

# MMYC TUNING SESSION

## DF65 Hull & Radio Setup

### By VC Bob Wellen (March 2024)

#### Part 1 - Version 2.0

#### Rigging Assessment Check List Made

**Repairs Made** (If Possible) participants will make repairs On site)

Tools recommended to Bring...

Sharpie, Scissors, Bic lighter, Metric measuring Tape, Allen Keys, Phillips screw driver, Corrosion X oil, Needle threader, 15cm/6" metal slide ruler,  
Any other tools you like to use.

Supplies Recommended to Bring

Super Glue, Rigging line/string, Forceps,  
Any spares you have.

#### Radio Tuning Hacks

##### Rudder & Sail Servo Rotation Stop Points

###### Channel 1 is Rudder & Channel 3 is Sail Servo

The Goal here is to have your rudder rotate equally both directions and booms to move outward to 90 degrees when the sail joystick is fully forward.

In Radio Settings Go to "End Points" and enter these approximate values...

>End Points>Channel >Ch1 100% 100% & Ch3 120% 120%

(You may not need to go to the full 120% amount to achieve these 90degree boom angles.)

##### Rudder Servo Action - Channel 1 "Dual Rate/Exp" (1st Top Left Switch on FLYSKY Tx)

Dampens the Rudder motion in Normal Mode & Allows full capacity Motion in Sport Mode. This is particularly useful in the pre-start sequence when maneuverability is needed at slow boat speeds in and around the other boat jockeying for position. Once across the line switch to Normal mode. This will reduce erratic boat direction changes.

In Radio Settings Go to "Dual Rate/Exp" and put in these approximate values...

>Dual rate/exp>Normal Ch1>Rate 66 -66

Flip Upper left switch Down , now in Sport mode

> change Rate 100 & Exp -100

(Suggest playing around with these amounts to suit your boat's unique rudder movement and to your unique preferences.)

##### Sail Servo Action - Channel 3 "Throttle Curve"

Dampens the sail winch servo's rotation speed compared to the amount of joy stick movement. This allows smaller adjustments of the sails between fully sheeted in and 45 degrees out from centerline of the boat. Particularly effective when sailing to windward in puffy conditions to play the puffs, lulls, headers and Lifts in the changing wind velocities.

In Radio Settings Go to "Throttle Curve" and put in these values...

>Normal>L=0, 1=4% , 2=8%,3=25%, H=100%

(Suggest playing around with these percentages to suit your preferences.)

**MMYC TUNING SESSION**  
**DF65 A+ Rig & Sail Tune Settings**  
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**Part 2 - Version 2.0**

Mast Pos Mark        2nd or-3rd from back  
Jib Boom Tack>Deck 12mm  
Sail Servo Throw     118mm

**Slight Ease of Jib Halyard and Main Down Haul. Forestay always needs to have more tension than the jib halyard so the forestay carries the rig's load.**

Forestay Dim        963mm for V6 or 7 Hull (newer)     &     958mm for V5 Hull  
Backstay Dim        931mm for V6 or 7 Hull                 &     [     ]mm for V5 Hull

**Adjust Main Sheet Traveler Ring to mid way side to side & fore and aft between the three bowsies.**

&

**Snug up the Jib halyard & main Cunningham till luff wrinkles just disappear.**

**Sail Tuning**

**These steps are made in small increments and some adjustments might effect others so go back to recheck each until all are approximately to these values when the boat is laying on it's side with fully sheeted in sails.**

Jib Boom             38mm to 40mm from front center of mast  
Main Boom           10-20mm off center line between backstay & mast  
Jib Twist - leach    40 mm  
Main Twist - leach   40 mm  
Jib sail foot         30 mm  
Main sail foot        30 mm

These are good starting point values with the boat at rest no wind in sails laying on it's side. Now hold the boat by it's keel and wave it side to side to simulate wind in sails. Match the jib and main's sail twist to each other by making further fine adjustments.

**As wind increases add backstay tension** by subtracting 2mm at a time} This will tighten the Forestay and jib's leach reducing twist a bit and the main will be induced with more leach twist dumping the wind gusts at the top of the main sail keeping the boat more upright and reduce the boat from rounding up into the wind.