Report on Advisory Board Grant 2019 - "Advancing Meteorology as a Major via the Campus Weather Station at Penn State York"

<u>Submitted by</u>: Kip Trout and Stephen Lentz <u>Date</u>: May 15, 2020

PROJECT STATUS

Complete – Funded at \$400

ACCOMPLISHMENTS

- 1. In early summer 2019, Joe Royer and Stephen Lentz removed the PSU York campus weather station from the roof of the Main Classroom Building. They disassembled it, noting which parts were in the greatest need of refurbishing.
- 2. In July 2019, with the assistance of Christina Lee in the DAA's office, Kip Trout arranged for the PSU York campus weather station to be shipped to Davis Instruments Corporation for refurbishing. Some funds were used to reimburse Stephen Lentz for the personal expenses he used to professionally package the weather station prior to shipping, as requested by Davis. Other funds were forwarded to Raeann Koterwas in the Copy Center to reimburse her for the shipping costs. We are grateful to Raeann because, due to some odd policies somewhere, she apparently had to personally drive the package out to UPS in York for shipping.
- 3. Davis received the weather station in mid to late summer, and as agreed to ahead of time, refurbished and recalibrated the weather station.
- 4. The PSU York campus weather station was shipped back to PSU York by early fall.
- 5. Following numerous discussions with the DAA's Office, the Business Office and the Maintenance Department, a new location was selected for the weather station not far from the tennis courts on campus. A hinged antenna-like tower was secured by the maintenance staff in late fall, and the weather station was installed with electric power shortly thereafter. It is now much easier to maintenance. Additionally, because it is closer, it has a stronger signal to its base unit in the Grumbacher ISTC.
- 6. Remaining funds in the grant were used to purchase two temperature/humidity sensors for the campus greenhouse. They allow the greenhouse conditions to be monitored. Both sensors are Bluetooth and will notify Biology faculty member, Judy Owen, via her phone.

In conclusion, the weather station received a professional refurbishing and recalibration using the funds. Additional sensors were purchased with funds remaining after refurbishing. The opportunity provided by the funding of this project led to leveraging a better location and mounting system for the campus weather station. It is now ready to service the campus science programs for many years, in particular our meteorology program which we hope to expand.