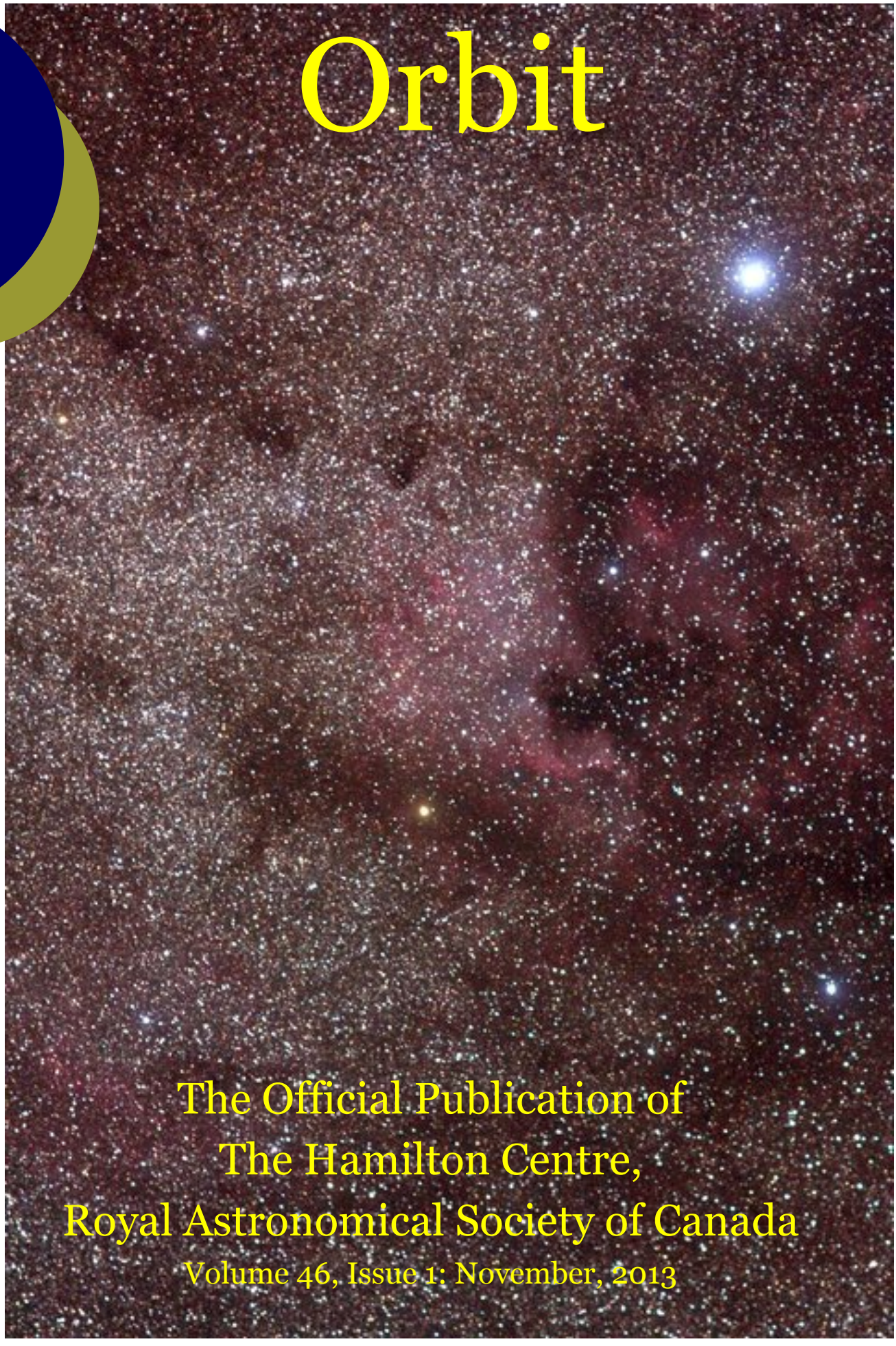
Orbit



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Issue Number 1, November, 2013
Roger Hill, Editor

This is the first issue of Orbit for this membership year. Over the years, it has been the usual practice for an editor to stand down and let someone else take the reins, but this is the start of my seventh year now, and I've enjoyed the vast majority of it. If all goes well, I hope to continue for another few years, but life is uncertain and you never know if something will come up that will stop you from doing something you love. Ultimately the Board will decide who the editor will be.

Which brings me to my next topic. The Board.

I'd like you to have a look around at the events and programs that were put on last year, and you'll see that there were some incredible things done. Why? Because we had the people to do it, that's why.

And the plans for the future of the Hamilton Centre are more ambitious, which means we need a few more people. We want to do more public outreach, run another NOVA session (or 2!), offer instructional seminars for members at the Observatory, along with AstroCATS, the Henrys astrophotography sessions, a banquet, and more.

It's mainly true that Board members do most of the work, which means that a large Board can do more. You can see where this is going, can't you?

