

DECEMBER IN THE YEAR 1978

Predictions

- Dec. 2 Club star party at Sanborn Canyon Park.
- Dec. 2 Jack Zeiders' birthday.
- Dec. 9 General Meeting, Rosicrucian Planetarium, 7:30 pm. Park and Naglee, San Jose. Part 1 - Messier Marathon warm up by Gerry Rattley. A dusk to dawn look at the sky of March 23, 1979 using the Planetarium. Part 2 - Richard Hansen, member of the San Francisco Amateur Astronomers, will give a talk and slide show about his collection of astronomically oriented postcards and other astronomical memorabilia.
- Dec. 13 Jeff Lo's birthday.
- Dec. 15 Board of Directors meeting at Dr. Gregory's, 8:00 pm. 5480 Fairway Dr. San Jose.
- Dec. 16 Indoor star party, Los Gatos Red Cross, 7:00 pm. Yes, there will be a Christmas party.
- Happy Christmas and Merry New Years.
- Jan. 6 General Meeting, Rosicrucian Planetarium, 7:30 pm. Park and Naglee, San Jose. Program to be announced.
- Jan. 12 Board of Directors meeting, 8:00 pm. Douglas H. Buettner's, 6659 Mt. Pakron Dr. San Jose.
- Jan. 13 Indoor star party, Los Gatos Red Cross, 7:00 pm.
- Jan. 20 Indoor star party, Los Gatos Red Cross, 7:00 pm.
- Jan. 27 Club star party at Sanborn Canyon Park.

EDITORIAL

There are no quotes this month because of all the complaints I've gotten in the past. Now I'm really catching it for saying I would not have quotes. I can do no right.

Penny E. Pinschmidt

The San Jose Astronomical Association

Personal Glimpses: Norm Neinchel

In talking with Norm Neinchel, it would be hard not to sense his enthusiasm for astronomy in general but, especially, photographic work. It seems to me he's always excited about a new idea or accessory for his telescope or darkroom.

Norm's background explains some of his enthusiasm. He studied electrical engineering at the University of Rhode Island and Stanford, then did research at GE for a short while. He developed police equipment and a cordless microphone before switching to real estate in 1968. This job transition coincided with another transition: from bachelor to married man. At the end of 1969, he married Nancy, an elementary school teacher.

Where does astronomy fit into this picture? Until about two years ago, Norm had a life-long but casual interest in astronomy. At that time he was looking for a hobby and bought an 8" Celestron. Through experimenting, he found it good for some types of observing but inadequate for color photography of deep sky. One particular session on Mt. Hamilton in the early spring left him especially discouraged - after an exposure of 1 hr. 45 minutes with ASA 100 film, the Trifid showed only 9 stars and no nebulosity. As a last ditch effort he decided to try a cold camera. After a few rehearsals in his living room, he drove up to Fremont Peak for the big test. He took one hour Ektachrome exposures the first night of the Lagoon and the Trifid, and the next night shot M17, the Dumbbell, and the Ring. To get them developed was the next obstacle. Finding no one to develop them for him, he decided to learn the procedure and get the necessary equipment for doing it himself. Viewing his first results while they were still wet seemed to confirm his fears. Before giving up though, he dried, mounted, and projected them. The difference was mind-boggling. Success!

Norm's slides at the October meeting show that he is still experimenting with techniques to get the best pictures possible and reduce exposure times. Recently he moved up to a 14" Celestron, which he'll use to expand his deep sky capabilities to include planetaries and galaxies.

Besides all this experimentation on his own, Norm finds time to attend just about every scheduled meeting or star party of the SJAA. He loves to share astronomy ideas, whether it's relating his experience to someone else or picking up some hints to improve his own system. Could such an active member be enticed to contribute his ideas officially as a member of the board? Not now, he says. He has a few ideas which relate to the club as a whole, such as the establishment of smaller interest groups to help people get more involved. But for the time being, developing some ideas related to astrophotography has higher priority.

By Suzanne Lowd

Excerpts from The First Three Minutes by Steven Weinberg
Submitted by Allan Meyer

"SIXTH FRAME:

The temperature of the universe is now 3×10^3 °K. Since the first frames, 34 minutes 40 seconds have elapsed. The electrons and positrons are now completely annihilated except for the small excess of electrons needed to balance the charge of the protons.

