

## Highlights

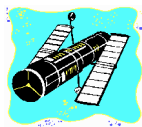
- The Celestar 8
- Megastar 4.0!

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- Viva le Nagler!
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# Skywatch

*Exploring the Final Frontier! A Newsletter for the Truly Outbound.*  
Volume 8 • Number 1  
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## 750 Kids, Jupiter, Saturn and a Leonid or Two! *MAS/ESC Fall Public Star Party and Leonids Meteor Gaze*

It looked like the clouds would stay away--for once! Sad to tell, the Mobile Astronomical Society's public star parties have become notorious as cloud and rain attractors! But the morning of Monday, November 16<sup>th</sup> actually looked promising. Dare I say it? Crystal clear! So it was with high hopes that I packed my 12" truss tube

Dobsonian into the Toyota and headed west to the Mobile Public Schools Environmental Studies Center, which is the site of our twice-yearly joint MAS/ESC star gazes.

As the Sun set, things still looked good. I sure *hoped* so, since this star party had been publicized as a '**Leonids Star Gaze**.' The media were putting up quite a fuss over the hoped for Leonids meteor storm, and it has been my experience that when a public star party coincides with some kind of astronomical 'spectacular' (especially one played-up on TV) we can have up to 1,000 visitors or more! A thousand bored little ones waiting for the skies to

clear can be hard on the nerves! Just before our visitors were due to start arriving, I took a quick look at Jupiter. A 12" telescope can present a wealth of detail on the King of the Planets. But tonight was something special! The seeing was especially steady and I was

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*Saturn was a real treat (image by Rod Mollise)*

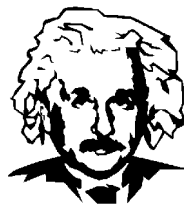
really overwhelmed by the huge number of fine features visible in my 12mm Nagler eyepiece! Not only was the Great Red Spot obvious, but a large number of tiny, micro-fine details, both *within* and around the spot were also easily seen. After what *seemed* like only a few seconds, my visual feast was interrupted by the rumble of arriving school buses. *They're heere!*

It was a good thing that we had a healthy turnout of MAS members onsite to help with this event (Pat Rochford, Ginny and Tony Kramer, Rod Mollise, Judy Anderson, George Byron, Sherri Martin, Leland Cox, Burrel Hamon, Marvin Uphaus and Betsy Hopson), because children and parents by the busload continued to pour onto the grounds! Within a few minutes of their arrival at least 50 eager young observers had lined up for a peek at Jupiter through the 12"! We continued this way for quite a while, with long lines of happy kids, parents and teachers at each scope! And boy was it all worth it for me! In my opinion, there's nothing quite as sweet as the amazement and wonder on the face of a little chirper who's just seen the rings of Saturn for the first time!

The perfect star party, right? It seemed that way for a while. Leonid fireballs had even begun to appear in the skies! But this was just a tease! *Once again*, a huge and impenetrable bank of clouds began to move in, obscuring Jupiter and Saturn and whatever Leonids might be lighting up the night! We

kept hoping, but by 8:30pm it was obvious that the skies would remain 'blank' for the rest of the evening. Despite this disappointment, most of the MAS observers stuck around for about an hour and a half after the kids left in order to provide interviews for WPML TV, who were kind enough to send a remote truck out to cover the star party for their 10 o'clock news broadcast.

Clear skies all evening would have been nice, but a large number (we estimate about 700-750) of children and parents *were* able to view the heavens. And most were very excited and grateful to have been shown the planets and a few bright deep sky objects! They didn't seem to be worried about missing the supposed meteor storm at all! No, not perfect, but a big success nevertheless! Special recognition must, of course, be given to the ESC's Dianne Martin, who did her usual fine, fine job of organizing this star party! Please help us with the next edition of this important public outreach event, which will be held this Spring! We need you! Remember, helping to educate the public about astronomy is certainly the most important task most amateurs will perform during their observing 'careers'!



