PRODUCTSCOPE

Aerospire Mitibov

The governor that limits, and more!

he MultiGov is the first product to come out from Aerospire. This throttle governor has a number of unique features that set it apart from many of the others available. The MultiGov will accommodate beginner, intermediate, and advanced pilots alike. The MultiGov governor is used on nitro helis to keep the motor at a preset RPM through all maneuvers.

Contents

The MultiGov comes packaged along with a set of instructions, RPM sensor, two magnets, leads, and a set of sensor brackets. The unit itself is very small and light, just a small wafer board, wrapped in heat shrink, with connection pins and a single blue LED. Due to the small size and weight, this unit should survive most crashes. The sensor is mounted to one of the included carbon fiber brackets (a really nice feature) and then mounted to the motor under the fan. The instructions are very well done and give all needed information on mounting the magnets and how to get the sensor set properly. The throttle servo plugs into the MultiGov which is connected to the throttle channel on the receiver. The MultiGov can utilize an auxiliary channel to determine which of the 3 speed settings to use. This means that it can be programmed with three different speeds (including being turned off) that can be selected via the transmitter. The unit can also be set manually.

Key Features

Here are some of the unique features that set the MultiGov apart from most governors. The MultiGov is both a governor and a limiter. Throttle governors work by monitoring the engine RPM and adding throttle or reducing throttle to keep the RPM at the user defined level. Limiters work by only keeping the engine RPM below a certain level—ignoring the low end. The MultiGov can be set to either of these modes, depending on user preferences. Now, we have talked about all these settings and parameters, but how are they set? The MultiGov uses an innovative detachable LCD unit to enter all parameters. The LCD unit is plugged into the governor whenever a parameter is changed and then it is unplugged. This serves a number of purposes, one being that there is less chance of damage in a crash since the LCD unit does not stay in the helicopter, two being that all the settings in the MultiGov can be modified easily, quickly, and without the use of a tach. Simply enter the heli's gear ratio and the desired head speed into the unit and it does the rest. The MultiGov has a host of advanced features that can be set and tweaked as well. The manual describes it all well.

Setup

I installed a MultiGov on both a Freya Evo 90 and a Sceadu Evo 50. Only one LCD



configuration unit is needed as it can be used with all MultiGov units. First thing after installing the unit, sensor, and magnet is to verify that the throttle servo ATVs are set to 100% on both ends, or at least as close as can be done. Using the LCD panel, I then set the approximate idle throttle point and the high throttle point (by moving the throttle stick to the appropriate places). Next, I entered the helicopter's gear ratio into the panel and set my speeds up. I use all three speed settings, which are tied to my Aux2 channel and change with my flight mode switch. For normal mode I set the MultiGov to OFF, which allows my throttle curve to pass through the unit as if it wasn't there. For IdleUp 1 I set the unit to 2,000 RPM (1,850 in the Freya) governed mode, and in IdleUp 2 I set the unit to 2,000 RPM Limiter mode. I left all other settings stock.

Testing

I tested the MultiGov over a one month period on both helicopters. The unit kicks in very well when activated and holds the RPM through all maneuvers. The unit rarely overspeeds, even at zero degrees pitch. The head speed has always stayed within 50 RPM of what was set in the governor, verified with a tach. I personally could not tell a difference between the limiter mode and the governor mode, but your results may vary. In flight, this unit does what it advertises to do-it maintains a very constant RPM. I have not had to plug the LCD back in to the unit since setup (except to show people how it works), as everything has worked very well.

Conclusion

The Aerospire MultiGov is a wonderful governor. It offers plenty of features for those that want to tinker and it offers true plug and play ease of setup for those that want to just get out and fly. It holds as well as any governor out there and the cost is very reasonable.



only need one LCD for all your helis)