The universe will go on expanding and cooling, but not much of interest will occur for 700,000 years. At that time the temperature will drop to the point where electrons and nuclei can form stable atoms, making the universe transparent to radiation; this decoupling of matter and radiation will allow matter to form into galaxies and stars. After another 10 billion years, living beings will begin to reconstruct this story."

"We can imagine a time when gravitational forces would have been as strong as the strong nuclear forces. Gravitational fields are generated not only by particle masses, but by all forms of energy. At super high temperatures the energies of particles can become so large that the gravitational forces between them become as strong as any other forces. We can estimate that this state of affairs was reached at a temperature of 10^{32} °K.

We do not know enough about the quantum nature of gravitation to speculate intelligently about the history of the universe before this time. The temperature of 10^{32} °K was reached some 10^{-43} seconds after the beginning, but it is not really clear that this estimate has any meaning."

More on the Messier Marathon
by Don Machholz (356-7727)

As mentioned in a recent bulletin, we can attempt to observe nearly all of the Messier objects in one night. Due to the position of the sun in late March/early April, over 100 of the 107 known Messier objects will be visible sometime between dusk and dawn. As for the exact date, this is determined by the moon's phases and the weekend nights.

In 1979, the last quarter moon is March 21.1, new moon is March 28.8, and first quarter is April 4.1. The Friday nights occur on March 23 and 30. And as for the weather, the past four years indicate that we have about a 60% chance of having a clear night on any given night during that time. I would suggest that we try for the following nights:

Fri., March 23, and if it's cloudy, we'll try Sat., March 24. If it's still cloudy, we'll try Fri., March 30, and if still no luck, try Sat., March 31.

Meanwhile, learn your Messier objects. A book that I have found helpful is "Messier's Nebulae and Star Clusters" by Kenneth Glenn Jones. It is expensive (\$25.00), but it has a section on every Messier object, along with helpful finder charts. We will be observing from Loma Prieta, some 30 minutes from Los Gatos. With such a close location, it is hoped that all of you will be there, whether you have a telescope or not. Binoculars should be useful, also.

Blurbs

Jack Zeiders has a roll of red film (the stuff for making flashlight filters or whatever) available for any one who wants some. Either call him at 246-6189 or send a self-addressed, stamped envelope with instructions as to how much is needed enclosed. (2961 Magliocco Dr. #3, S.J. 95128) If all else fails, corner him at one of the meetings.

Cathy Pinheiro and I will be having a Christmas party at the Red Cross on Dec. 16. We have a problem, though. Mr. Claus himself will not be able to make it. Instead, his twin brother, Paus, is going to fill in for him. Only Paus does not have a red and white suit. If any of you happen to have one available, please call me at 356-4330. (We don't want to have to rent.) Luckily, Mrs. Claus will be able to be there as will a few elves. (They aren't so much in demand as old "Ho Ho Ho" is.)

December's new moon period falls in the middle of the holidays. That is why our last scheduled meeting of the year is on the 16th. Happy Vacation.

Debrah Moore and I are famous. In the Sept. Bulletin I quoted Debbie on a comment she made about the Conference at Cal Poly. The December issue of Sky & Telescope quoted the quote I quoted from Debbie. No one should ever complain about my quotes again.

For anyone who needs them, I now have numerous copies of the revised membership list.

FOUND by Jim Van Nuland at the Nov. 4 star party at Sanborn Canyon - 2 green sand chairs. Will the owner please phone him at 371-1307.

Last month's question of the month was "What do you want to be next month's question of the month?" The "answers" are as follows:

"How heavy is a Black Hole?" Marty Maguire

"I would like to be the question of the month. I am very questionable." Wolfgang Hanisch

"Why isn't anything being done at the board meetings?" Anon.

"What was the Star of Bethlehem?" Cathy Pinheiro

"Why aren't people attending the meetings?" Gerry Rattley

"How high is up?" Denni Medlock

"Where did it all come from - what we look at each night? Who is responsible for this mess?" Phil Hermsmeyer

"Why do you like astronomy? What do you want out of it?" Ed Schell

"Why do we do all our observing in the visible light spectrum?" John Cincotta

This month's question of the month is "What was the Star of Bethlehem?"

