

Article Title: **How It All Began?**

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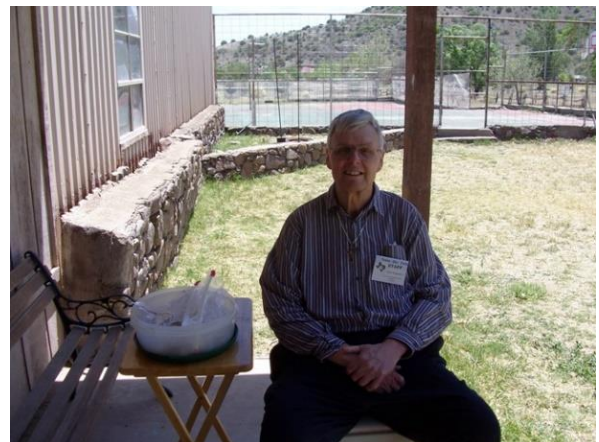
In 1983, my family and I moved from San Antonio to Garland, TX. A short time after that, I learned of the Texas Astronomical Society and became a member.

In the process of moving our belongings to Garland, I decided to get my 12.5" f/8 Newtonian telescope operational. I made the primary and secondary mirrors removable from the tube and built a collapsible Dobsonian mount to help transport this telescope to dark sky sites. Many of you might remember my black and white, hexagon tube telescope:



I would haul my 12.5" telescope out to TAS's dark sky site, set it up and swing it around, looking for this and that. But I had no real plan of what I wanted to observe. I just looked at whatever I could find.

At some point in my early observing attempts, John Wagoner took notice of me. John was the Texas Star Party observing coordinator for years. He could be seen sitting outside the meeting hall door every afternoon. John saw an opportunity to help a new amateur astronomer. He not only introduced me to the Astronomical League's Observing Clubs, as they were called in those days, but he taught me how to observe the night sky. I made my first observation for an Astronomical League Observing Club on July 12, 1986. This was M57 for the Messier Observing Club. I



think John knew that I would like these Observing Clubs from that moment on. And he was right! He set the observing hook so deep in me, I continue to complete these Observing Programs today.

I recently completed my 63-rd Astronomical League (AL) Observing Program (OP). It is a program called the Solar Neighborhood (SNH). You can review the program's webpage on the Astronomical League's website by clicking this URL [Solar Neighborhood Observing Program - Astronomical League \(astroleague.org\)](http://astroleague.org). All the stars that need to be observed are within 10 parsecs (32.6 light years) of our sun.

As is the case with all the OPs I have completed, I learned new concepts and information about our astronomy hobby from this one also. I was amazed to learn that many of the bright stars in our night sky are this close to our sun. I also liked the fact that there was a list of these stars to observe. All you need to do is to choose 100 stars from the master list of stars to observe. Then go out and record your observations.

A list of objects to observe gives a natural structure to your observing outings. You know what you are going to observe before you go out. You have an order to the objects you will observe. This makes the planning for your outings simple. All you must do is to go to the dark sky site and have fun.

The list of objects/activities that the ALOPs have is what draws me to complete so many of these OPs. All I need to consider when trying to decide which ALOP to start next is what kinds of objects I would like to observe. Then find the ALOP that will provide of list of these objects to observe.

Then there is the educational aspect of some of the ALOPs that caught my eye. The Spectroscopy OP is a case of this. I've always been interested in the spectra of stars. This OP taught me how to capture the spectra of stars and deep sky objects and then how to process the raw images to show the spectral features. The Lunar Evolution OP is another one I chose because of the educational aspect of identifying craters on the lunar surface and determining which lunar epic they were created in. I find the ah-ha moments of these kinds of OPs very illuminating.

I use the Standard Edition of Sky Tools 4 (ST4) to help organize all my observing lists. This includes an observing list of the SNH stars brighter than magnitude 14.0 from the master list. When you have your laptop at your telescope in the field, ST4 shows the order to observe these stars on your list. With hot key shortcuts, star fields can be displayed, aiding you in identifying the star field the SNH star is in and then the star itself.

You need to sketch the star field, showing the SNH star's position amongst about 5 other stars in the field of view. The sketching requirement will show the Program's Coordinator you actually saw the SNH star. I enjoy sketching at the eyepiece, which made this OP more fun for me.

In the past, I've heard people comment that if an OP has a sketching requirement, they won't do it. You don't need to be an artist like Rembrandt to create a sketch. You are not being graded on your artistic ability. With patience, you can make a sketch that resembles the view in the eyepiece.

In addition to observing SNH stars naked eye, with binoculars (I used my 10x50 binoculars) and then using a telescope (I used my 8" f/6 Newtonian), there are three additional exercises that I found very educational.

One exercise was to sketch Barnard's Star over a year's time. In my sketches, I was able to detect a tiny bit of movement of this star. I was amazed my sketches revealed this.

Another exercise was to make an occulting eyepiece and try to see the Pups of Sirius (Sirius B) and Procyon (Procyon B). With the occulting eyepiece I created, I was able to easily see both Pups for the first time ever. Another amazing result of this OP for me.

As anyone who knows me, I love lists of objects to observe. Many ALOPs have more objects on their master list of objects than are required to be observed to complete the OP. It is always the case that once I complete the required number of observations for these OPs, I will look at the rest of the objects on the master list for fun. I want to see why the OP's creator chose these objects for the program. I also see so many more objects that if left to my own accord, I would not observe them because I wouldn't know they exist.

As is the case with this OP, there are many more SNH stars on the master list than the 10 naked eye, 20 binocular and 70 telescopic stars that need to be observed. While I was waiting for the final observation of Barnard's Star, I observed more of these beautifully colored, most of them red, stars. At the time I submitted my observations to the Program's Coordinator for their review, I had looked at 148 SNH stars telescopically, twice the number of telescopic observations required by the program. I still have a dozen more SNH stars to see before I turn my full attention to another one of my ST4 lists to observe.

To see what I submitted to Marie Lott, the SNH OP's Coordinator, see my results webpage by clicking this URL: https://www.mikehotka.com/CertLogs/SNH/SNH_Observations.html .

This is a very easy OP to do. The stars are easy to find in the sky. The learning aspect of this OP is outstanding. An alternative to visually observing and sketching these SNH stars, this OP can be completed by imaging the SNH stars, ergo both visual observers and imagers can have fun learning about these stars and completing this OP.