

'Exploring the Final Frontier' Vol. 7 No. 3 May-June 1998

A 'Bright' Supernova!....

A 'New Star' in NGC 3877 Entertains us!

It hadn't happened since 1993: a supernova bright enough to be 'interesting' from light polluted backyards! The 'bright' Type II supernova which appeared in NGC 3877 in March was certainly no M81-style stellar explosion, but it was, at least, something the small scope observer could enjoy without traveling to a dark site!

Supernova **1998S** in galaxy NGC **3877** was discovered by astronomers at the Beijing Astronomical observatory (BAO) on 3 March 1998. It was at a dim **magnitude 15.2** when discovered on a CCD image taken as a part of the BAO's ongoing Supernova Patrol. Confirmation came shortly from personnel at Lick Observatory. By Mid

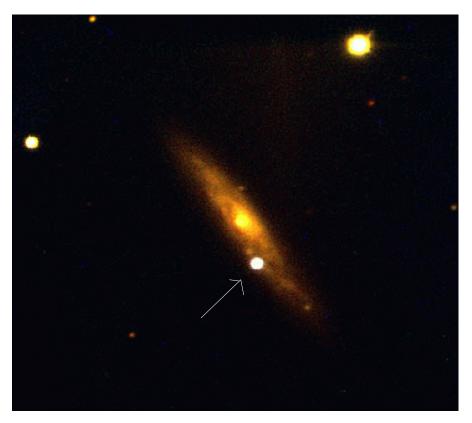
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March, this object had brightened to **magnitude 13**, making it a viable object for the average amateur.

When I heard that this supernova was really getting 'bright,' I

telescopes from my heavily light polluted backyard in the Garden District. My 12.5" Newtonian was in pieces, undergoing conversion to a truss tube configuration, and I wasn't at



1998S outshining an entire galaxy!

prepared finder charts using Megastar, made note of the object's vital statistics--and passed the information on to Pat Rochford in Fairhope. I was *sure* the supernova would be *easily* visible through Pat's 24" at Stargate Observatory, but initially I wasn't even going to *search* for it with my all sure either of my 8" scopes, an 8" f7 Newtonian and an 8" f10 SCT, would reach 13th magnitude under my very poor skies!

The evening of March 21st turned out to be almost unbelievably clear, though, so I decided to give the supernova and NGC 3877 a try,

anyway. NGC 3877 is certainly easy enough to locate, being a mere 15' south of the bright, magnitude 3.7 star χ (Chi) Ursae Majoris. As I expected, this magnitude 11.8 galaxy was relatively hard to pick-out with my small scope in Mobile's sodium-orange skies. It *w as* visible--with averted vision--at high power, but all I could detect was that it *seemed* to be an edge on galaxy (which NGC 3877 indeed is)--it appeared as a **dim** streak of light *barely* on the edge of perception.

Surprisingly, the supernova itself turned out to be much easier to see than its host galaxy! 1998S, which did, as advertised, appear to be at about magnitude 13, was visible with averted vision at first, and later with direct vision when I knew exactly where to look! I double-checked my Megastar charts and consulted with Pat Rochford by telephone to make sure I had 'snared' the object. Pat reported that the supernova was in fact what I was looking at--his job was made simpler because NGC 3877 was easily visible (if not overpowering) in the 24".

Pat and I continued to observe 1998S over the next couple of weeks, and were frankly amazed to see it climb in magnitude until in hovered around **12**. While I wouldn't honestly call this a 'spectacular' object, exactly, I *was* impressed by the majesty of the event! A single star in its death throes was **outshining an entire galaxy** across millions of light years, and I was watching the show from **my** backyard with **my** tiny scope!

By early April, the supernova was beginning a slow and inevitable fade. Nevertheless, we were able to show this **striking object** to the membership of the Mobile Astronomical Society at the regular monthly meeting on 6 April 1998. 1998S *was* becoming difficult, but it was definitely visible in Pine Lake Observatory's 8" f10 SCT!

And this is just the kind of sky show I love! It is special events like this that keep amateur astronomy so exciting! No, this one certainly didn't compare with the blazing explosion in M81, and this Spring's sky show certainly didn't approach excitement and beauty of the flight of Comet Hale-Bopp across the skies last year, but it was still a memorable and beautiful event!★

Judy's Eclipse

All of my eclipse trips have been memorable, but this one involved some wonderful amenities: after all. I'd be observing from a Carribean cruise *ship!* This was my third trip with 'Ring of Fire Expeditions' out of Houston, Texas, organized by Paul Maley, who works with NASA. Paul, who is an 'official' timer of Solar eclipses, led the group going to Curacao. Our particular group, which would observe the eclipse from onboard The Norwegian Sea was escorted by Dr. Patricia Reiff, a physics professor and astronomer from Rice University. 'Pat' and I had been roommates in 1994 in Cusco, Peru. There were only about 68 people, including children, in our group on the ship. Ring of Fire Expeditions offered closed lectures onboard The Norwegian Sea, and the cruise line offered some speakers on general astronomy topics as well. Ring of Fire's featured presenter was Dr. Melissa McGrath of the Hubble Space Telescope Science Institute (StScI) in Baltimore.

