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Skywatch

Exploring the Final Frontier! A Newsletter for the Truly Outbound.
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1999 Chiefland/Winter Star Party ("WSP North")!

The cancellation of this year's Winter Star Party, no doubt a disappointment to hundreds of regular attendees, was an unexpected bonus for me. Thanks to the residents of the Chiefland Astronomy Village, a substitute stargaze was organized to take the place of the normal WSP. The usual location, a Girl Scout camp in the Keys, was badly damaged by hurricane Georges and

could not be repaired in time for this annual event. The Chiefland site turned out to be a short six and a half-hour drive from my home in Fairhope, Alabama.

The Chiefland stargaze, intended to go from February fourteenth to the twenty-first, actually began on Friday the twelfth. Seven and a half of the nine nights were clear with exceptionally good seeing on several. I did not arrive until Friday the nineteenth and missed a few of the speakers and the big door prize, a Meade ETX 90 EC. No matter, there was still plenty of good weather and a few prizes left (even though I didn't win one).

I arrived just a couple hours before sunset, so I hurried to set up my tent and telescope (I brought the 24"). The sky showed good promise for an evening of galaxy hunting, cool and dry with just a hint of a breeze to

keep the dew at bay. I should mention at this point that the Chiefland Astronomy Village is comprised of about a hundred acres where a half dozen or so residents have homes with attached observatories. The village is about ten miles south of Chiefland, Florida and is very dark with only a slight dome



M51... "Spiral arms you could drive a truck through!" *Courtesy STSci...*

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of light to the north. The facilities are somewhat limited, but there is room enough for a thousand people to camp under the stars at one time.

Back to my story. As soon as I finished setting up, more door prizes were given out and that night's speaker, Jack Newton began his slide presentation. To be honest, I wasn't really thrilled at the prospect of looking at slides. I wanted to start observing and almost slipped away to do so. I'm glad I didn't. I would have missed the most spectacular amateur images I've ever seen. Jack Newton is without a doubt, the most capable person in the world when it comes to imaging deep sky objects with a CCD camera and a small telescope (I mean small in the sense of under a meter). His observatory is equipped with a 16" LX 200 and an array of SBIG and Meade cameras. (I was treated to a tour of his observatory the next day and had the pleasure of meeting his wife Alice as well. By the time I headed back to the observing field, I felt as though I had known them for years. Very warm and friendly people.)

The sky was fairly dark by the time Jack's talk was over so I got right to observing. At first the seeing was mediocre, but as the night wore on things settled down and I was able to use over 300X by midnight. This was also the first chance I was able to use my TeleVue binocular viewer extensively from a dark site. The Binovue really excels on objects with dark lanes like M82, M104

and NGC4565. It gives them an almost 3D effect. Once M51 was high enough it proved to be nothing short of spectacular. The sky was very transparent and in the Binovue at 325X you'd swear you could drive a truck between the spiral arms. The H II regions were very prominent. M101, though not in the same class, also showed spiral bands all the way around the core. The JMI digital setting circles were working very well that night (sometimes they're finicky) so I was able to locate several off the beaten path objects (a couple Hickson galaxy clusters and a few obscure planetary nebulae from an article in Sky & Telescope a month ago). I would like to have found more, but I found a continuous, small crowd eager to look through a 24" Pegasus mirror with the Binovue. Actually I didn't mind at all as I was able to make many new acquaintances and that's a big part of star parties anyway.

Also that evening, I was able to spend some time with Tom Clark and his wife Jeannie of Amateur Astronomy Magazine and Tectron Telescopes fame. Like Jack and Alice Newton, the Clarks (more residents of the Village) are genuinely warm people. This is not to say that Tom is not opinionated. I appreciate his honesty, which is sometimes brutal (and usually always humorous). It is the same trait that attracted me to my wife Stephanie. God help the world if those two ever get together! Tom took me on a tour of his shop and showed me eight telescopes in progress, one of which is being

purchased by a member of our club. He is also building the Yard Scope II, his own 36" monster which will be housed in a big dome there sometime in the near future. Tom has now built over 150 large Dobsonians and his magazine Amateur Astronomy is a breath of fresh air as compared to the big two publications.

