

AN EVENING WITH HERB LUFT

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Abstract

Herbert A. Luft (1908 - 1988) contributed sunspot observations to the AAVSO Solar Division for over 50 years. He received the 1987 E. E. Barnard Observer's Award from the Western Astronomical Association, and he was a member of the AAVSO for 44 years. Sadly, Herb Luft passed away in October 1988 while on his way to the AAVSO annual meeting. It would be a fitting tribute to Herb's memory to share with you some of the fascinating memories of this astronomer's early development as he shared them with us at his home on the evening of November 21, 1987. For example, his 54mm refractor was one of the few personal possessions he carried with him when he fled from Germany in 1939. Without exaggeration, it can be said that Herbert Luft dedicated his life to solar astronomy. The reminiscences below are compiled from a video tape of that evening, now a permanent part of the AAVSO archives.

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"Well, you want to know how I became interested in astronomy. A long, long story - a long, long time ago. One of the first things I remember was the solar eclipse of 1914, at the start of World War I. I became interested in astronomy when I was 9 years old. I saw for the first time a 'shooting star' near the end of World War I. People said when you see a shooting star you should make a wish, and I did so - I wished for peace. Soon afterwards was the treaty of Brest-Litovsk between Lenin and the Germans - this was about February 6, 7, and 9th, 1918. Then came Nova Aquilae 1918; I got the news from the newspapers; I was looking for it from the apartment of my parents, in the big city of Breslau - I couldn't find anything. But I was always interested, got popular and scientific books, but I didn't always understand everything. I had a cousin who told me 'what you don't understand, leave it out!'

"I learned a lot of things. The next step, I became a member of the 'Bund der Sternfreunde.' I got their bi-monthly notices. Then in 1923, during the worst inflation time in Germany, I was invited to the local branch to join. My parents thought I was too young, only a pupil. But the society wrote back that even the very young are welcome.

"As it turned out, there I met Wolfgang Gleissberg. At the time he was a student at Breslau University, and an active sunspot observer with a 54mm Mertz telescope. He gave talks on how interesting and easy sunspot observing is. He asked if any of us was interested in doing such observations, and so I lifted my hand, 'yes.' But then one elderly gentleman, a court official, sternly asked me, 'will you continue for some time?' I said yes. On September 26, 1923, I made my first regular sunspot observations with a 35mm.

"I became a bank apprentice earning 50 marks a month, and saved up all of my money so that I could get the larger scope, a 54mm Mertz (in 1924, 120 Marks) sent from Hamburg. In the meantime the local

society loaned me a 3-inch telescope. I learned a lot from this 3-inch, though I did not make any sunspot observations with it since we did not have a proper filter for it.

"With my little 2-inch 54mm telescope, in January 1925 I began making regular sunspot observations for the Swiss Federal Observatory, under the guidance of Gleissberg; thus began my solar observing. So I have been making solar observations from 1923 until now. I don't know how many observations I have made - I'm not the kind of guy who wants to make records! As long as I'll be able to do it, I'll do it.

"The 'scientific father' of the local astronomy society was Dr. Wilhelm Rabe, well-known for his double-star work. He calculated the orbit of Castor, he became famous for his measurements of planetary diameters, and he worked with the 3-inch heliometer. He worked with the observatory's 203mm Clark refractor - an optically perfect and mechanically very good instrument. Dr. Rabe was not only a good scientist, but he was a good instructor at the scope, and I learned a lot from him. It was the first time I learned what the [Hertzsprung-]Russell Diagram is. Real astronomy!

"My first publications, February-March, 1928, were photographs of lunar observations. It was a first. From then on, you could find my name here and there about two or three times a year.

"I learned about spectroscopy by taking private lessons through the sponsorship of the astronomy club. Through the club, I went to Sonneberg on my vacation times, and there met people like the astronomer Cuno Hoffmeister, and learned a lot of things about astronomy. It was interesting. Hoffmeister started out as an amateur astronomer, and went on to become a highly-classified professional. There I first saw the BDM [Bonner Durch Mustering]; this was a special event, since it was out of print, and nobody then had the money to buy a copy, not even Hoffmeister. What he did was to copy these 500,000 stars by hand, point by point, from the BDD of the Bamberg Observatory. He copied it point by point. Myself, I only copied about a five degree region of Eta Carinae for my own use.

"Then I began to publish lots of things on halos and such phenomena, around 1933, in *Die Sterne*. Of course sunspots have nothing to do with halos, or anything else - [they] have nothing to do with the stock market, or the weather. That is all big nonsense.

"In 1933 I observed light columns all over the sky. I reported this to Professor Schoenberg at the Observatory; he came out of bed to see this, too. In the newspapers then he gave a long explanation that this phenomenon was due to the bitter cold temperatures - quite rarely seen in Europe. I gave a report to two astronomical magazines and to one meteorological magazine.