This is what happened Nov. 11:

Gerry Rattley announced the bad news first - the chartered flight out of San Francisco or Oakland for the February eclipse may not happen. Gerry has information on two ground expeditions, though, and Bob Fingerhut has the details of a flight out of Spokane.

Now the good news - the CID camera, bought through an IBM grant, has arrived. Kevin Medlock has made an adaptor for $1\frac{1}{4}$ " systems, and there is progress on other details.

Jim Van Nuland gave a short explanation of asteroid occultations. A fairly accurate location for observing these events is known only a few days before they happen. Anyone who would like to participate and can set up on fairly short notice should contact Jim.

Next came the evening's program on MIRA. Dr. Nelson Irvine shared the history, present status, and goals of this group of professional astronomers. From their beginnings as graduate students at Warner-Swasey in Cleveland 7-8 years ago, they have now become a tax-exempt corporation with an observatory site at Chews Ridge (southeast of Monterey). A 36" f10 telescope was installed the summer of 1977. Besides individual projects, they are working on updating the Henry Draper star catalogue. Eventually, they hope for an endowment to support the observatory and full-time astronomers. Best of luck to you!

To conclude the meeting, Ed Schell presented a plaque to Don Machholz as the club's official recognition of his comet discovery.

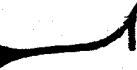
Suzanne Lowd, Staff Reporter

Equipment

Close to 40 people came to the show-and-tell indoor star party on November 18. It seemed to be more people than many of our general meetings have been in the past.

Slides were first as Norm Neinchel took around 15 minutes more of his self-predicted 30 seconds to flip through his slides. Bob Fingerhut and one or two others also had some astrophotography shots. Unfortunately for some, this slide show did not have a well-endowed young girl in a skimpy bikini slipped in among the other heavenly bodies as did the general meeting show a few months ago.

As far as equipment was concerned, there was plenty. Jim Van Nuland proudly bragged about his familiar "Superb" 8" f/6. Bob, Charles Ingebretsen's and Gene Cisneros' C8s were dwarfed by Norm's Celestron 14. Steve Smith announced his 8" f/6 Newtonian was for sale (see the ads, back page, for details) and Denni Medlock shined up the chrome surface on her $4\frac{1}{4}$ " f/3.6 Newtonian piggy backed with a 4" Maksutov. Pete Manly showed the beginnings of the CID camera, and the famous 18" f/4.6 was explained by Kevin Medlock. I had my little 6" mirror and pitch lap. It seemed so small in comparison to the giant 14 and 18 inches, that I was tempted to say Kevin's telescope had babies and my mirror was one of them.

con. 

Equip. con.

After all the excitement was over, I ran home for dinner. Upon returning, I was practically attacked. Yes, we have some weird club members and bulletin subscribers among us. Wolfgang Hanisch tore off my coat and swiped my spectacles, as Mr. Foot Fetish, himself, (Jay Freeman) proceeded to relieve one of my shoes of its shoe lace and then take my shoe as well. This gave Wolf the perfect opportunity to peel off my sock, which, in turn, left my naked foot open for Bruce DeGraff to tickle to death. It's amazing what can happen at one of these indoor star parties, isn't it? Until the people mentioned directly above left, I kept my recovered shoe and both feet inside a paper bag for protection.

Considering the only excitement was when Wolf tried to balance Ed Schell's six-cell flashlight, one cookie, and an opened full can of Coke all on his nose, most of the gang, at Norm's urgings, took off for Sambo's around midnight. The few who were left behind cleared out of the building by 1:00 A.M., three to four hours sooner than the normal closing time for an indoor star party.

Perils of Penny and her Petty Publishing Problems

I actually thought I was doing pretty well last month in getting the November issue of the Bulletin out in time. By Wednesday, October 25, I already had two pages duplicated. It was to be a multi-colored bulletin, so I designated that first page (Gerry's) to be gray.

For the first time since September, the Bulletin did not cause me to miss any of my classes. I was proud of myself. But Thursday morning came all too soon as I suddenly discovered I should have missed a class or two - I was very much behind.

With my mother at one and me at the other, we kept two typewriters in constant motion until 3:30 P.M. With the typing completed, minus proof-reading, dividing lines and touch-up by the illustrator (Ed Schell), the slapped-together Bulletin was rushed to Los Gatos Office Equipment. Yep, you guessed it - the duplicating machine decided to take the rest of the day off.