My roommate, a retired science teacher from Praetoria, South

Africa, was a friend of Paul Maley's and was very nice. She brought her Messier list with her so that she could try to see a few of the northern hemisphere objects!

On our second night at sea, I went up to the Sun Deck and grabbed a lounge chair in hopes of doing some observing with my binoculars. I could see the Southern Cross as bright as could be, and I tried to locate the **Jewel Box**, but the binoculars simply wouldn't hold still because of wind and the rolling of the ship! Since I'm not a very patient person, I gave up and went inside to try the midnight buffet, which was billed as a 'hedonistic chocolate extravaganza!' The next morning (right after breakfast), I went out to try the 'fitness center!'

On Wednesday we went sightseeing on Aruba. We toured the aloe vera factory, and saw wild goats and a lot of rocks (one of which was nicknamed 'Yogi Bear'!). The tour guide pointed out their 'beautiful' beaches, whereupon I immediately invited everyone to Gulf Shores, Alabama for a *real* beach experience!

Wednesday evening we docked in Willemstad, Curacao, which reminded me of a colorful village in the Netherlands. Picturesque is an understatement! After docking under the Queen Juliana Bridge, the highest bridge in the Carribean, several people went ashore to say 'hi' to Paul Maley and his wife, who had come to meet the ship.

The next morning, February 26th, Eclipse Day, we sailed out of Willemstad at 8:00 AM Atlantic Time *under dark and cloudy skies and misting rain.* Obviously, everyone was *very* concerned about weather conditions. First Contact, when the Moon's disk first 'touches' the Sun, was expected at about 12:40 PM. With our Captain's adroit maneuvering, we

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3 Skywatch

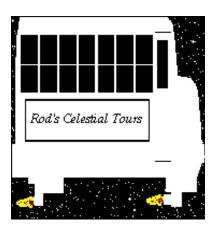
sailed into sunlight shortly before noon!

The Ring of Fire group was set up together on the Sports Deck aft on the 6th level of the ship. Most of the rest of the people onboard were all congregating on the Sun and Pool Decks, so we weren't very crowded. I took a beach towel to sit on, and, naturally, carried my binoculars and Mylar solar filters. Just before second contact- totality- I just laid down flat on the deck and watched the beauty of this natural wonder! I heard one of our group's awed voice: 'Oh my God, LOOK HOW BRIGHT VENUS IS!' But I couldn't look--I had my eyes glued to the Sun and Moon! I wouldn't even blink; I was afraid I might miss something! A brief glimpse of Bailey's Beads, and then the Diamond Ring--GORGEOUS! Amid squeals of excitement, I removed my Solar filters and looked around. I had never before seen such a dark 'overhead' during an eclipse! I could see Jupiter and Mercury on either side of the Sun! Wow! It was truly amazing to see Mercury so high in the sky. Looking around the horizon, there was a bright glow down low all around me. What an unusual sight! There was a school of Dolphins pacing the ship and jumping out of the water. Do you think they were watching the eclipse too?

People were spread out all over the deck, some lying, some sitting, some standing. But we were all looking up and experiencing a magnificent natural phenomenon! I could see two prominences with my binoculars, one being more obvious than the other. The Corona was large and elongated along the Sun's poles. Totality lasted for about 3 ^{1/2} minutes, and neither words nor photographs can convey or explain the feelings that come over a person during a total Solar eclipse! As I watched third contact and the second diamond ring, I thought to myself, 'I want to see *one more* total eclipse!'

The ship sailed on, docking the next day in St. Croix, Virgin Islands, which was a lovely place. The local people held a big street party for our ship at the foot of the pier, with food, bands, crafts and Cruzan rum drinks! The last guy to board the ship before it sailed at 11:00 PM was doing cartwheels down Fredrikstad Pier! The next day brought us to St. Thomas, V.I., which was a shopper's paradise. Then back to San Juan on Sunday, and time to fly home. It was a wonderful trip with lots of good food and a wonderful, unforgettable, total Solar eclipse!★

--Judy Anderson



From City Lights to Deep Space

It's baaaack. I'd been assembling several years worth of the 'City Lights' columns into a little book and found that I needed a bit more material. Herewith, then, is a new From City Lights to Deep Space, and I expect to continue with these--at least on an off and on basis--from here on out! I had forgotten how much I enjoyed writing these pieces and how much I enjoyed doing the backyard observing for them!

