



# Whirlwind



Newsletter of the Beltzville Flying Machine Society

November 2018

## COCKPIT CORNER – by Brian Sherman, [did4ways@aol.com](mailto:did4ways@aol.com)

November is here and, as you know, the club will hold its meeting at Platz's to nominate members for election to the club officer positions for 2019. The vote will take place at the December meeting. Most of the incumbent members have been in office for many years and, I am sure, would appreciate a break. Please give serious thought to volunteering your time and expertise for one of the positions.

With the flying season coming to an end it's time to start thinking of your winter projects. Are you going to be a couch potato or will you be building in your basement (or where ever your better half lets you)? X'mas came early for me. Picked up my new Sukhoi 3.1 over the weekend and started removing the servos from the decimated remains of the original. I noticed that some of the servo arms did not rotate smoothly. Especially around the neutral point. Some actually seemed to bind up.

Below are pictures of the main gears from two of the HiTec HS-7954SH servos. It's amazing what 330 – 400 oz-in of torque can do to hardened steel. The driving gear shows no such wear. Likely because it is a much smaller diameter and does not come to rest at the same neutral point each time.

The balance of (10) servos will be inspected. Some feel smooth like new, others exhibit various degrees of sticking/binding. The decision how to proceed after seeing the results will come down to do I feel comfortable to a) order replacement gears and rebuild the servos at a cost of \$30/kit b) order a set of titanium gears used in the step up servo (uses the same case) and confirm they fit the same (\$50/set) or c) put (12) titanium gear servos on my X'mas list and hope my brothers, sister and relatives hit the lottery? LOL

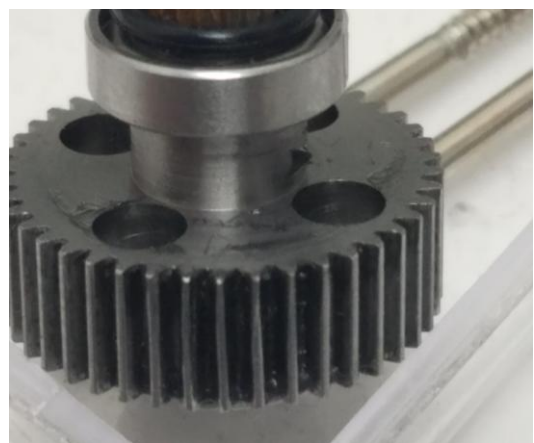
### Left Wing Inboard Servo – binding at neutral

I am amazed the servo worked at all.



### Left Rudder Servo – Sticking at neutral

Notice how thin the front teeth have worn.



See you at Saturday's meeting!

Until next time keep the cockpit up and be safe.

## Drone Flying

The author of numerous articles and a website dedicated to drone flying and drone photography sent a link to a good introduction to drones. Some of it is very basic and familiar to most of us but it contains a wealth of information and can serve as a good reference for anyone looking to break into that exciting area of our hobby. Check it out at the link below:

<http://mydroneauthority.com/reviews/best-drones-with-cameras-buying-guide/>

Any questions or comments  
should be directed to  
Scott King at:  
skyking@ptd.net

The next meeting of the  
BFMS will be at :  
**P.J. Whelihan's (Platz's)**  
Saturday, November 10<sup>th</sup>  
at Noon