All the way over on the far side of San Jose, we found another duplicating service. Colored paper was not free there, which was why only Gerry's page, the one done ahead of time, was in gray.

To my stamping party that followed the duplication, I invited Gerry Rattley, Wolfgang Hanisch, and Jack Zeiders. This is when the fun begins. The Bulletin has to be collated, stapled together, folded in half, addressed, stamped and stapled again. Except that Gerry, upon discovering I had a white pumpkin Celestron, used an orange felt pen to color each and every one. Something must have gone wrong in his childhood.....

Anyway, just before midnight, another Bulletin in the life of Penny Pinschmidt, complete with mistakes galore, was finally put to bed.

CID Camera

A design meeting was held on 18 Nov. '78 at the Los Gatos Red Cross. The camera will be run initially with a simple variable rate clock driver and CRT display. This will allow group demonstrations of the system and preliminary evaluation of the system for manually guiding an astrocamera. We expect the initial version to be running in about a month.

Present plans call for the addition of circuitry that will allow digital photometry for AAVSO and occultation work. These additions should be ready in about 2-3 months.

We are also designing a digital memory and scan converter that will allow use of a standard rate TV monitor. The digital memory will also allow integration of many TV frames, much like a time exposure. Finally, the digital memory will form the main data interface between the camera and a microprocessor.

We are still looking for an intensifier for the camera. We'd also welcome people who like to work in electronics or who would like to learn.

Pete Manly

11-26-78

COMET COMMENTS

Following the flurry of comet discoveries during the past month, there seems to be little happening now. One comet had acquired another name, and another comet remains visible in the evening sky.

Comet Fujikawa (1978n): This comet appears to be identical to the comet discovered by W. F. Denning of England, using a 10" reflector, on April 10, 1881. Since that time, it has made 11 revolutions of the sun (unnoticed), until it was picked up by S. Fujikawa on Oct. 9 of this year. It is now at mag. 12 in the morning sky. Additionally, its new name is: Periodic Comet Denning-Fujikawa.

Periodic Comet Ashbrook-Jackson (1977g). This comet remains in the evening sky at magnitude 12-13. It appears small, and some observers report a small tail on it.

Comet tails: The average absolute magnitude (the magnitude of a comet as seen at 1 A.U. from both the earth and the sun) is about mag. 7 for long period comets. Comet Meier, discovered last April, appears to be one of the brighter comets, its absolute mag. is 3.5.

Don Machholz 356-7727

CORRECTION

In regards to Allan Meyer's contribution in last month's Bulletin, (FIRST FRAME by Steven Weinberg), an error has been made. The temperature of the universe is 10°K , not 10 K. My mother, in typing that page, was instructed to leave space for the appropriate numbers to be added later with pencil. As I said in Perils of Penny, not much proofreading was done, and things got very rushed and hurried at the last minute. Editors are not perfect, Allan, and I regret upsetting the teapot in simply forgetting to add the numbers.

Rattley rattles

ON . . .

President's Message and Comments

At the last board meeting I brought up the point that I have been a little disappointed at the general attendance level at the general meetings. Also we have been having poor attendance at our close in star parties. I have been pushing lately for more of these close in star parties because I felt that more people might attend them, they haven't! At our last general meeting we had an excellent program from a group that is doing something on the frontiers of astronomy, the speaker was a PhD astronomer, and yet our attendance was only mediocre (not even average)!!?

Now, don't get me wrong, I'm not complaining to nag people to do things just because the board says these are the things we want the club to do! What I am trying to say is what are we doing wrong, what things can we do to get more participation (at least at general club functions, such as lectures and star parties), what things would you like to see done!

I don't see how a club as large as ours, with as many very active members as we have and as many projects and programs can show so much apathy and lack of initiative when polled on what they would like from the club. Two years ago when I first took office as President of this club I ran a poll in the bulletin and would you believe it I only received ONE, yes ONE, response!!! This is pretty disheartening when you have a club to run!!!

Now that everyone feels they've been yelled at, let me reverse my attitude and thank the club for its support for all the special programs going on, such as occultations, grazes, comets, astrophotography, and the TV camera, etc. It is amazing how much support we have gotten from all our special projects in the last couple of years. Again, I thank you very much for this support, and hope that it can maintain!

