup for LW hybrid version only)





## Shopping list

Printing material:	0,65kg of PLA (optionally 150g of LW-PLA)
RC:	4 channel receiver for your RC system
Motor:	any motor for 3S - 6S Li-Pol with weight up to 100g  EMAX MT 3510 600KV (for 6S setup) DYS D4215 650KV (for 6S setup) AX-4008Q 620KV (for 6S setup, motor is discontinued - use it from your old planes) Leopard LC2830 980KV (for 3S setup)
Controller:	<a href="#">Speed controller (ESC) YEP 40A/6S</a> CastleCreation Talon 25A / 6S or similar
Battery:	6S Battery LiPol 1300-1800mAh/6s
Servos:	3x <a href="#">HXT900</a> , or <a href="#">opt1</a> , <a href="#">opt2</a> , <a href="#">opt3</a> or any similar sized servos 23x12x26 mm / 0.74x0.42x0.78 inches  2x servo extension cables 300mm / 12 inch
Glue:	CA Glue - medium viscosity Activator for CA Glue
Other:	1x 1 - 1,2 mm / 14 AWG pushrod wire or carbon rod 1x 0,8 mm pushrod wire 2x M5 fitting screws and nuts or 2x 3mm carbon rod 125mm lenght for rubber bands 4x M3 screws and nuts for motor mount