E-Soar Maxx V2.0 for ETHOS 1.5
Unlocking and configuring F5J Competition mode

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1 INTRODUCTION

This document describes Competition mode - what it is, how to configure it, and how to switch back and forth between Sport and Competition modes.

1.1 ONE TEMPLATE, TWO OPERATING MODES

E-Soar Maxx features two modes of operation: *Sport* and *Competition*.

- *Sport mode* - basic setup as described in the E-Soar Maxx V2.0 Setup Guide
- *Competition mode* - offers additional features for F5J competition (timers, fast-idle, and auto disarm)

1.2 HOW TO UNLOCK COMPETITION MODE

Competition mode is hidden by default: it must be unlocked before it can be used.

To unlock Competition mode, edit a var as follows:

VARS	Adjusts	Notes
V_CompUnlocked	Locks/unlocks Competition mode	***Values* <=0% locked (default)** *Values* >0% unlocked

1.3 SWITCHING BETWEEN SPORT AND COMPETITION MODES

When Competition mode is unlocked, you can switch between Sport and Competition modes as follows:

- Elevator stick fully forward + full left aileron, and hold.
- Pull the momentary switch (default SH), and release.
- Release stick(s). The operating mode is announced.

1.4 SETTING THE OPERATING MODE AT STARTUP

You can choose which mode should be active at startup (this applies only when Competition mode is unlocked).

VARS	Adjusts	Notes
V_IsCompDflt	Sets operating mode at startup	***Values* <=0% Sport mode** Values >0% Competition mode

Tip: Before a competition, make sure to set the default to 'Competition mode'.

1.5 COMPETITION MODE FEATURES

When Competition mode is selected, the following options are available:

- 30-second countdown motor timer
- 10 second zoom timer
- A facility to avoid accidentally stopping of the motor (which would incur a penalty)
- Automatic disarming at the end of the 30 second run

Each of these options can be independently enabled/disabled, as explained in the following sections:

1.5.1   30-second motor run timer ('Mot 30')

Counts down remaining motor run time
- *Starts:* when the motor starts.
- *Stops:* when the motor stops or 30 seconds have elapsed.
- Final 10 seconds are counted down

VARS	Adjusts	Notes
V_IsMotTimer	Enables/disables 30 second countdown timer	*Values* <=0% disabled ***Values* >0% enabled (default)**

1.5.2   10-second post-run timer ('PostRun 10')

Beeps for 10 seconds after the motor stops
- *Starts:* when the motor stops.
- *Stops:* when 10 seconds have elapsed, or the motor starts or is re-armed (whichever is first).
- Beeps each second, long beep at expiry.

VARS	Adjusts	Notes
V_IsPostTimer	Enables/disables 10 second countdown timer	Weight <=0% disabled ***Values* >0% enabled (default)**

1.5.3   Auto disarm

Enabling this option causes the motor to be stopped (disarmed) automatically at the end of the 30-second motor run.

VARS	Adjusts	Notes
V_DisarmAt30	Enables/disables automatic motor disarm.	***Values* <=0% disabled (default)** *Values* >0% enabled

Tip: In case you need to apply power in an emergency, you will need to rearm first.

1.5.4   Fast idle

Fast idle reduces the risk of stopping the motor accidentally. If you move the motor control to the 'off' position, the motor doesn't stop; instead, the motor continues running at a preset 'fast idle' speed. **To stop the motor, you must disarm it (default arming switch is SF).** A warning sounds when Fast idle is active.

To enable fast idle, edit the following vars:

VARS	Adjusts	Notes
V_IsFastIdle	Fast idle enable/disable	*Values* <=0% disabled ***Values* >0% enabled**
V_IdleSpeed	Fast idle speed	**Default -60% = 1190 µs** To adjust, advance motor to say ½ power, then move back to zero position - the motor will run at fast idle speed. Adjust speed so it's just above threshold at which your AMRT registers a cut motor.

Note 1: If the motor doesn't reach the fast idle speed, Fast idle will not activate and the motor will stop if the motor control is moved to idle.

Note 2: Fast idle is compatible with any type of motor control, whether switch, slider or stick. To reassign the motor control, see the E-Soar Maxx V2 Setup Guide.

1.6 CONTACT

Your feedback is always welcome! Please contact me by email.
For technical queries, please include transmitter type, Ethos version, template name and template version.

2 DISCLAIMER

Although this configuration has been well tested, it's up to the pilot to make sure that the controls respond correctly under all conditions. The author will not be responsible for any consequences resulting from bugs in the template or documentation or as the result of changes in Ethos.

Remember to test your setup thoroughly before the first flight
and after any modifications!

If in doubt, DO NOT FLY!!