Some years ago, during the Summer of 1993 to be exact, I was house-sitting for my brother and sister-in-law at their home in west Mobile while they were on vacation. I was fairly recently divorced and hadn't yet gotten accustomed to living alone. An empty house seemed strange and spooky, and the nights promised to be long. But, luckily, I had brought my 6"f8 Dobsonian with me, and when the skies were clear I had no lack of friends to visit with! Looking out at a blessedly clear--though substantially light polluted--southeastern horizon one quiet and clear June evening, I spotted a few of my friends: brave Hercules, Sagittarius, noble mysterious Ophiuchus. Though I wouldn't exactly call the west Mobile suburban skies 'dark,' they weren't too bad--the southern stars definitely seemed to glow with that burnished majesty which is their hallmark.

After setting the scope up, I started thinking about targets for the night's expedition. Sure, I'd visit Hercules--how could I pass up M13 and M92--but what then? The answer was obvious! Ophiuchus and his attendant snake sprawled across my view of the southern heavens! In myth, Ophiuchus is identified with Aesclepius, the first Physician. The Serpent, Serpens (Caput/Cauda or head/tail), is that very same snake who taught him the healing arts. In reality, these two constellations are beloved of deep sky observers because of their Milky Way bounty--many beautiful star clusters, both open and globular, can be found in this area. Tonight, we'll visit three globular star clusters which are without doubt in the 'showpiece' class, M5, M12, and M10.

M5/NGC 5904 (RA=15h18m34s, DEC=+02°05', MAG=5.7, Globular Cluster, Shapley-Sawyer Class=5, Size=22').

M12/NGC 6218 (RA=16h47m15s, DEC=-01°56', MAG=6.1, Globular Cluster, Shapley-Sawyer Class=9, Size=14').

M10/NGC 6254 (RA=16h57m9s, DEC=-04°06', MAG=6.6, Globular Cluster, Shapley-Sawyer Class=7, Size=19')

I really don't hear M5 talked about much by deep sky observers. This is *very* surprising, since it is unquestionably one of the finest globular clusters in the entire sky! It's beautiful. And bright. And quite easy to locate. M5 lies in the little constellation Serpens Caput, being about 15° southwest of the triangular asterism which forms the Serpent's head (Serpens is among those rare constellations which actually *look* like the figures they're supposed to represent). The prominent star I



usually use as a guidepost to M5 is magnitude 2.6 α Serpentis. M5 is 7.8° southwest of this star. Really, you

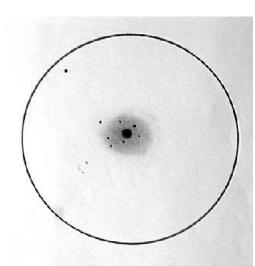
shouldn't have any trouble with this cluster if you can get your finder scope in the general area of M5. It is easily bright enough to show up as a fuzzy star in a 50mm--or even smaller--

finder! And I don't doubt that this great cluster would be easily visible with the naked eye under dark skies!

It didn't take me long to center this beauty in the field of the 6"; even though I only had a 30mm finder scope to work with. Judging from the notes in my observing

log for that evening, I really liked what I saw, too: 'Lovely even under less than optimum skies! Compact core. Seems somewhat elongated e/w.' This cluster is fairly 'tight,' rating a '5' on the Shapley-Sawyer scale, but I was pleased to find that bumping the 6"er's power up to around 200x began to resolve some stars on the periphery! I was reluctant to leave M5, but the Summer stars were wheeling into the west with unwonted haste!

Though M5 first gained fame as a member of Charles Messier's 'stellar' list, it was first seen by the German observer Gottfried Kirch in about 1705. Messier seems to have independently 'rediscovered' this star globe over fifty years later in 1764. This huge ball of stars is incredibly ancient--it is believed to be one of the oldest of the globulars, which are themselves an ancient race. Its half-a-million shimmering stars, which lie around 26,000 light years away from our cozy



with. Judging M5 was pretty nice--even from the from the notes sodium pink skies of west Mobile!

computer screen will also reveal that M12 and λ form an almost right triangle with δ (Delta) Ophiuchi. M12 is, like all of our targets for tonight, almost absurdly bright--as deep sky objects go--at magnitude 6.1, and shouldn't present too many locating problems, even for novices. IF you know your constellations! And it's not enough just to know the Dippers, Orion and one or two others if you're going to be a successful deep sky hunter. You'll be straying into the constellations you never hear mentioned on Star Trek or in the sci-fi movies--places with odd-sounding names like Ophiuchus and Scutum and Lupus!

No way around it. While M12 *is* impressive, it's *not* in the same class as M5! It is both looser and dimmer. Under good skies, the looseness of this class 9 globular would lead to easier resolution by smaller scopes, but here it just makes the cluster look dimmer,

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ball of rock, were, perhaps, witness to the titanic events surrounding birth of our Milky Way!