## Product Review: The Celestar 8

*Hi guys 'n gals!*

*After publishing my little review of the LX-10 in the last issue of Skywatch, I've had an email or two asking how this telescope stacks up against the Celestar--after all, I did proclaim myself a 'Celestron Person.' Actually I have had a chance to try a couple of the Celestar Standard scopes (the Deluxe Celestar is a completely different animal--one I hope I have a chance to check-out before long) in recent times. Here's a copy of the short review which I emailed to one interested correspondent...*

I'd be glad to tell what I know about the Celestar 8 (standard). It just so happens that I finally had an opportunity one evening to try one of these little SCTs. Like the LX-10, this is a lightweight no-frills scope; it, in fact, weighs a bit less than the surprisingly light Meade telescope (surprising to me after toting around my Ultima C8!). Seemed very pleasant to haul around and set up. Unfortunately, Celestron has, like Meade, discontinued cases for most of its scopes (I believe the Ultima 2000 still comes with one). So the owner who takes one to dark sites regularly will probably either want to pony up some \$\$\$ for an optional case of

some sort (have you seen how much Orion charges for a case for an 8" SCT?) or try make do with a cheaper solution. I've always thought the case was an integral part of the SCT 'system,' critical to making these scopes fairly 'portable'--without a case, an SCT and its accessories tend to spread out all over your car. It's a shame that Meade and Celestron have had to economize in this area.

But to cut to the chase, images in the Celestar I used were good and were easily on a par with the LX-10. Now, the Celestar (or the LX-10s for that matter) didn't seem to have quite as much snap as my Ultima C8, but since I didn't have this scope on site for a direct comparison (I was using my 12" Dob on this night), this may WELL have been my imagination!

The OTA ('optical tube assembly') was up to Celestron standards with smooth, easy focusing (though some people prefer the slightly stiffer focusing typical of the Meades), a nice black Celestron finish and a usable eyepiece (a Kellner type eyepiece, an 'SMA', which was not nearly as good as the Plossl included with the LX-10). The fit and finish of the scope were superior to that of the Meade LX-10, something which seems typical in the Meade/Celestron SCT faceoff. Steadiness of the scope's light fork mount? Seemed about the same as what I saw on the LX-10. A gentle tap at 160x took several seconds to damp out--not bad, and quite acceptable for most uses. I believe that any shortcomings here--on

both scopes--are more attributable to their very light tripods and wedges than to their somewhat undersized fork arms.

What *didn't* I like? I did *not* like the 'wedgedpod,' the tripod with the 'built-in' wedge Celestron uses on the basic scope. Oh, I guess it would be ok for general visual use, but for dabbling in photography or CCD work....well, let's just say it would be a pain to polar align since the only way to move the scope/wedge in azimuth is by nudging the tripod! Also, the tripod is not adjustable in height, so if you don't find its height convenient, too bad for you (it should also be mentioned that the tripod most folks purchase for use with the LX-10 is also not height-adjustable)! Since the wedge is integral to the tripod, you would have to replace the whole shebang, and not just the wedge, in order to 'upgrade.' Subtract another 10 points for the measly 30mm finder that comes with this scope (and also the basic LX-10). As I've said before, a 50mm finder really is necessary for comfortable, efficient aiming of these SCTs.

But don't get me wrong! The image of M13 in this telescope was, to me anyway, as good as what you'll see in any 8" scope, and I must admit I lingered over this wondrous globular for quite a while! Oh, one last thing...this scope 'features' a spur gear drive instead of the LX-10's wormgear set. However it tracked well--just great in fact! Neither scope is really optimal for photographic use anyway, so I wouldn't let the type of gears on the Celestar dissuade

me from buying one. For most uses (including limited prime focus photography) the drive on this scope is more than adequate.

Like many new SCT buyers, the proud owner of this cute little telescope hadn't yet gotten around to purchasing a dew zapper of some kind! Predictably, his corrector plate soon dewed up, and I deserted the Celestar for my nearby 12.5" truss tube dobsonian, Miss Telescope, who had been waiting patiently for me to finish my flirtation with this smaller instrument and return to her embrace.