By 3:30 am I was dead on my feet, so I covered up the 24" and crawled into my tent. I couldn't seem to get warm so I eventually gave up on the idea of sleep, drove into town and got a hot shower at a motel, had breakfast and started all over again!

Saturday morning was chilly, but still clear and I could see it was going to be another good night. The first person I ran into was Rick Singmaster, the gentleman who crafts Starmaster Dobsonians. Rick has developed a fierce loyalty among his customers and it's easy to see why. He often delivers his telescopes at star parties and this was no exception. I believe this was a 20" and he was right there to make sure its new owner was happy with his purchase. I asked him what new things he had in store for amateur astronomy (he was the first I believe to offer Stabilite mirrors in a commercial Dob) and he indicated he was working on a 30" with an eyepiece height of about six feet. This would be something similar to the JMI scopes that came out a few years ago, but would have a smaller central obstruction (similar to an SCT).

I later found Chuck Pisa of Wolf Camera (formerly Sarasota Camera Exchange) who had brought a Celestron C102HD for me to look at. This is a 4" F/10 achromat refractor on a German equatorial mount for the unheard of price of \$595. It has gotten very good marks from customers and I wanted to see one for myself. Its not an Astro Physics or a Takahashi, mind you, but for the money it's a very good deal. There is a little chromatic aberration on bright objects (like Venus and the moon) but it easily showed the Cassini division on Saturn's rings as well as dark banding on the planet itself at 208X (4.8mm Nagler). It really excelled on the deep sky with beautiful images of M81 & 82 (16mm Nagler) and the Double Cluster in Perseus (27mm Panoptic). Needless to say, I bought it.

One other interesting scope for sale was the Teleport, a 10" F/5 compact Dobsonian. Tom Noe is now making commercially the scope he designed to ride on his motor cycle a few years ago and featured in Amateur Astronomy magazine. It sports a Carl Zambuto mirror (complete with optical certification), a 2" custom helical focuser, telescoping truss tubes/shroud and a built in drawer for eyepieces. The whole thing collapses into a cube 13.5"x14.5" x26" and weighs only 35 pounds! I guess the only thing somewhat hard to swallow was the price tag of \$2200. Let me tell you though, the construction was first class.

Late in the afternoon,

club member Pfil Hunt showed up with his C-8 to enjoy these dark Florida skies. The last talk of the star gaze was on this night, and given by Alice Newton. This was a slide presentation for adults. Everyone had lots of good laughs as one bawdy slide after another showed the Newtons' (Jack and Alice) move from British Columbia to Chiefland. After that it was dark once again so everyone headed to the observing field.

Saturday night turned out to be not quite as good as Friday (the humidity had climbed significantly) but it still provided good dark skies for those of us starving for galaxies. Once more I found a small crowd eager to view the universe with both eyes so the Binovue got another good workout. The best object for this night had to be the Eskimo nebula (at 325X). No photo I've ever seen showed any more detail than we saw in this object. It stayed clear until about 2:45am when a few clouds began to creep in from the northwest. After shooting through sucker holes for thirty minutes, I decided to call it a night. By daylight the sky was completely overcast and a light mist was falling. Packing back up was done hastily (due to the mist) and I was headed back to Alabama by 9am, after saying goodbye to a really great bunch of people. I've been attending star parties since 1984 and this was without a doubt, the most fun I've ever had at one.

--Pat Rochford

The *Tascification* of Celestron?