Leaving Serpens (Caput), we move to the heart of Ophiuchus,

where our two

other globs for the night form a close pair. M12 is the most northernmost of the two, lying about 22° southeast of M5. My usual guide these to globulars is magnitude 3.9 λ (Lambda) Ophiuchi. M12 lies 5.6° due southeast of λ . A peek at your star atlas o r

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DS '98's 'Home' screen!

I'm afraid. On this particular Midsummer's eve, I noted that M12 was, '...a somewhat ghostly glow. Appears very loose. Some central condensation noted.' I was not able to resolve any of M12's suns with the 6"f8 Newtonian--<u>this time</u>.

M12 was apparently discovered by Messier, but that most famous amateur of them all, William Herschel, was the first observer to pay much attention to this object, and was able to see that it was a cluster composed of 'tiny stars.' M12 is located *somewhere* in the area of 15-25,000 light years away.

Continuing on for a mere 3.9° brings us to the end of the road--for tonight--M10. If you found M12 you won't be able to miss M10! Just extend the line you 'drew' from λ to M12 for a little under 4° and you'll be right on top of this wondrous star-swarm!

A lot of people refer to M12 and M10 as 'identical twins.' No way! Though M10 is a bit larger and a bit dimmer than M12, I thought it was much prettier: 'While M10 and M12 are often said to be similar, I found M10, even though it was lower in the sky, to be a lot more impressive! A good number of stars are resolved around the edges.' Let that be a lesson. Trust your eyes and your telescope more than the guidebooks! The books say that M10 and M12 look about the 'same.' I could easily have taken a quick peek at M12 and gone back to Hercules. Why look at M10 when it's just the same as M12? And I would have missed a beautiful cluster spangling across the dark light years!

M10 does seem to be at about the same *distance* as its 'brother' cluster M12--15-25,000 light years. Though Charles Messier included this cluster in his famous catalog, Herschel was the first to resolve it.

That's it for tonight's guided tour. Now go your own way, wandering through the bewildering marvels of the south. That's what I did on this Summer evening! I traveled from wonder to mystery to marvel as the night grew old and the dawn of another beautiful Summer morn crept

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up on me and my wonderful telescope. I didn't feel a bit lonely anymore. After visiting the stars and constellations and deep sky objects I'd known since childhood, the often mysterious universe seemed to take on a friendly and familiar aspect! Even the distant and enigmatic globulars seemed no stranger than friendly bees buzzing around a bright, beautiful flower--the Milky Way Galaxy's center!★

--Rod

City Lights: The Book. It should be ready by the time the next issue of Skywatch (July) comes out and you'll find details on price and availability there! I *can* say that it will be at least 70 8 $\frac{1}{2} \times 11$ pages in length, will contain substantial new material, and will feature completely redone charts and illustrations!

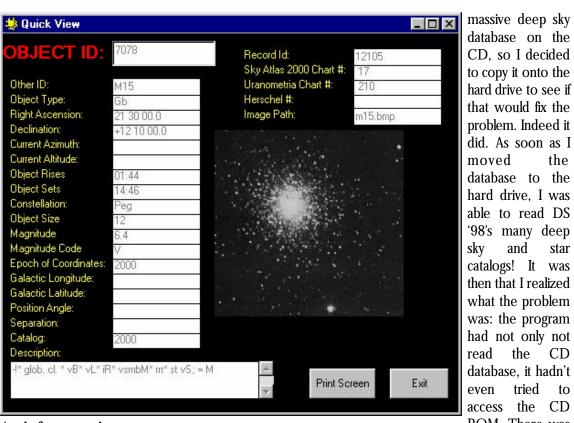


Astrobytes Deepsky '98 \$42.99 Steven S. Tuma 1425 Greenwich Ln. Janesville, WI 53545 (608)752-8366] stuma@inwave.com

Got a new astronomy CD, huh? Deepsky '98? Oh, it's a planetarium program, right? No? A deep sky charting program? It's not? Well...is it a logbook like NGP? Uh-uh? A database like SAC 6.0? Nope? Well what IS it?!

Deepsky '98 is something genuinely new under the Sun! Dilbert

will kill me for saying this, but this program really is a WHOLE NEW PARADIGM where astronomy software is concerned! It's a databa huge containing over 300,000 deep sky objects (so say the authors...I haven't counted 'em all-vet!). But it is also an accomplished charting program which uses the Hubble Guide Star **Catalog** to produce excellent maps. And it is a superior observing logbook; it's very flexible and An info screen! I



has features

haven't seen before, like the ability to append images to your observation records. It also contains enough 'Solar System functions' to allow you to keep track of what's going on with the Sun, Moon and Planets. Oh, and it even features a fairly powerful image processor! Not enough? OK ... it can control your LX-200! This is a whole lot to ask of any single astronomy program! How well did Deepsky '98 implement all these features? Very well, for the most part! But that's getting ahead of the story!