Bottom line? If you must choose between these basic scopes, the Celestar Standard or the basic LX-10, I would favor the LX-10 very, very slightly. It has a somewhat better drive, a better tripod/wedge (though these must be purchased 'separately'), and comes with a far better eyepiece. The optics were, in my opinion, pretty much equal given the very INFORMAL nature of my 'testing' of both scopes. I do think that Celestron has historically demonstrated a better level of Quality Control, and that they seem to produce telescopes which are consistently better mechanically and optically. But a 'good' Meade is indeed every bit as good as a 'good' Celestron--and vice versa (didn't expect me to resolve the time-honored and still raging Meade vs. Celestron debate here, did ya pilgrim?!). And let me say this: EITHER of these telescopes is far, far superior to the first C8 I purchased back in the mid

70s (and which cost at least twice as much if the price is figured in 90s dollars)! I can even now see myself doing a lot of good work and being quite happy with either of these nice little SCTs!

--Rod Mollise

## AstroBytes

*Two goodies to talk about this month, the long awaited 4.0 release of that favorite of deep sky observers everywhere, Megastar, and a nice bargain package, which may provide you with a replacement for Skyglobe or whatever other aging planetarium program you use for quick checks of what's goin' on in the sky....*

*Megastar 4.0*  
\$129.95  
Willman-Bell Incorporated

How can you improve on perfection? Is *Megastar* perfect? Many committed deep sky observers would tell you it is! Despite the fact that it now has some capable competition (*Guide*, *Skymap*, *The Sky*, etc.), Emil Bonano's *Megastar* is still first in the hearts of many observers. But if pinned down, I suppose that most would admit that while amazing, this program isn't quite perfect (I've yet to see the 'perfect' computer program!). And Emil has continued to improve *Megastar*, both in function and form. 4.0, the latest edition isn't a **major** upgrade, but it does contain some nice

enhancements:

**Object Databases:** Work continues on making *Megastar's* deep sky object databases, **which are already the best in the business**, even better. Larry Mitchell, for example, continues to improve his MAC Catalog of anonymous galaxies, which is a highlight of *Megastar* and which really sets it apart from the 'other guys.' According to the publisher, Willman-Bell (*Megastar* is no longer available directly from Emil's ELB Software), Larry has added 4,000 more previously uncataloged MAC galaxies and has made an additional 5,000 corrections to the object databases!

**Asteroids and Comets:** More data on individual asteroids is now displayed, and the original limit of 32,700 asteroids is gone, meaning that it is now possible to use the full Lowell database.

**Stellar Database:** Like most other recent programs and upgrades to programs, *Megastar* now uses the **Tycho and Hipparcos** catalogs rather than the time-worn SAO as its basic stellar data resource.

**Double Stars:** The latest version of the Washington Catalog has been added.

**POSS:** It is now possible to use the *Real Sky* Palomar Observatory Sky Survey CDs with the program. I just wish that an ability to use the online version of the POSS, the Digital Sky Survey, could be added in the next release for

those of us who don't want to spend \$500.00 for the *RS* package!

In addition to the above, numerous other small refinements/corrections have been made, many as regards to the program's display/interface.

*Megastar* remains my favorite deep sky program, and if you're serious about your observing, I'd urge you at least give it a try! If you'd like more information on this application, I can provide you with a reprint of my complete review for the program from *Skywatch* from several years ago. You should also be able to download a demo copy from the publisher's web site at <http://www.willbell.com>.

*Universe Explorer*  
\$9.95 (street price)  
Rom Tech Inc.

One November Saturday night before Christmas (a rainy Saturday night) Dorothy and I were trotting through Target in search of a Pokeman Pichu (sp?) video game my little daughter Elizabeth had her heart set on. I was beginning to feel the onset of a dose of Christmas shoppin' phobia when *what to my wondering eyes should appear* but (no, not a sleigh, not down here on the Gulf Coast!) a repackaged set of two decent astro programs, *Distant Suns* and *Mars Rover*. These two CDS are now in one box titled *Universe Explorer*. I'd seen ads for this set last Summer for about 25 bucks. So imagine my

surprise to see that my friendly neighborhood Target was practically *giving* these CDs away--\$9.95 for the set! I snatched one up and threw it amongst the boxes of chocolate cherries which had been my contribution to our cart's booty.