Tasco and Celestron? Tastron? Celesco? The 'Tascification' of well-loved SCT maker Celestron? That's been the question on the minds of many amateurs since well-known (infamous?) import scope seller Tasco bought Celestron last year. Do fans of Celestron have anything to fear in this regard? Well, from what I understand, the desire is to keep '**Tasco**' and '**Celestron**' separate corporate entities with basically unchanged product lines. And, like it or not, the buyout of Celestron by **somebody** was pretty much inevitable. Celestron, unfortunately, had become a company with a lot of problems as the 90s wore on. In retrospect it seems clear (to me, anyway) that Celestron's problems stemmed from three root causes:

1. Lack of skill in marketing. The problem was that despite a continuing advertising presence in the astomags, Celestron's advertising campaigns, year in and year out, weren't really *heavy enough*--or at least SLICK

enough. Their ads over the last ten years frankly pale beside Meade's multi-colored high-tech front/back of the magazine extravaganzas! Celestron just kept poking along, placing ads which usually consisted of a monochrome photo of a pretty girl in skimpy sixties clothes caressing a scope (oh, how I'll miss **The Celestron Girls**, though, if they're really gone!). Compare ANY of Celestron's (slightly pathetic) **catalogs** to Meade's and the disparity is even more obvious.

2. The drive (due, I suppose, to competition with Meade) to keep at least the basic SCT at that **\$1000.00 price point** these scopes were at in 1975 (!). And I must admit that both companies have TRIED really hard to keep the quality up on the bottom model scopes. But this was surely punishing for **Celestron**, who I ASSUME didn't have the sales numbers of Meade.

3. High techiness. In addition to the two other problems, Celestron, especially with the coming of the LX-200, came to be known as a *follower* rather than a *leader* in high tech innovation as far as telescopes go. Was this fair? Yes and no.

Celestron was actually in the *lead* for quite some time....prominently marketing *the first mass produced goto scope*, the Compustar (yes, LX-200 fans, Celestron was there before Meade). Now, the Compustar was not



Somehow both Meade and Celestron have managed to keep the prices on basic 8" SCTs about where they were in the 1970s! Pictured is Meade's introductory scope, the LX-10...

perfect (nor was the 'other' goto system Celestron marketed at the time, Vixen's original Sky Sensor system), but it did work. The puzzling thing is that Celestron abandoned the Compustars about the time the LX-200s started coming on strong. Why didn't they choose to build on the Compustar rather than *run away* from technology?

Instead, Celestron waited years, literally, to announce *their* goto scope, the **Ultima 2000**. It then took another couple of years to reach the market (and we have YET to see an Ultima 2000 11"!). And finally, in typical

Celestron fashion, they then chose basically *not to advertise it* (nor their other high-tech scope of the time, the Faststar), wasting advertising, instead, on spreads featuring cheap Plossl eyepieces and red flashlights!

Why, why, why does Celestron let Meade rule the roost in the high-tech arena? Part of the reason may be the **corporate culture** of the company. Celestron apparently does not 'do' 'advanced' electronics--ironic for a company which started out as an electronics manufacturer. The Compustar's software (and electronic hardware, I understand) were contracted to outside developers. I believe the same thing maintains with the U2K. Even the simple drive corrector/driver/PEC electronics for my Ultima 8 are made by Tangent Instruments. Nor does Celestron make the other accouterments of modern high-tech astronomy. Their CCD cameras, for example, being made by SBIG.

Farming these things out ain't necessarily bad, and many folk will tell you that 'Celestron's' electronics are 'better' than Meade's, but I DO think it's a symptom of Celestron's corporate resistance to technology. Of course, high-tech (for telescopes, anyway) doesn't appeal to everyone. I was faced with choosing between the LX-200 and the Celestron Ultima 8 in '95 when I bought my last SCT, and easily chose the U8. I wanted a simple, sturdy scope which would

easily 'last' the rest of my observing life, and the U8 filled the bill. Maybe I'm weird, but I think there are still some astronomy Luddites like me out there (why I don't even have a set of DSCs for goodness sake!)

Things have seemingly improved ad-wise since the Tasco buyout, though I have NO inside info and no idea whether Tasco's purchase of Celestron from a Swiss holding company had anything to do with the improvement in the magazine advertising strategy. Prominent and attractive ads for the Ultima 2000 8" are now running (the Faststar was discontinued and it's removable secondary system integrated into Celestron's other scopes).