Deepsky '98 comes on a single CD ROM. Documentation is included on the CD, but I didn't need to refer to it to get the program up and running (I didn't think I needed it anyway--as you'll see, it would probably have been a good idea to read the manual before getting started!). The computer requirements for DS '98 are surprisingly minimal: a

486 PC running Windows '95 and 30-150 megabytes of hard disk space. 30 megabytes gets you a minimal installation, while 150 mb allows you to run the program's big catalogs from your hard drive for maximum performance. I was able to install the software on a 166mhz mmx PC with no problems whatsoever, and soon had Deepsky '98 onscreen. I entered my 'unlock' code to make the program fully operational (DS '98 can be used as a shareware application for 30 days, but you only have access to a limited database--the NGC catalog).

After playing around with the application for a little while I ran into the only major 'problem' I've yet to experience. Though my copy was 'registered', I quickly found out that I still 'only' had access to the NGC catalog (how can any self-respecting deep sky nut put up with only 8,000 or so objects?!). I had chosen to leave the

ROM. There was a copy of the 'shareware (NGC) catalog' on the hard drive, and the program was defaulting to this! I erased the full database from the hard drive, made sure that the shareware database was gone, and rebooted the program. Sure enough, it asked me for a drive letter for the location of the database. I told it 'D:'. it read the CD database, and I was on

my way. This may be all spelled out in the documentation somewhere...but you know how I loathe 'reading the instructions!'

What is Deepsky '98 like? The closest thing I can compare it to is David Chandler's Deep Space. Like Deep Space, Deepsky '98 is an observing system; also like Deep Space, while it produces fine charts, it makes no claims to being a planetarium. Your 'home base' in Deep Space is a star chart; Deepsky '98, however, takes a different tack, starting you out from a SQL database

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displayed in spreadsheet format. This is different, but it didn't take me long to get comfortable with it. I've come to be convinced that working from a spreadsheet is, for many tasks, much more efficient and faster than working from a chart! While it would be helpful to have had some experience with database programs, the user interface is very intuitive, and the documentation explains exactly how to proceed. To select the objects to be displayed on your spreadsheet, you have two basic options: use a combination of preference settings and pull-down menus OR format your own SQL queries. This database is very powerful, and I found it a breeze to display exactly the range of Deepsky objects I wanted. It is possible to use more than one spreadsheet at a time by using the program's 'tabbed' multispreadsheet feature. But no user interface is worth a flip if there isn't sufficient good data to work with! Rest assured that Deepsky '98 doesn't stint there!

Deepsky '98 really offers enough catalogs to last you a lifetime! I won't list them all here, but some of the more familiar and useful ones include (in addition to the NGC/IC, natch): the UGC, the Washington Double Star Catalog, the Morphological Catalog of Galaxies, the Atlas of Peculiar Galaxies, the Abell Clusters of Galaxies catalog, The Third Reference Catalog, and the Catalog of HII Regions (and on, and on!). If, for some reason, this wealth of data just isn't enough for you, DS '98 includes a 'database import' option which allows you to use virtually any ascii format catalog.

OK, what do you do with all this data? One thing you may want to do is develop an observing list ('Plan') for your next deep-sky-safari. This is easily accomplished. Just click on the first object you want to add to your list. The program asks you if you want to start an observing plan. Click 'yes,' and you're on your way, adding objects of your choice to the list. When you're done, just stop 'recording,' and print and/or save your list as necessary. I found this planning facility easy to use, and had no trouble creating customized lists to suit my tastes.

How about charts? I was quite surprised that DS '98 has become such an 'advanced' chart making application! I thought I knew that it could print some small, simple charts, but I had no idea that it could produce output to rival Megastar! The easiest way to produce a chart with this program is to right click your mouse on your spreadsheet; this brings up a menu which includes a choice to 'chart selected objects.' Select this, and DS '98 proceeds to draw a detailed (the program does, after all, use the Hubble GSC) chart looking about a good as many 'printed' atlases! Most of the familiar options are here, and I found the charts useful and accurate.

You're back from a long and successful evening of observing. Time to record your evening's work. It's now that you find one of the areas where DS '98 really shines--as a logbook. The screens are attractive, data entry is easy (especially if you use the observing list you created and saved earlier to help you make your entries). One feature of the logbook really intrigues me: it has the ability to append images to logbook entries. I'd sure like to scan-in a lot of my sketches and include them in my logs!

And that's not all. If you're an **LX-200** owner who's lucky enough to also have a laptop computer to use in the field, DS '98 can control your scope, allowing you to click on an object on a spreadsheet or chart and 'go there!' You can even use your

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observing list to put the LX into 'slide show mode' (automatically slewing from one object to the next)! And Deepsky '98 will help you create logbook entries while running a 'slide show'!

