

**RM young anemometer calibration**  
**Originated by: Mary Engels (SEA) on Thursday, August 04, 2011**

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Good Morning All,

I am curious about calibration schedules for RM Young Anemometers. We have several Marine models (05106) that we brought into cal last year.

Now that they are up to cal I would like to keep them in cal. Do other folks out there use these models? If so, how often do you calibrate them? Annually? Bi-annually? Any experience out there would be very helpful.

Thanks so much

Mary Engels

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**Reply from: "Electronics Tech, Supervisor" (USAP) on Thu, 4 Aug 2011**

Hi Mary,

We used the 5106 Anemometers for quite a few years. We had them on a Biennial/Annual after install calibration schedule. (Biennial is every two years, bi-annual is twice each year). We had a number of units, but only 3 in use at any one time. This meant that if they were on the shelf and not installed we would still calibrate them every other year, but once they were installed we would calibrate them after 1 year or as soon as the 2 year period ended, whichever came first.

We originally sent these back to RM Young for calibration, but due to our location and 3-6 months shipping round trip, we ended up buying the calibration equipment to perform the cal's ourselves. RM Young sells everything you need and has good instructions for doing so, but it essentially consists of verifying that the direction potentiometer is within spec, that the propeller bearings are still low friction and that the propellers rotational counter is still in tolerance.

Let me know if you would like more information and I suspect I can dig up the calibration manual if you have trouble finding it.

Bruce

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### **Reply From: Bill Fanning (URI) on Thu, 4 Aug 2011**

Mary,

We calibrate our model 05103 Wind Monitors every year. Every second or third calibration RM Young recommends some small maintenance item as well. I don't have the actual numbers here with me at sea but total cost for cal. and maintenance item is usually about \$150. As Dave O'Gorman noted in a similar thread a while back (was that you Dave?), with this annual preventative maintenance there are no (few) failures and climbing aloft is done at convenient times.

With all that said let me add that I really like our Gill Windsonic ultrasonic wind sensor. No calibrations and no maintenance in the last three years and its going strong.

Regards,  
Bill

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### **Reply From: David O'Gorman (OSU) on Fri, 5 Aug 2011**

Our Gill ultrasonic just keeps working. The word I got from R.M. Young on the mechanical windbirds was that recalibration was not required unless the unit was suspected to be not working. We replace the bearings in the unit on a yearly basis and haven't had any problems. (I was surprised to find that the unit didn't require recalibration after replacing the bearings).

Thanks to everyone who wrote back about the time servers.

On a related note we have been calibrating our SBE43's every six months due to membrane failures. (We kept having failed membranes and SeaBird recommended that we switch from a 1 year calibration interval to a 6 month calibration interval) We keep them wet when the ctd is on deck. Has anyone else had trouble? How often do you calibrate your 43's?

Dave

David O'Gorman  
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Reply From: Phil White (NOAA) on Mon, 08 Aug 2011

David,

Haven't have trouble with SBE 43s since the first couple years of production. I think they made a plenum / membrane mount change in the early 2000s. What depths are you working at and what do you clean them with?

Phil