

March 25, 2019

March 2019 WNYFFS Thermal Journal Update

Here is the latest from the Western New York Free Flight Society.

### Indoor Flying

The last indoor session scheduled for this Saturday, March 30. We have had a very nice set of indoor sessions with lots of Science Olympiad competitors taking advantage of the gym time looking for sage advice. We did the best we could.

At the previous session, Jim DeTar was finally able to hold his No Cal event. A half dozen or so individuals turned in official times. Mark Whalen (center) took first place, Bob Clemens (right) took second while Marc Hunt finished third. Congratulations to all who took part. Thanks to Jim for adding a bit of competition to our indoor activity.



### Spring Winder

Here is a nifty spring winder you can make at home. Thanks to Jim DeTar once again.

Springs made of small .008 to .010 inch diameter spring steel wire can be useful in our little flying machines. Free wheeling propeller set ups and DT timers are two cases. Appropriate springs for use with DT viscous timers can be purchased, but I wanted to see if I could make them myself. After trying various methods with mixed results, I decided to attempt a homemade version of a commercially available winder. Steal boldly, but thank profusely, as it were.

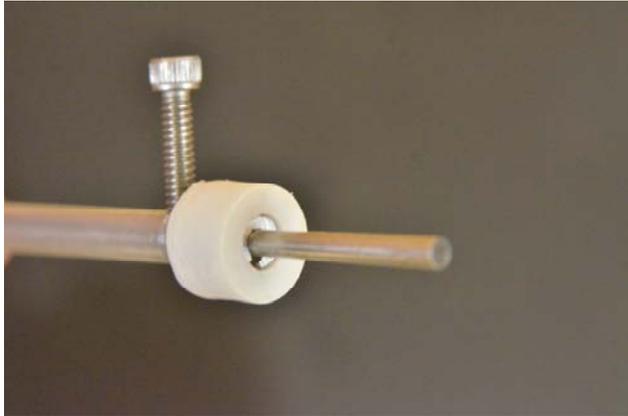
Here is what I came up with, (or copied), all with things found around my shop.



The Handle is a length of 1/8" thick wall aluminum tubing. The white nylon bushing ring was added to provide a larger face surface against which to wind the spring. A piece of drill rod serves as the Mandrel. The thick wall of the Handle was drilled and tapped to accept a set screw to hold the Mandrel in place.

To the left in the photo is Mandrel with the Winding Bar installed. The Winding Bar is also made of the 1/8" tubing, with a hole drilled to allow it to slide onto the Mandrel,

and with one side filed flat to bear against the white nylon ring. There is a short piece of hard music wire installed in a hole in the flat surface of the winding bar, protruding just enough to catch and hold the spring wire as it is wound. The end of the Winding Bar is drilled and tapped for a set screw which is adjusted to hold the Winding Bar to the Mandrel with just enough pressure to keep it from walking back too quickly as the spring is formed. A lock nut on the screw holds the set screw in place with the desired drag.



There is a hole down through the Handle and white nylon; it is drilled at an angle so that it exits adjacent to the Mandrel. You can see that hole on the Mandrel side in the picture here. To use the winder, feed a length of wire through the aforementioned hole from Mandrel side toward the Handle. Leave enough wire on the Mandrel side to form the spring. Wire fed through the hole towards the Handle is there to provide a means to hold the wire while the spring is formed.

To form the spring, hold the Handle firmly, including the portion of wire fed through the hole. Make sure the wire exiting the hole touches the Mandrel. Bring the Winding Bar to the white surface to catch the spring wire with the short music wire piece on the winding bar. Turn the bar is round and round; as the coils are wound, the Winding Bar is slowly forced down the Mandrel as the coils stack up.

Finding suitable wire for making such small springs can be difficult. I have successfully made springs using small wire from small diameter metal guitar “strings” using this device.

### Wrap it up

Winter seems to have finally come to an end. May will be here soon enough and it will be time to work out the kinks in the fleet at the Spring Openers, a.k.a. the Hobo Meet. Even before May completely winds down it will be time for the ESSFC. If you did not receive the announcement for the ESSFC, the contest flyer is available on the website, wnyffs.org

That is all for now.

Mark C. Rzacca, editor Western New York Free Society Thermal Journal

### Western New York Free Flight Society Dates of Interest for 2019:

Spring Opener (a.k.a., Hobo meet):	May 4 & 5
Spring Opener Rain Date	May 18 & 19
ESSFC	May 31, June 1 & 2
Greatest Show on Turf!	July 12 - 14
FAC Non Nationals	July 17~20
AMA Nationals (in Muncie)	August 5 through 9
Pirate Challenge	August 23, 24 & 25
GGG	September 6, 7 & 8