The copy of Mike Smithwick's *Distant Suns* which is included here, v4.0, is a couple of years old. Apparently 4.0 was the first release for the program after the original publisher (VRLI) dropped the short-lived '*First Light*' title change which came about in 1995 and went back to calling this program by the more familiar '*Distant Suns*' name. Be that as it may, this is a *very* competent program. It's somewhat like *RedShift* or *Starry Night*, and has always, in my opinion, been a contender in the 'best pretty planetarium' sweepstakes. Being a little long in the tooth, this app runs blazingly fast on a modern Pentium. It runs so speedily on my PII 350 that you can barely make out the title screen as it flashes by! It is good for quick '*what's up in the sky*' checks at least, and is, to me, *much* superior to *RedShift 2*, which now sells for a similar price.

The other CD included here, *Mars Rover*, is much less useful, consisting of numerous Martian landscapes created with VRLI's Vista Pro. These are viewed with Quicktime, which is included on the CD in case you don't have a copy of this ubiquitous Apple program installed. It's fun, even if it's not 'good' for much of anything. This program, by the way, steadfastly crashed when used

with a 32 bit version of Quicktime I have on my PII. I installed *Rover* on my old 486 which still harbors a 16 bit copy of QT, though, and all was well.

This package was definitely worth *10 measly bucks*, and if you don't have a nice CD planetarium program, I insist you scurry down to Target and glom onto this! Would also make a nice inexpensive gift for an interested teen.

--Rod Mollise

## Viva Le Nagler!

Everyone has some magical place in mind that they would live if money were no concern. My dream has always been a small cottage on the west coast of Ireland with a turf fire burning, a good book in one hand and a pint of Guinness in the other. At least until now. These days I'm kind of leaning toward buying a house next to Al Nagler. Man would that be cool or what? Imagine this guy out tinkering in his optical shop. It would be like watching a cross between Russel Porter and Steven Spielberg.

Just stop and think what amateur astronomy was before Al happened along with his version of star gazing. I remember buying a 6.8mm orthoscopic from University Optics in the early 70's. I

remember trying push this eyepiece halfway into my skull to see all of its 40 degree or so apparent field of view, thinking that 1mm of eye relief (or what ever miniscule distance it was) was okay because that's just the way it was. (This is not intended as an insult ... University Optics has been for a very long time, a very reputable supplier of astronomical equipment for the amateur.)

Anyway, a decade later, along comes the biggest damn eyepiece I've ever seen in my life! The 13mm Nagler. Soft whimpering could be heard coming from my eyepiece case as the Erfles began to realize their doom was close at hand. I often contemplated their fate after reading a TeleVue ad (and then wiping the drool from my chin) ... would they live again in someone else's telescope or be relegated as weights to hold star charts down on windy nights?

The 9mm actually turned out to be my first Nagler. Arthur felt no greater power from wielding Excalibur, I assure you. I single handedly conquered Mars with this eyepiece and an AstroPhysics refractor during the 1988 & 90 apparitions. Nothing hid from the scrutiny of my eye. (Except perhaps the canals of Mars, which are apparently visible with a 60mm refractor found in the holiday Sharper Image catalog for 1998 ... at least that's what the ad claims.) I have by now acquired the entire set, with the exception of the 20mm. (I have a bad back.)

When I purchased an 18" Sky Designs in 1992, I ordered a 32mm Wide Field with it. Magnum load for a big gun. What a wonderful combination for navigating galaxy clusters. That eyepiece is still with that telescope and its new owner. One doesn't split up a family. Well, actually there's a little more to this story. It's called the Panoptic line. Amazing what a little Lanthanum and a slight change in design does. These eyepieces tremendously expand the low power capability of your telescope (while simultaneously shrinking your bank account). Oh, but its only money. The Panoptics continue to give me my "galaxy-fix" on a 24" F/4. I'd like to say they couldn't get any better, but I know that little guy in New York is scheming right now in his shop.