Finally, Deepsky '98 even has a rudimentary image processor to use with your scanned photos or CCD images. No, it ain't Adobe Photoshop, but it is usable! And for many folks, this may be all the image processing horsepower they ever need.

But no program has ever been (or ever will be) perfect. What didn't I like about Deepsky '98? There wasn't too much to complain about actually; especially, when you consider that DS '98 is 'young' and still obviously a work in progress. I do have a few nits to pick, though. All the catalog data is nice...but, as time permits, I think a bit of editorial intervention is necessary. I'd like to see, especially, some cross referencing of the data--for the NGC at least. For example, I'd like to know what NGC umptysquat's UGC or PGC numbers are. Judicious crossreferencing can cut-down on the number of catalogs you have to have present on your hard drive. The more data that can be added to catalog fields, the better...it's not always enough just to dump massive catalogs into an application. On the other hand, I realize that even going through the NGC and adding data is a *monumental* task. Also, while I know you can add additional catalogs, I would have made some different choices for the initial group included here. I would, certainly, for instance, have preferred the familiar PK catalog of planetary nebulae to the planetary nebulae catalog on this CD. The chart drawing engine was great, but I would like to see just a few additional functions added. It is possible to overlay a Telrad sight on the star maps, but I would also like to see the

ability to overlay various-sized finder and evepiece field circles added. A more flexible zoom tool would also be nice--one which allows you to zoom or unzoom by a user-specified amount. Performance-wise, the program works quite well, but when the authors say that copying the GSC to your hard drive will help with charting they're not kidding! With the GSC enabled and left on the CD drive, you're going to wait a long while for just about any charting function to finish. I know it would be simple to copy the GSC to the hard drive, but some folks still may not have that kind of disk space available--even in this day of multi-gigabyte monsters, and I believe CD performance could be improved.

What's the bottom line? Don't expect me to stop using Megastar for charting, but I'll be using it in conjunction with Deepsky '98, which will be my observing planner from here on out, and I don't doubt that DS '98 may take over at least some charting tasks from Megastar! I'll not mince words, <u>I love this program</u>, and insist you give it a try! If you're a deep sky fanatic you just can't go wrong for \$42.99 (no, that's NOT a mistake: \$42.99 for a CD!)!★

--Rod



Can it really have been only ONE YEAR since the amazing flight of Hale-Bopp across the inner Solar System? Here's our final salute to this amazing sky creature! *Photo by Rod Mollise*.



My Back Pages Stories in the Sky

You can't look into the Spring or Early Summer skies without being taken by the beauty of the glittering celestial virgin, Virgo! This huge and lovely constellation hosts the great Virgo Cloud of galaxies, so it is, of course, a magnet for deep sky observers. But who in classical mythology *was* this Virgin?

Ceres goddess of the Earth (or merely of the harvest, or perhaps the corn plant, depending on who you listen to) had a *beautiful* daughter whom she loved greatly, *Persephone*--Spring. All who saw Persephone, humans and immortals, were captivated by her fresh loveliness as she danced through her mother's groves and fields in the perpetual Summer of Mother Earth, for in those days there was *no such thing as Winter*!

As time went on, Persephone grew ever more fair, and a God became **obsessed** by her beauty. **Pluto**, God of the Underworld was known as the dark and unfeeling master of the realms of the dead. But his heart was easily awakened by the young goddess! Thinking his grim countenance would more likely inspire fright than love in Persephone, Pluto was saddened. But so enamored had he become of Persephone that he resolved to have her *by any means necessary!*

One day, as Persephone walked alone through one of Ceres' orchards, a huge crack opened in the very Earth! Up from this chasm arose a blazing chariot pulled by a team of black and infernal steeds! Pluto, of course, was the driver! Bearing down on the terrified goddess, he caught her about the waist and placed her weeping beside him in his black chariot, swearing by all that she would remain *forever by his side* from that day hence! In a flash the horses drew them back to his underground realms! Persephone, though, had recovered herself enough to voice a single scream before the chariot of Hades bore her into the Earth! Ceres, who was nearby, heard her daughter's cry, and, in the form of a bird, began searching for her beloved Persephone!

But no matter how she searched, no trace of her child could Ceres find. Finally, taking pity on her, Apollo,

who had seen all, told the grieving mother what had happened. Poor Ceres now gave herself totally to despair! And the effect on the Earth was grim! Earth's everlasting Summer turned to cold. Icy winds leapt across the land killing the growing bounty of the fields. Snow fell where it had never fallen before! And the chill storm did not abate! Earth was locked in its first Winter! The time for Spring came and went, but still the Earth was frozen. Mortals suffered terribly in this deep and unnatural Winter! But Father Jupiter took pity on his subjects and looked into the matter! Growing ever more concerned, he eventually sent his Messenger, Mercury, into the underworld to retrieve Persephone!