"I belonged to this local society until about 1935, then I was expelled because I was Jewish.

"In 1928 I became a member of the Astronomische Gesellschaft, an international society. Once, when I was without work for six months, I went to Gleissberg and asked if I could help him with his observations, so I worked with him on meridian observations, which became part of the AGK2 catalog. Doing this, I learned something about how to handle calculating machines, and I helped him a little, occasionally, with the reduction of his observations, so I learned something half-professional then.

"I was told that an amateur could do scientific work only if he did variable stars, meteor observations, or sunspot observations.

Well, I tried variable star observations; there were very good introductions available. But when I saw what procedures were involved - you have to observe the star 'r' with three steps to 'b' then three steps to 'c' - then I had enough! I didn't want to do it - it offended a little bit of my patience I may say! But I continued my sunspot observations - once at a temperature of about 20 below zero! - but I didn't see too much, but I reported. I would put the telescope on my left shoulder, under my right arm I had the big tripod that I took on the street, and put the telescope out, and observe, and make my notes; sometimes the policeman would chase after me for 'hindering traffic' as they called it! On special occasions, say lunar or solar eclipse, I'd ask if I could bring my telescope to the university observatory - 'of course!'

"Sometimes, when Gleissberg would be at the large refractor, and I would be looking through my small telescope, he would say to me something like: 'Herr Luft - you are looking at Hercules? - well what is the name of Hercules' wife?' I had no idea. then he would tell me: '**Frau**-cules!' He always made such jokes. He was five years older than me - and he also had to leave Germany in 1934 because of the persecution of Jews, dismissed by the university because, as they put it, he was 'not of pure Aryan race.'

"In 1935 I was a member of the Congress of Astronomical Societies; I attended their meeting in Berlin. In 1937, when they had their meeting in Breslau, the local astronomy club approached me - they wanted me to return as a member now that I was part of an international group. I did go back with them, but I was always kept very much in the background. I went back because I was so interested in anything to do with astronomy. But a few years later, when Hitler was made more of, they threw me out again.

"Then, in November 1938, during the 'Kristallnacht,' I was put in concentration camp at Buchenwald for five weeks - together with all of the male members of my family. The next thing was to get out of Germany as quickly as possible. Where to go - my brother did all of the necessary formalities; an uncle of mine who lived in Amsterdam bought visas for us for wherever we could get them. We had to leave my mother behind, and six weeks later she passed away.

"So we left Germany in February, 1939, and travelled by steamer to Santos, Brazil. There was some family there. As soon as I arrived, I immediately started to learn the southern sky! That was something completely new - I decided not to make any observations for one year. I made connections with Dr. Prager, later of Harvard College Observatory. He referred me to the AAVSO. Professor Campbell sent me all the necessary stuff, and I saw how easy it is to make variable star observations! I was shocked! And so I said, I don't do any observations of northern variable stars, only what is [south of] 23°!

"The only thing I possessed of value, and brought with me, was my 54mm telescope. I had it shortened and modified and continued to use it. I did more or less regular observations of variable stars for the AAVSO.

"One day in November, 1944, as I did my regular observations for the Nova Search Program, and looked a little bit over the fence and there was a bright nova! What [had] happened? I immediately recognized that it was a bright nova, magnitude 0.5. I wondered what I should do: should I notify the director of the Sao Paulo Observatory, who had no interest in any observations, and who was funny against me? - I said 'no.' I told my boss where I was working at that time, 'I discovered a new star, and I want to break it to the newspaper.' I went to the newspaper, and introduced myself, told

them I discovered a new star; they took a photograph of me, and wrote a big article. The director of the observatory was furious - **furious** that I didn't notify him! But he went ahead and put his name on it. My legal status was not too clear, I was still a 'tourist' - so I had to keep my mouth shut. But on the official list of independent observers, compiled by Owen Gingerich, I am in the fifth place. That was the story of Nova Puppis!

"In Brazil, any German was an 'enemy alien' and had to list all of his optical goods for eventual confiscation. What would I do with my telescope! I gave the objective to my boss who was in Argentina, gave the tube to the local Benedictine monastery, and the mountings I kept. The moment that the glorious Brazilian troops came back from Europe, I gathered everything together and started everything again, to observe with my 54mm telescope. And in the meantime, I was using the 35mm.

"I came to the United States after the war, in 1946."

[Note: Herb's arrival in the U. S. A. meant an even greater degree of participation in AAVSO activities. He continued his sunspot observing and sent his observations every month to the AAVSO Solar Division, after its establishment in 1946, as well as to Switzerland. He also continued his variable star observing and made 5382 observations. Herb attended nearly every one of the AAVSO annual meetings, and always gave a talk about the year's activity in solar astronomy. We will miss him greatly!]



Herbert and Hilde Luft in their home, November 1987.

Herbert Luft with graph showing his sunspot observations over several decades.