But when will it end? No time soon by the looks of things. Take the recent modification of the Bino Vue, now with a barlow amplification of only 2X. (The only thing that kept me from buying it before now!) I recently built a 12.5" Dob around this gizmo. I spent \$1000 on something I had never used or even seen before based on my trust that if Uncle Al says its great, its great!! I can not begin to describe the leap in viewing pleasure this gives. Eye strain is a thing of the past. Detail in Jupiter's belts that defies drawing. Colors that were only hinted at before on both Jupiter and Saturn. Remember that golf ball on the Moon? Well, its there. (Just kidding of course, but if it

was visible, I could tell you the brand.)

I'll tell you right now, if Tele Vue marketed a black hole viewer, I'd buy it. I can see the ad now – Concept: To design a viewer that could not only see stars being sucked into a black hole, but see the connecting worm hole and where it pops out in another part of the Universe. – Al Nagler

And just when I was beginning to become concerned about my aging eyes, along come the little sirens called Radians, softly calling to me from a recent TeleVue advertisement. How long can he continue?

I for one don't think we should take any chances. I'm not sure how old Al is, but its certainly not too soon to start planning a way to keep his brain alive for a few more generations of stargazers.

-Pat Rochford

## MY BACK PAGES-MY BACK PAGES-MY BACK PAGES



## Stories in the Sky

Not much space this time, but there is a *little* room for a *little* constellation. Just enough space to allow me to clear up a misconception about one the Fall/Winter sky's most nondescript constellations, *Equuleus*!

Did I say *little* when referring to this nag? How about just about the tiniest star picture of them all! Only the far southern *Crux* claims less area on the celestial sphere! So there's not much mystery to how 'The Horse,' as *Equuleus* was originally known, became 'The Little Horse.' In addition, this puny constellation's diminutive size seems even *smaller* when compared to big brother *Pegasus* next door! This appellation, 'Little Horse,' has also quite naturally led most folks to consider this sky trotter a mere foal...perhaps even mighty *Pegasus*' little son or daughter!

Not at all, not at all! *Equuleus* is *really*, as I alluded to above, *Pegasus*' *brother*. Given by the gods to one of the divine Gemini brothers, Castor, *Equuleus* was a winged horse nearly as mighty as majestic *Pegasus* himself! How are we to reconcile this with his tiny size? Perhaps by doing as Bayer did and seeing the star pattern here as merely the representation of the head and shoulders of a horse

### Club Notes?

*As most of you know, I now teach Astronomy Labs on Wednesday nights for the University of South Alabama Physics Department, so I won't be making MAS meetings. But I do want to continue to publish the details of the meetings as I have for the last four years. Would some kind soul be willing to take over this duty? All that's needed is a paragraph or two summarizing the events of each MAS meeting. If you'd be willing to undertake this, let me know.*

instead of his whole sprawling, winged body ala *Pegasus*!

Neglected, yet serene, *Equuleus* floats among the mysterious stars of Autumn, poised perhaps to take a drink from the not too distant cosmic river, Eridanus, or maybe to trot along the descending stretches of the Milky Way. Do yourself a favor and take a long look at this little fellow before he gallops off for another year!

## Editor's Musings: Once Upon a Midnight Dreary

Well, well, well, another new year has come upon us. They simply seem to fly by more and more quickly with each birthday! But I do like the sense of 'new morning' that the year's dawn always brings! Lots to look forward to in 1999--star parties and other fun activities with your fellow amateurs, and many chances (we hope) to observe! Something I'd been meaning to do for a while was to modernize *Skywatch*'s layout a little bit. Hope you like the results!

*A tip of the ol' Skywatch derby to Dorothy Mollise, who continues to sacrifice her valuable time proofreading Skywatch (a big task if ever there was one)! Thanks, honey!*

*Sitting in my den on one unseasonably warm pre-Christmas evening, what did I hear but, "Heh-heh, heh-heh, heh-hen...uhhh...yeah, yeah, I mean 'ho-ho'!" After a puzzling minute or two, I determined that this strange chant was coming from the...fireplace? Much too early for old St. Nick to be comin' down our chimney! And this was indeed borne out a moment or two later when who but Beavis should come hurtling down the chimney to land in a heap in the (luckily unlit) fireplace! This disreputable refugee from MTV appeared to recover for a moment and was about to get up when we heard: "Huh-huh, huh-huh...you forgot this dillweed!" This was followed by the airdrop of a*