Reaching the dark kingdom, Mercury found Persephone and Pluto enthroned side by side as husband and wife--co-rulers of the underworld. Persephone, though she seemed, perhaps, not entirely unhappy with her husband, *did* long to see her mother again! Mercury relayed his master's instructions that Persephone be allowed to return to the sunlight, and Pluto knew, sadly, that he must obey Jupiter's command. As Persephone was departing, he begged her to remember, him, and reminded her that her husband was great among the immortals. Persephone was indeed moved, and accepted a pomegranate as a parting gift from her husband. She devoured the fruit hungrily since she had previously been too depressed to accept either food or drink from Pluto!

Persephone's homecoming was indeed joyous, and the happiness of the Earth goddess was reflected in the flowering of the fields. Winter was gone! Spring had returned! After a few days, though, Pluto sued Jupiter for the return of his wife. Jupiter listened and ruled that Persephone, if she had had either **food or drink** while in the underworld, *must* return to Pluto, her husband, forever! Hearing this, Persephone had to admit that she had eaten the pomegranate! Ceres was devastated! Fearful of the effect Ceres' unhappiness would have on the world, however, Jupiter amended his original ruling and decided that since Persephone had eaten only a Pomegranate while in Pluto's realm, she would only be required to spend four months of the year in the Underworld.

This was a judgment that all could live with. Persephone did not look forward to leaving Ceres when the time came each year, but it is said that she *did* miss Pluto. Pluto hated losing his wife for eight months every annum, but the beauty she brought to his cold domain when she returned more than made up for her yearly absence. Ceres accepted the decision--unhappily. When Persephone is with Pluto she grieves as she did when first she found her daughter missing, and the children of the Earth now have Winter! But every year, without fail,

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Persephone eastern sky, abate, and indeed world of



appears in the the cold winds Spring does return to the men!

Club Notes

March 1998 Regular Meeting: The joint MAS/ESC Spring Public Star Gaze was held in place of the regular meeting on Wednesday, 4 March 1998. In spite of cloudy skies, we were able to show upwards of 200 Mobile County schoolchildren and parents the Moon, Saturn and one or two deep sky objects before being socked in! As usual, **Dianne Martin** did a superb job of organizing the event, and we were pleased at an outstanding turnout of MAS members despite the obviously less than optimum weather!

April 1998 Meeting: The April Meeting was held on 1 April 1998 at the club's usual meeting place, the Environmental Studies Center on Girby Rd., at 7pm. The Membership was enthralled by **Judy Anderson's report on her journey to view the recent Caribbean Solar Eclipse**! A complete report on Judy's trip appears in this issue! We also discussed the upcoming **EAAA/MAS April Star Party**, and ironed-out a few details concerning the **MAS Members Only Star Parties**. Finally, we talked-over plans for an MAS presence



at Bel-Air Mall on **Astronomy Day** this year (2 May). We'll be there with a booth similar to the one we manned last year! The help of all MAS members in urgently solicited! Following the meeting, we adjourned to the observatory for some views of **Supernova 1998S**! It's really nice to see the club's activity on the upswing again!



Once Upon a Midnight Dreary.

We're very excited about the upcoming joint MAS/EAAA April Star Gaze-Messier Marathon! This event, which will no doubt be history by the time you read this, is to be held on 25 April at a dark site provided by the EAAA. I think this will be a lot of fun, allow us some great observing, and, I hope, will herald future cooperation between the two clubs. Look for a complete report in the next issue of *Skywatch*!

Closer to home, the MAS ESC Members Only Star Parties roll on! The April edition was completely clouded out, but this was the first of these events (we started in January) where there wasn't at least some observing possible! That's pretty good considering the depredations of that dreaded el nino, I think! And even though we (Rod Mollise, Ginny Kramer, Tony Kramer, George Byron) were clouded out, we still had a great time. And you're welcome to join us! If you haven't yet attended, contact Ginny Kramer or Rod Mollise for details. and check the MAS web page (http://members.aol.com/RMOLLISE/index.html) for last minute news!

Things had been very quiet of late. I didn't really expect much excitement at all. With the coming of Spring, the tourists' buses and horse drawn carriages were back in the Garden District, but the passengers, were, as always, well-behaved. Until...I was startled out of my reverie by the terrified neighing of a horse, and down Selma street came a driverless carriage being pulled at a full gallop! While the carriage was currently without a driver, a closer look revealed two bizarre youths being dragged along **behind** it!

'Uhh..huh...huh...huh..., like, help us or something!'

'Heh...heh...heh! .Yeah, yeah, help us, dillweed!'