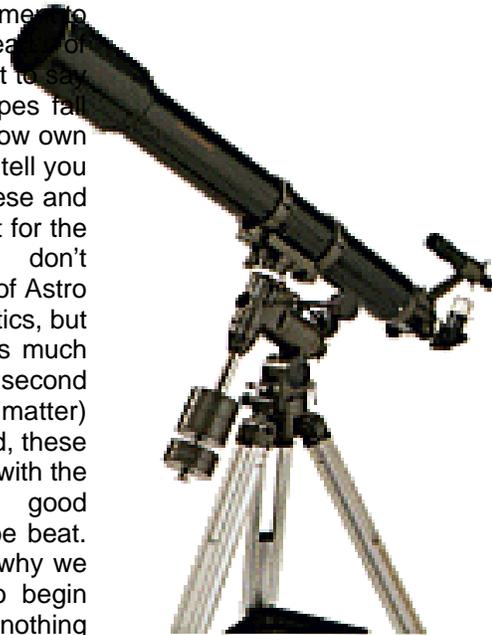
Tasco buying **Celestron**? Certainly wasn't something I welcomed. But it is far preferable to the alternative offered (in the late '80s), the *merger of Meade and Celestron!* The FTC, thankfully, turned that one down. At least we still have a 'Microsoft' and an 'Apple' in the telescope business. I'll leave it to my more sanguine readers to decide which is which!

--Rod

**Product
Review:
The Celestron
C102HD 4"
Refractor!**

Right now is a very good time to be in amateur astronomy. There are currently more telescope models available, in nearly every price range, than at any time I can remember. Two models currently available from Celestron are the C102 HD, a 4" achromat and the C114 HD, a 4.5" Newtonian. Both come on a German equatorial mount called the CG-4. Before I go any further, let me make a statement about inexpensive, imported telescopes. It's fairly common knowledge that "department store" scopes are often crap, introducing disappointment to the newcomer instead of excitement. This is not to say that all import telescopes fall into this category. I now own two of these and let me tell you that you can buy Chinese and still get a good product for the money. No, they don't compare to the quality of Astro Physics or Pegasus Optics, but then they don't cost as much either! For a portable second scope (or first for that matter) or a scope for your child, these are excellent buys and with the upgrade of a few good eyepieces they can't be beat. Let's try to remember why we got into this hobby to begin with. I mean there's nothing wrong with star testing optics, but isn't the objective of all this to see things in focus?

I'll begin with the C102 HD. I'd been looking for an inexpensive, portable scope for taking out on those nights that I didn't have the energy to set up one of my larger ones (24", 12.5" & 8"). I also wanted something with wide field capability. The ideal instrument would have been something like a TeleVue 101 or maybe an Orion (Vixen) 102ED, but I just didn't want to shell out two to three thousand dollars for casual



observing. After hearing favorable comments about this 4" achromat, I decided to try one out. Chuck Pisa of Wolf Camera (Sarasota, FL) brought one to the recent Chiefland Star Party and I was able to put it through its paces there.

The 102 has a focal ratio of f9.8. There is definitely some false coloring seen around bright objects

like Venus and the Moon, but I don't find it that objectionable. For the most part, stars are crisp, pinpoints of light, just like you'd expect in a refractor. There appear to be three baffles in the optical tube, again maybe not as many as you might find in an Astro Physics, but they are certainly adequate for my purposes. One of the big drawing cards of this scope is its standard 2" focuser (with 1¼" adapter). The Vixen achromat (at nearly twice the cost) does not have this, even as an option. The star diagonal that comes with the 102 is a 1¼" with a plastic housing. Useable, but not the greatest. I purchased a Meade 2" diagonal and tossed the other into my box of "stuff". Under the dark skies of Chiefland this 4" amazed me. With a 27mm Panoptic (37X) it produced a true field of view of one and three quarter degrees. The area of M42 and 43 was absolutely stunning with more nebulosity visible than I thought possible with this aperture. The Double Cluster was perfectly framed, with several red stars plainly visible. M81 and 82 in the 16mm Nagler (62X) were hauntingly beautiful, the dark lanes of 82 were definitely there. The seeing in the early evening hours was not the greatest, but during periods of calm, Saturn's Cassini division and dark banding on the disk were clearly seen with a 7mm Nagler (145X). I also used a 4.8mm Nagler (208X) but it was just a little too turbulent for a good, steady view. I have on order now, a 55mm TeleVue Plossl, which will give a 2.6 degree

field of view at 18X, just right for rich field viewing.

