

Seventy-Second Gathering of Telescope Makers Stellafane Convention in Springfield, Vermont

Ever since I was a little Amateur Telescope Maker sitting crosslegged on the floor in front of Dr. Rat's Mirror Making Machine, I had heard fables of a land far away and distant in time where hardy Yankee precision engineers and tool makers had first come together on this continent to make their own telescopes. Russell Porter, Walter Scott Houston, Albert Ingalls and many others through the years gathered at Stellafane. Richard Berry and John Dobson were newcomers. It was in many ways their spiritual home, where amateur telescope made its home in America.

Stellafane, (related to "Stellar" and "Fane," or shrine/temple) is most properly the small very pink clubhouse on a rocky hill a few miles outside of Springfield, Vermont. It sits on two and a half acres of rock about a quarter mile southeast of Breezy Hill Road. More generally, the term refers to the Convention, an annual gathering of more than a thousand amateur telescope makers and astronomy enthusiasts from all over. (The "longest" winner at Saturday Night's big program was from South Africa, but there were several from California, a few from Europe, Canada, and all over.)

The Springfield Telescope Makers, who built the clubhouse and run the convention, were

founded in August 1920 by fifteen men and one woman, most of whom were tool makers, engineers, and machinists. (The woman was a teacher!) By 1923 they had built the clubhouse, and in 1926 held their first convention. Editor Albert G. Ingalls, reported in Scientific American:

"One most interesting aspect of the new movement [amateur telescope making] was the gathering of a group of invited T.N.s [telescope nuts] at Stellafane, Springfield, Vermont, over the weekend of the Fourth of July. Invitations were sent out by the "Telescope Makers of Springfield" (which, by the way, is an amateur, not a business organization) and nearly 30 enthusiasts from several states made the trip to Vermont in order to convene, rub elbows and talk telescope making with

their confreres."

World War II was the only interruption in the annual meeting ever since. And, except for scale, not much has changed.

Scale does count, however. The highest reported attendance in club lore that I heard was "as many as 3000." Nobody is quite sure how accurate that number is, however, and I only heard it only once. The weekend I was there I would estimate attendance of roughly 1100.

To accommodate this crowd takes a lot more than two and a half acres. Until the mid 80's, the club had housed the campers on an empty

The "Pink" as the Stellafane clubhouse building is known, sits at the top of a hill just to the south of the Porter Turret Telescope. This reflector is built so that on a cold Vermont night, the observer can sit in a warm room (the turret) as the whole scope rotates around him and the eyepiece. On the white fascia above the clubhouse is inscribed "The Heavens Declare the Glory of God." Inside, except for the addition of a computer terminal and a wireless network, the clubhouse looks like it was frozen in the 1930's, with logbooks, photos of and by the founders on the walls, and a heavy scent of tradition.





On Thursday evening before the Convention officially opened, the skies (as seen here behind the Porter Turret Reflector) were beautiful—although not amateur astronomy beautiful. The clouds pretty much wiped out the first night of observing, and provided a little rain overnight (StellaRain). But they cleared the rest of the weekend and observing was quite good.

field "borrowed" from a neighbor for the weekend. But the neighbor turned to Christmas Tree farming, and the club had to scramble and an additional parcel of land nearby. A few short years later they were for-

tunate to be the beneficiary of a gift of another large parcel. (Their club has had some very rich and influential people as members: governors and senators and rich inventors.) So, as of now, the

Springfield Telescope Makers own about 87 contiguous acres of dark, rural Vermont. It is heavily wooded except where the club spends many weekends cutting, clearing, and mowing.



SERIOUS TELESCOPE MAKING:

This is the world's largest collection of Schuppmann telescopes ever gathered in one place (I was told!). This innovative design features matched lenses, one of which is aluminized to optimize color correction. They are also examples of how seriously the Springfield Telescope Makers take their hobby. They were among the thirty or so entries in the competition.

In the cleared spots, they have carved out a hillside amphitheater, a large observatory to house their thirteen inch Schuppmann-design folded refractor telescope (largest in the world, or maybe second?), a medium size-dome for a 10 inch true RC, a "bunkhouse" that serves as engineering and yard tool shed, and the latest addition—A 100 x 60 steel

building called the Flanders Pavilion (Flanders was one of the rich Senators I was talking about earlier!). They have also made room for a lot of parking.

Observing here is a bit different from RTMC Astronomy Expo. For one thing the skies are a bit darker. They are somewhere between Mt. Laguna and GMARS on a good night. (I barely perceived a glow when I asked about the prison recently built nearby.) Of course skies are darker than most RTMC AEs, considering that the west coast has its conference on Memorial Day regardless of the phase of the moon, and Stellafane always picks a new moon weekend. But it goes further. There are defined "Camping" areas, and "Observing" areas. Nobody camps near the observing area (although there are some observers in the camping area). Also, once the evening program ends, the announcer says "If you are leaving, use your lights as much as you need for safety." But once that grace period is over, white lights of all sorts are really taboo in the observing area. Even more so, around The Pink, there is no light except dim red astro-lights. And I saw no computer screens or astro-imagers in the observing areas.