Unfortunately, the carriage had sped out of sight before I could do anything to aid **Beavis and Butthead**. Looking about, though, I noticed a mayonaiise jarapparently hermetically sealed and kept on Funk and Wagnals' front porch. It had been dropped by one of the strange youths, and it obviously held yet another

RUMOURS

At first it seemed like a bad April Fool's joke: longtime 'department store' telescope importer and all-around whipping boy TASCO was in the process of buying Celestron, a company which, if not always considered the very best manufacturer of amateur telescopes (not in the same league as the AstroPhysics and the TeleVues, anyway), is well-respected and well-loved by the amateur community! Lots of nervous jokes out there; your anonymous correspondent started chirping about his 'Tasco Ultima 8!' With the issuance of a joint press release it became evident, though, that, for good or ill, this was no joke:

MIRAMAR, Fla.--(BUSINESS WIRE)--March 25, 1998--Tasco Sales, Inc., the world's largest distributor of quality sport optics, announced it has signed a letter of intent to acquire Torrance, California-based Celestron International, a high-end optics company, in an agreement that will merge the two companies.

While Celestron will continue to operate independently, there are significant benefits that both companies will share through this global alliance.

"For the past two years, we have taken note of Tasco's efforts to become more marketing-driven and quality-oriented, which complements Celestron's overall philosophy," said Alan R. Hale, president of Celestron.

"International sales and brand awareness have been the recent focus of our marketing efforts, and joining forces with Tasco will expedite these plans by offering an instantaneous global distribution

network. We anticipate swift growth and an expanded worldwide presence with Tasco's assistance," Hale added.

"We are very pleased that Celestron chose Tasco among its many suitors to forge ahead with this transaction," said Tasco President and CEO W. Greg Bland. "This partnership allows Tasco to accelerate its growth in the high-end optics market with Celestron's established and well-respected brand name."

At first, shocked discussions among amateurs asked the question: 'Is this a bad thing or horrible thing?!' But, truthfully, it is obvious--in retrospect, anyway--that Celestron has been searching for a buyer for some time. Following the attempted merger with Meade several years ago, unsubstantiated rumors of Celestron's desire for acquisition had been floating through the amateur community. And a buyer may be necessary for Celestron to

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continue in business. As I've said before, the company's marketing SUCKS! Celestron has two very innovative telescopes in their line, the computerized Ultima 2000 and the CCD optimized Faststar. Did they push these scopes--or even advertise them? NO. Most of the time the company chose to run unattractive advertisements for cheap refractors, Plössl eyepieces and red flashlights! No wonder Meade was obviously running away with the ball game! What will happen to Celestron now? Things may actually improve! With ready cash and an owner with marketing expertise and big overseas sales, a new golden age may be in store for Celestron. While Tasco is obviously not renowned for quality telescopes (!), they have at times made abortive attempts to 'better' themselves. I recall, for example, that in the 60s, they offered a high quality 4" refractor for a short period of time. More recently (80s?), Tasco contracted with Meade for 6 and 8 inch Newtonians. Things went as far as Meade painting some of the OTAs of their old 'Research Grade' Newts TASCO RED before Tasco got cold feet and backed out. Time will tell what will happen in this case, but you would think that Tasco would have sense enough not to kill a goose that is at least CAPABLE of laying golden eggs. In any case, it usually takes a couple of years before many changes appear after buyouts like this.

OR DOES IT? Above, I spoke of Celestron's '*two* innovative telescopes.' Make that **ONE**. The Anonymous One has learned that Celestron has REPORTEDLY dropped the Faststar from its line! We were surprised, since with Celestron teaming with SBIG to produce a new CCD camera, we figured that the Faststar would finally be pushed! What killed the Faststar? Was it merely lack of advertising? Were there production problems? Or did Tasco want this telescope which, though obviously clever, had limited appeal, GONE?

Need a 3" refractor? Got deep pockets? Uncle Al Nagler has the scope for you! A fine 80mm has been added to TeleVue's line! Only problem I see here is the pricearound \$1800.00 for the OTA, I understand. Seems pretty steep to me, and I wonder if it will fly? TeleVue has obviously done very well with the 70mm Pronto, which goes for about a grand, though, so there may be more people than I imagine willing to part with TWO grand for a small, albeit very fine, telescope.

That about it for this time troops...Anonymous One needs a little rest after spending some time contemplating the thought of Tasco CG 14s (with plastic correctors?) on sale down at Wal-Mart!

-- The Anonymous Astronomer

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Skywatch® is published bi-monthly as a service to Mobile's amateur astronomers. Submissions are always welcome. Address correspondence to:

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May-June 1998 Volume 7 Issue Number 3 Whole Number: 38 We're still enjoying the new Members Only Star Parties, but we're really excited about the forthcoming dark site star gaze with Pensacola's EAAA! We hope all of you can join us!

Peace,

Rod & Dorothy



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Here's one variant of Uncle Al's new 80mm refractor. This one, equipped with an upscale binoviewer, is known as the '**Bizarro**!'