What I would really like to know is if anyone has any ideas on how we can get better attendance at our regular club functions. I would run another poll in the bulletin but I feel that this has proven itself not to be too useful in the past. Ideas and/or comments to this editorial President's message should be expressed to myself or to any other board member whenever you feel the urge! It would be appreciated!

Thank you for your support!

Lets move on to a less humorous topic; would someone please explain what is a standard limburger cheese photometer and how, if at all, it works! I feel like I missed something, somewhere, someplace, sometime!? At the last Freemont Peak star party Ed, Penny and myself spent some time making timings of the newly discovered variable star reported in the October bulletin. Ed's timings did not agree with mine, but that's okay. We both used WWV as our time standard and we both did our timings at the same time. I do not know Ed's results exactly, so I'll leave them for Ed to publish. Here's mine, the period is almost exactly 2 seconds from maximum to maximum, with approximately one quarter of the period being spent near maximum light (bright red) and having an equally spaced equally long minimum. The rise and fall to and from maximum are steady.

Astronomically Yours,



History

October 28-29 Star Party at Fremont Peak

Even the preparations for this star party were hectic. Some of our astrophotographers decided that this was the weekend to do some "chilly" camera work. I was appointed by Jack Zeiders to buy the dry ice.... Have you ever tried to buy dry ice the weekend before Halloween? There wasn't any in all of San Jose. (It was all dried up.) At the last minute, Gerry Rattley told me about a source in Mt. View, and Jack went at Warp 7 to buy some.

Arriving at the Peak, Jack promptly burned out his dec. motor and bounced his diagonal off his primary mirror. Obviously, he was shot down for the night.

Gene Cisneros tried his hand at astrophotography - I heard - but was forced to go home Saturday morning after his wife was invaded by a raccoon while asleep in the van.

Jack Petersen and Bob Fingerhut - the dynamic duo - did not report any trouble for Friday night. They did look kind of groveled out when I arrived at the Peak at 4:30 P.M. Saturday. They were both semi-asleep wrapped around the steering wheel of their cars and seemed to welcome my noisy and, as usual, nasty arrival. (I still don't like the drive up the mountains.)

As the sun slowly sank in the west, the pumpkin orange Celestrons (12 of them) sprang up like weeds at Coulter Camp. Seems like everyone's got one - hot dogs, apple pie, Chevrolet and Celestrons?

I learned for the first time under Jack Petersen's eagle eyes how to practice guide. I attempted all night long my first prime focus pictures on hydrogen gassed tri-x. My first opinion of this method is that it does not increase the speed of tri-x. The "chilly" camera does much better with tri-x.

Six of my high school students also came to the Peak to learn about astronomy from the masters. One of them - a young lady of formidable beauty - turned Jack Petersen into a social butterfly. He very eloquently and dramatically got her hooked on astronomy.

While all this great education was taking place, Ed Schell, Gerry Rattley and Penny Pinschmidt interrupted this highly academic setting with prehistoric bellowings and numerous comments.

Around 2:30 A.M., the wind kicked up, (you should have seen the guide stars bounce) and it became very cold. At this point Bob, Jack, Jack, Pete Manly, and I huddled in front of and in Jack's van. We were then able to more comfortably continue our incoherent babblings. Eventually, we all gave up and went to sleep.

Sunday morning was a typical after-the-star-party morning. Everyone looked green and rumpled. Slowly, the tired troops packed up and headed down the mountain, each remembering this star party as the first cold one of the season.

P.S. My wife just discovered that it took me three days to recover from this star party.

By Wolfgang Hanisch

November 4 Sanborn Canyon Star Party

It was cloudy early in the evening as Jack Zeiders, Kevin Medlock, and I were driving in caravan-style to Sanborn Canyon. We were greeted by Jim Van Nuland, Ed Schell, Penny Pinschmidt, and Gerry Rattley.

Ed was sitting in his chair with his moon umbrella firmly attached and preventing him from possible moon burn. Jim was the only one who had set up a telescope. We all looked at the double double in Lyra and marveled at Jim's "superb" optics. We then had a discussion over the difference between "superb" and excellent optics, which was left hanging in mid-air when Kevin Medlock brought out his treasured butter cookies. He claimed that they were custom-made in Bishop, except the "expiration date" read "Eat before Nov. '61".

Slowly, such diehards as Norm Neinchel, Phil Hermsmeyer, and Pete Manly.....arrived. Also a bunch of my students and some of Gerry Rattley's friends came.