The finder scope is a 6x30 with long eye relief. An 8x50 would have been better of course, but I must remember this is an economy scope. The standard eyepiece that comes with the 102 is a 20mm Plossl. It looks like one of the old Vixen silver tops, but it's not of course. Its useable, but I've been spoiled for a long time from using TeleVues (Its also in my box of "stuff" now). A couple of nice touches are the 2" to 1¼" adapter that's threaded for a tee-ring, and a ¼"x20 bolt incorporated into one of the tube clamps for piggybacking a camera. The biggest difference I can see between this Chinese version and the Celestron Vixens of earlier years is the use of plastic in the objective cell and dew cap. It certainly has no adverse effect right now and only time will tell if it fares better or worse than aluminum.

The equatorial mount, dubbed the CG-4, was much beefier than I expected. Its not quite up there with the Great Polaris, but doesn't miss it by a whole lot. The slow motion control gears are enclosed and are reasonably smooth in operation. There is currently available, an optional single axis (right ascension) drive which seems to get favorable marks, but which I have not personally used. I am holding out for the soon to be released dual axis drive (if it falls into the same price range as Meade's drive for the LXD-500). There are fine adjustments for movement in altitude and azimuth, as well as a hollow casting to accept an optional polar alignment scope.

The tripod legs are aluminum, which pretty much seems to be the standard these days for economy scopes.

As far as operation goes, this mount has only one drawback that I can see - excessive vibration. The damp out time seems to be about 6 seconds on a consistent basis. Part of this may be attributable to the heavy 2" star diagonal and Nagler eyepieces I use. That's a lot of weight on the end of the focuser tube. But I believe a lot of the vibration comes from its light construction. My first attempt to reduce the jitters was to fill the tripod legs with sand (I had read of someone doing this). This had no effect. My second attempt met with moderate success. By placing a rubber gasket (1/8" thick) between the mount and tripod head and more of this material between the optical tube rings and the mount, I have been able to reduce the damp out time to about 3 seconds. This is acceptable I think, for an inexpensive mount with a fairly long optical tube. I have received suggestions (via Internet) to use felt instead of rubber and to fill the mount casting with epoxy. I may try these as I get spare time. Right now I'm fairly pleased with its performance.

The C114 HD is just as impressive. The version I have is actually a 4.5" Starhopper that Santa brought for my son, Breandan. The optical tubes are identical, the only difference being the mounts. The Dobsonian mount, by the way, just

doesn't cut it in my opinion. It's a single arm arrangement with an adjustable bearing for tension. Looked good on paper but missed the mark in real life. The 4.5 is now on an old German mount that I've had for thirty years.

The optical tube is aluminum, but is not seamless. (Not a major drawback as far as I can see) A 6x30 long eye relief finder is standard as well as a 1¼" focuser. This focuser is plastic but seems to work just fine with any normal weight eyepiece such as the 25mm SMA (Kellner) that comes with it. By the way, this eyepiece is very nice for being standard equipment on an economy telescope (a definite step above Meade's Modified Achromat). The secondary mirror (1") is held by a thick, single stalk but is adjustable for collimating purposes.

I took this scope to the Deep South Regional Stargaze last October (for my son to use) and was surprised at just how good the optics were. On one particular night, when the seeing was exceptional, the view of Jupiter it provided was stunning. I used a 10mm Celestron Plossl with a 2X barlow (182X) and saw a wealth of detail. Deep sky viewing is somewhat limited by its aperture, but under dark skies (like the C102) it performs quite well.

Current street price on the C102 HD is about \$600 while the C114 HD runs \$425. Plan on spending \$150 - \$200 on a couple of good Plossls & barlow lens, \$120 for a motor drive and you now

have a very portable scope that will provide many years of enjoyment.