There were plenty of big scopes on the observing fields, and they were freely shared. I saw some familiar objects in new ways, and met some new ones. You should try a 30 inch scope with a 100 degree apparent field of view on the galaxy 7331. It looks like Andromeda! I can't even

respectably image that tiny galaxy in my 10 inch Newt. Ever seen the Fetus Nebula?

One big difference between RTMC AE and Stellafane is the way telescope makers are recognized. Both gatherings allow ATM'ers to enter their scope for review. In Big Bear, however, the judges (a team of three or four) look for quality and innovation. Good craftsmanship, or a creative idea is recognized with a Merit Award, and no competition is implied. One Merit Award is no more important than another. At Stellafane, however, there is competition, with first place, second, third, and fourth being recognized. For example, in the optical competition, the judges (two teams of four) meet together for an hour to determine their criteria and make sure everyone is judging the same. They then review all the entries for optical excellence (Point the scope to Altair as the judges run a Suiter-like star test checking for contrast, astigmatism, correction, and collimation). They rate the scopes. Then they exchange information,

SWAP MEET COMPARISONS: Their swap meet was greener, wetter, and less dusty. Otherwise, it was pretty much the same as the one at RTMC AE. Very Similar. As a matter of fact, I found a fellow trying to sell the very same aluminum castings in Vermont that I had sold him from the RAS booth at RTMC AE six or eight years ago. They were still wrapped in black tape and marked with my magic marker!!! In my handwriting!!!

and each group looks at the best from the other group. Then they meet for an hour or two to hammer out who is getting the award. They ended past 2:00 am. The next day, a similar team does the same for the Mechanical competition—in which the criteria are innovation and workmanship.

RTMC AE has three venues going for beginners, main hall, and annex workshops. Topics cover just about anything in astronomy. Stellafane, on the other hand, has a much smaller set of presentations, and focuses on informal working sessions and mainly telescope making itself.

The camping is somewhat different, since everything is wet and green in Vermont. I was traveling with a small backpack only and could not bring camping gear, so it was cold and uncomfortable sleeping in the car without a bag or tent. Also remarkable: there were only about half a dozen RV's. (The terrain does not leave them safe parking. RV's must pay \$50 extra and must come



in a day early, and leave late.) The food was prepared by a caterer who specialized in "New England Cooking," a term I never really could get defined. It was a good grill, with lots of variety, and pretty tasty. Another thing that seemed a little strange was that there is absolutely no commercialization. There were no vendors, no sponsors, and nothing that looked or sounded like it. Of course Al Nagler was there. But he was just observing, and not even wearing a TeleVue hat. (Well, you could look through the Ethos since it was there, and talk with him about it.) They did have a raffle at \$1 per ticket. The prizes included a set of Nagler T4's, another set of T5's, an Ethos, a set of observing guides, and so forth. Maybe eight prizes in all, in about fifteen minutes. All the prizes had been donated, but other than a brief mention of the donors, they were not at all commercialized.

But the reason one goes to conventions like this is the people. Many of these people have been coming year after year (52 consecutive was the winner when they asked during the Saturday evening program). Many "Names" were there. Dobson held court for those who wanted to hear about living on a neutron star. And it is fun to hear about the Schuppmann Telescope from Jim Daley, who wrote the book(s) on them as he stood watch over the 13 incher! I talked for a while with Sue French, of Sky and Tel, who was observing next to us on the main field. I also at last met Alan French, with whom I have been trading Forum posts since Compuserve! The

head of Willmann-Bell. Al and David Nagler of course....Lots of other people dedicated to making amateur astronomy better.

The people were generous and sharing all the way through. I actually spent the first night in a borrowed shelter after somebody heard I did not have a tent. (Had it been warmer, I would have stayed there but opted for the rental car instead for the next two nights!) They shared information about how they run their organization, a bit about attendance and how they finance their operations, how they are expanding their program and all sorts of things useful to somebody who wants to spread the good word about the hobby. All in all, it was a splendid trip to this fabled land and the pink clubhouse. I was wide-eyed.



RANDOM SHOTS: At top, a picture of pictures. These are some of hundreds of old photos in the Pink clubhouse. They have been at this a long time, and were proud of their traditions. Next, a telescope maker pushing glass during part of hours of workshops and demonstrations in Flanders Pavilion. The third photo at right is the focuser and control wheel for the Porter Turret Telescope. (They were, after all, machinists, engineers, and tool makers!) This reflector uses a large diagonal to reflect light to a spherical primary at the end of a long arm. The primary reflects it back through a hole in the diagonal and to the eyepiece. At the bottom, the telescope field, the turret scope, and the clubhouse.

