Updated 22 August 2022

# Rigging



# 4.2.1

- **1.** Open the rear canopy.
- 2. Clean and lube the pins, bushings, and the control connections.

## 3. Rigging the inboard wing panels

(All controls hook up automatically.)

- a) Set the airbrake handle to the forward stop.
- b) Ailerons must be held neutral for rigging.
- c) Airbrakes must be locked.
- d) Screw one of the rear wing securing pins on the tool W38/2.
- e) Close both canopies.
- f) **Right wing first**: Push the **right wing** into place.
- g) Insert the rear securing pin with the tool at the rear attachment fitting. Push in the tool so far that the upper surface of the brass part of the tool is flush with the wing surface.
- h) Screw off the tool.
- i) Check that the locking device for the securing pin has engaged.
  - **Note:** If the wing refuses to slip close to the fuselage, you may try to insert the conical rigging pin W58 instead of the locking pin and try to move the wing towards the fuselage with help of the conical shape of this pin.
- j) Screw the other securing pin onto the tool.
- k) Open the rear canopy.
- 1) Push in the **left wing**.
- m) Insert and check the left rear securing pin by the same method as the right side.
- n) Check that the locking device for the securing pin has engaged.
- o) Push the two main spar pins in as far as possible.
- p) Turn the handles up to the fuselage wall, while pulling out the white securing knob, then release the knob back to its locked position.

#### 4. **Rigging of the stabilizer**



(GPK has factory-fitted ballast installed in the vertical fin battery box.)

- a) Check the weight (5.5kg) is in the top of the vertical fin (this is not the ballast box on the side of the fin).
- b) Operate the trim release lever and push the control stick forward, then release the lever to engage the trim (don't operate the trim control knob, the trim should not be pushed to the most nose down position).
- c) Screw the tool into the securing plate (near the top of the left surface of the fin).
- d) Pull out the securing plate with the tool, move it downwards to engage in the rigging position.
- e) Place the stabilizer on top of the fin (stabilizer leading edge raised) so that the roller at the fuselage side push rod is inserted into the funnel at the elevator.

#### Carefully watch the procedure!



- f) When the stabilizer is set down and laying on the fin, push it aft. The roller will engage and slide forward in the funnel if you hold the elevator in the pertinent position.
- g) Release the securing device by pulling out with the tool and engage the securing device by lifting the tool. The securing plate must be flush with the surface of the fin.
- h) Screw out the tool.
- i) Check for correct elevator connection by looking from the rear into the gap at the right hand side of the rudder.



#### 5. **Rigging of the outboard wing panels**

(18m wing tips)

- a) Insert the wing tip extensions into the wing.
- b) Press in the locking pin with your finger.
- c) Insert the wing tip and align correctly. Strike firmly with the palm of your hand on the wing tip to lock in the wing tip extension.
- 6. Install the tail fin TE probe and tape in position
- 7. Tape the gaps of the wing-fuselage junction and at the wing joint.
- 7. Execute a positive control check. One helper is needed to hold firmly the control surfaces.

# Derigging

## 4.2.5

Derigging follows the reverse of rigging.

- a) Water ballast must be dumped first. (GPK does not have water ballast.)
- b) Derig the outboard wing panels (18 m wing tips) using a 6 mm diameter pin (e.g. tool W36) for pressing in the locking pin on the wings upper side.
- c) Pull out the wing tip and stow in the front of the trailer.
- d) Fit the wing-tip handle.
- e) Lock the airbrakes.
- For disassembling the securing pins of the wings the tool W 38/2 must be screwed into the thread completely.
- g) The brass part of the tool will then disengage the securing of this bolt.
- h) Leave the securing pin in the right wing while you derig the left wing.