Pat Rochford



MY BACK PAGES-MY BACK PAGES-MY BACK PAGES



AstroPoem

Mars

You gaze across the landscape with your
Baleful Red Stare,
A frightening and blood-red apparition.
But through the telescope
Your truer countenance is revealed!
No more red,
A delicate and welcoming
Peach
Ripe and ready for man's and woman's
Taking!

--Rod

Editor's Musings: Once Upon a Midnight Dreary

MOSPs...Members Only Star Parties, that is, those monthly gatherings of MAS observers at your friendly Environmental Studies Center, are going well this year. It's no secret that last year saw us drearily rained out just about every new Moon Saturday night. But this year things are decidedly different. As of April, we've had three good outings. How much does the light pollution hurt from this suburban site? Some...but the legendary Rosette Nebula was easily visible in my 12" reflector this past Winter, and that's not too shabby! Join us for observing fun once a month on the Saturday evening nearest the full Moon. Never been? Contact Rod Mollise or Ginny Kramer for details. You'll also find

information on this star party on the MAS web page at <http://members.aol.com/RMOLLISE/index.html> (go to events and announcements).

Dorothy and I will have left for the Texas Star Party by the time you read this...and while we'll have to miss Ginny's 15 year reunion party, we wish everyone the best, and will be there in spirit!

Oh, how we'd looked forward to the TSP..and we'd spent quite some time getting ready, organized and packed. Imagine my surprise though, when I noticed that my C8 case had been moved to the front hall...I hadn't planned on taking the C8 to Texas at all! Imagine my further amazement when I noticed the C8 itself sitting outside its box and heard a muffled thumping from inside the case! With some trepidation I opened it, and who should spill out but a half-suffocated Beavis and Butthead:

"I told you we'd, like, smother before we got to Texas, dillweed!"

"Heh-heh, yeah, yeah, I kinda liked the feeling, Butthead!"

I might have known...those two delinquents trying to cadge a free ride to TSP! After shooing them out, and pointing them toward the local Greyhound Bus station, I was repacking the C8 when I noticed a mayonnaise jar in the bottom of the case. Face Front True Believers! A mayo jar which contained still another ever-lovin' installment of...

Rumours

Meade sure didn't wait long! Just a few months after introducing it's much talked about ETX/90EC, Meade is preparing to up the ante with a **five-inch ETX** (which will, like its little brother, use the new Autostar computer controller for goto operations! And will cost, we're told, all of **\$895.00** (sans Autostar and tripod). Good gosh...if this thing is reasonably well made (maybe with at least the build quality of Celestron's new G5), I expect it to take the

market by storm. Especially if, as expected, the optics are as good as those in the ETX and in the 7" Meade Maksutov! Possible downers? A plastic mount ala' the ETX 90. The construction used on the 90mm is certainly workable, but I would question the durability of a 5" which is merely a 'scaled up' 90!

Well, what's Celestron gonna do about it?

They'd better do something, or be beaten up by the ETXes, which are increasingly becoming the telescope equivalent of the **Yancy Street Gang!** But indications are that Celestron is, for once, preparing a timely response. The rumor we're hearing is that Celestron will introduce a 5" goto scope this Summer. One with what is supposedly a 'more sophisticated' computer controller than that found on the ETX (whatever that means). While it is not clear whether this will be a Mak or an SCT, the Anonymous One guesses that it'll be another incarnation of the much loved C5!

Along the same lines, a little bird chirped to your friend AA

that if you want a C5+ you'd better order one now, since, with the coming of Celestron's goto 5 (Compustar 5?!) It is fixing to go the way of the dinosaur!



Meade's brand-spankin' new ETX/125EC and her 90mm little sister!

--The Anonymous Astronomer



Ever wonder what we northern hemisphere observers are missing? Here's an example, glorious 47 Tucanae! This image was taken by a buddy of Rod's, Brazilian astrophotographer José Carlos Diniz. He captured this beautiful image with his LX-200 and an exposure of 35 minutes on PJM 640 with his old reliable Olympus OM-1!

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