During a more "cloudy" moment, using the binoculars, I watched a couple in their car on the observing site using it as an impromptu Lover's Lane. When they pulled the shades on their car, attention was directed back towards food. Phil had gone into town and bought some popcorn. Kevin, Jack, Phil, and Gerry then proceeded to pop it on Jim's camp stove which Jim nearly blew up when he supposedly wanted to pour gasoline on it.

Jim and I finally turned our attention to our guests and showed them some of the typical objects that amateur astronomers look at. We showed and talked about galaxies, open clusters, globular clusters, planetary nebulae, diffuse nebulae, and binary stars. Our guests were very interested, and some of them were overheard marveling about the color differences in the double Albireo.

Around 10 P.M., the sky clouded over again and we all split up into bull sessions. When the bull got too cold, most of the "die-easies" went to Sambo's for coffee. There they were met by Bob Fingerhut who was clouded out at Fremont Peak. Just when Bob left the Peak, the sky became clear again. Oh, the trials and tribulations of amateur astronomy!

By Wolfgang Hanisch

You pizza-gobbling turkeys who consider Sanborn Canyon little more than a staging area for raids on the local gourmet palace are hereby ordered up a double portion of crow all around. Yes, those clouds were temporary, and by 10 P.M., I had a nice clear sky and proceeded to log nearly 30 more objects, in addition to conducting a tour for a second wave of Wolf's students.

Clouds returned about 2:30 A.M., and I finally broke down, tired but successful. Penny and Ed report many splendid meteors in a lovely, clear sky.

By Jim Van Nuland

(I agree with Jim that the star party really got interesting when the gang left for Sambo's or pizza or wherever. You missed a good one, guys. Penny)

ADS

Criterion 6" Newtonian
Electric drive, setting
Circles, 2 eyepieces,
6x30 finderscope.

Asking \$200 or best offer
Patrick Earhart - 371-7131

Homemade 8" f/6 Newtonian
Schmidt drive, 6mm, 18mm,
Barlow, and Orthoscopic
Eyepieces.

\$250 or best offer
Steve Smith - (408) 732-6758

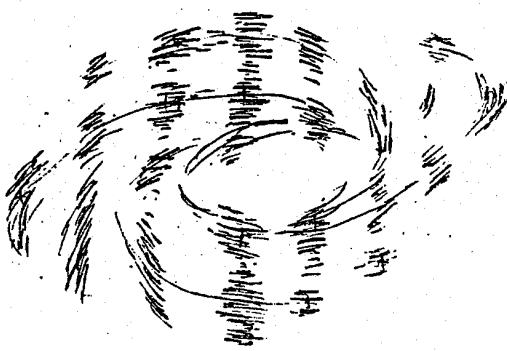
Great Red Spot
on Meridian PST

da	mo	d	h	m	
Sa	12	2	4	41	AM
Su	12	3	0	36	AM
M	12	4	6	20	AM
Tu	12	5	2	6	AM
Th	12	7	3	51	AM
Th	12	7	11	40	PM
Sa	12	9	5	28	AM
Su	12	10	1	18	AM
Tu	12	12	2	52	AM
Tu	12	12	10	47	PM
Th	12	14	4	34	AM
F	12	15	0	22	AM
Sa	12	16	6	13	AM
Su	12	17	2	6	AM
Su	12	17	9	49	PM
Tu	12	19	3	44	AM
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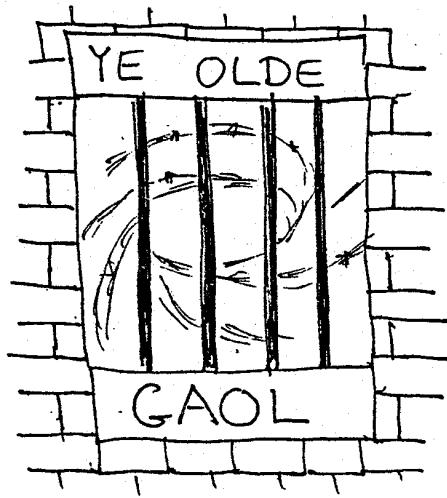
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Jim Van Nuland
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Observatory at
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NORMAL SPIRAL



BARRED SPIRAL (#1)



BARRED SPIRAL (#2)