*mayonnaise jar, which landed squarely on Beavis' noggin, knocking him senseless (well, MORE senseless). When the peculiar youth had recovered sufficiently for me to escort him out the front door without feeling too much guilt, I returned to the den to examine the errant missile. Mayo jar. Hermetically sealed? Yep. Appeared to have been kept on Funk and Wagnal's front porch. Yes indeed, another ever-lovin' installment of...*

## Rumours

*Ho, ho, ho and mistle toe and new telescopes for lucky amateurs! GOOD telescopes, we hope! Unfortunately, the holiday season always brings the terrible little department store scopes scurrying out of the woodwork--like the vermin they are! You know the type, the 60mm-600x wonders. You'll find 'em everywhere, from the corner camera store to the mall Radio Shack! And they are always described in the most glowing and unrealistic of terms! But rarely have I seen an advertisement as SHAMELESS as the one that appeared in **Sharper Image's** Christmas catalog! Not only does this ad claim the usual spurious claims for power, etc., but it goes on to boast that you'll be able to see **THE CANALS OF MARS** with this tiny trash-o-scope! Sigh. Poor old Percival Lowell must be somewhere laughing!*

*Get ready for a deluge of Chinese built refractors! Importers, apparently heartened by the acceptance of the 80mm 'short-tube' refractors (little f5 achromats being sold by at least five vendors at last count--including L.L. Bean), have decided that there's a place for DECENT inexpensive refracting telescopes! We've already seen a pretty good 4" achromat from Celestron (the **C102 HD**) for less than \$600.00. And Meade quickly reduced the price of its comparable 4" to the same level. Both of these scopes (especially the Celestron) are competent refractors on mounts that amount to 'clones' of the famous **Vixen Polaris/Super Polaris** German equatorials. And we also hear that FIVE INCH achromats (possibly with fluorite corrector elements) are on their way--and will sell for less than \$1000.00! No one's claiming that these scopes will be competitors for TeleVue, Takahashi, and AstroPhysics, but all indications are that Chinese optics are good and getting better all the time, and these scopes represent tremendous values! A good 5" achromat on a usable mount for less than a grand?! Who'd have thunk?!*

*You've probably already heard this, but the Winter Star Party has been **canceled**. This is due to the heavy storm damage that the scout camp in the Keys where WSP is*

*held suffered during this past hurricane season. But don't despair, Snowbirds! An 'alternate' WSP is being held during the same time frame early next year in Chiefland, FL, which is also the site of a growing regional star party.*

*Meade, ever looking to cut costs (and undercut its competitors), has announced that it will be opening an assembly plant in Mexico. The Irvine, CA plant will remain and will do subassembly of critical systems, but once this south-of-the-border plant goes online, most assembly of Meade's telescopes will henceforth take place in Mexico. It's to be hoped that this won't cause further problems as far as Meade quality goes. Meade produces some innovative products for some great prices, but in recent years their QA has often left something to be desired in the opinion of the Anonymous One!*

*What to look for in the coming year equipment wise?*

*We're still hearing rumors of a 5" 'ETX!' This could be a hot item if Meade produces a five inch with a build quality closer to that of Celestron's C5 than to that of the 90mm ETX. Less plastic, more metal! The Big C (Celestron)? I understand that their new **G5 and G3** (C5 and C90 OTAs respectively, on little German equatorials) have debuted to good customer acceptance. So I don't look for Celestron to introduce much in the way of new or groundbreaking products this year (I'd love to be wrong about this). Instead, I think they'll continue to clean up their marketing act in the wake of the Tasco merger/buyout. If you've seen Celestron's new advertisements in the astronomy magazines, you'll notice a big improvement. The G3/G5 ads in particular are much more attractive than Celestron's usual output. Full color! Decent copy! Sadly for fans of the **Celestron Girls** (there've been many of these models in Celestron's advertising over the years, always dressed in semi-skimpy 60s clothes and always caressing the featured scope), they are NOWHERE TO BE SEEN these days! Dangit! In their memory, I'm trying to convince Mr. Editor to do a featured **photospread on the C Girls** for a future issue of *Skywatch!**

*--The Anonymous Astronomer*