So I'd like for you to consider joining the Board. I know...the elections were last month, but we had our first Board meeting a week afterwards, and I was able to attend that one. There are some changes afoot, and I think the membership will like them, but it's going to require more people. A full complement for the Board is 12 people, and we have nine currently. If you can spare a few hours per month, we could really use you!

On a further note, there were two events at Westfield Village the weekend before Halloween. Mark Pickett was at both of them, and I was able to help out at the Friday night event. The weather for Friday was not the best, but we did manage about an hour of clear skies all told. The Bell 'scope was at it's best, and while it was not polar aligned, we were able to show at least a random star field to a large number of people who'd never looked through a scope before. What really made it fun was having to use strictly period instrumentation. So...no ability to use a green laser to show people where the scope was pointing. No electric clock drive either, and even the eyepiece we used was the sort that would have been used a century ago (or more). And yet, despite what we of the early 21st Century would consider major shortcomings, we had FUN (soon to be a major topic in the Centre...see later in these pages). There will be three nights in December (7th, 14th and 21st) where we can use some help...particularly because Mark will NOT be available on the 7th, whereas I will miss the 21st. The first two evenings should be easier as there will be a nice fat crescent moon a day shy of First Quarter on the first night and a practically full moon on the 14th. The evenings will go from 5:30 to 9:30, and we'll have to be there 30 minutes or so before and an equal amount after. Admission is free for helpers, and while you will have to don period costume, there is sufficient variety!

Anyway, enough for now...talk to you next month!

Roger

A Message from the President

Another year begins for the Hamilton Centre RASC, and I am honoured to be your new Club President. I have been a member on and off with the RASC since the age of 16. I joined the Hamilton Centre in 2003 and ten years later…here I am!

I have been excited with what has been happening in the club over the past several years, and I am very proud of the effort and vision of our past president, and I hope to continue that tradition. I am also very proud of the efforts of the membership, particularly in the past year, when members stepped up to some enormous ventures and saw the fruit of their labours return to them multiplied!

Some HUGE initiatives we have seen have been to name a few:
1. AstroCATS 2. The Nova Program 3. Henry's 4. Westfield 5. Scouting Outreach

Our club has stepped up to the challenges and has shone in their delivery. But we could not have done that without the active participation of our members.

One of my goals this year is to have more members attend the monthly meetings and planned events of the club. Of all the clubs and associations I have been involved with over the last several decades, this club is undoubtedly the one I enjoy the most. One way we can involve more members is to simply invite them. A phone call or email reminding them, or simply inviting them for the first time can work wonders. I remember it was a member who called me one night to invite me to a meeting…I went….and the rest is history. (good or bad….lol..)

One of the great things about our club is the hobby that we represent: Astronomy. I have noticed that whenever we have telescopes set up, or when we talk with people about our hobby, I have never met anyone who has ever said "I don't like looking at the Stars"…rather they say: "Wow" or " Cool" or " That looks just like a picture of it I once saw!" We have a hobby that has inspired philosophers, leaders, people of all walks of life; but more specifically you and I.

I have a qut4e from Carl Sagan on my website: "Before we invented civilization our ancestors lived mainly in the open out under the sky. Before we devised artificial lights and atmospheric pollution and modern forms of nocturnal entertainment we watched the stars. There were practical calendar reasons of course but there was more to it than that. Even today the most jaded city dweller can be unexpectedly moved upon encountering a clear night sky studded with thousands of twinkling stars. When it happens to me after all these years it still takes my breath away."

We are for sure jaded city dwellers today….yet I still have my breath taken away by the things I see above.

We must never forget that we got into this hobby to have fun!....and I would like to see that flourish in our club…. And that we spread that enthusiasm and excitement to others.

I have 3 goals or milestones I hope to achieve with your help this year:
1. To promote our club and our hobby to our members first…then to the community around us
2. To see our programs succeed and provide a fun learning environment for everyone.
3. To be a premier Astronomy Club of the RASC.

To do this I need your help…. The "President" I see as the "rudder" that steers the ship… a small part of a seaworthy vessel full of deckhands, navigators, planners and people with a vision to see our club move into the future. I would like to see our "Ship" grow not only in numbers, but as a club that people enjoy being a part of.
We have one of the finest telescopes of any Astronomy club in Canada, and we undoubtedly have the best members!!!!

I am looking forward to being your president…but more importantly, looking forward to having fun with everyone!

Sincerely

Gary Colwell

What's Your Idea of Astronomy Fun? By Gary Bennett

At our Monthly meeting on Nov 7, we are going to ask each of you to tell us "what is your idea of fun"? Why? Because we decided that we're not having enough of it and we're going to do something about it!

I am going to share with you a few "snippets" of what got this started. It was a suggestion to our board of directors:
"I read the RASC National Strategic Plan today and it struck me that we don't really have a concrete goal for what we are trying to accomplish at our local level. The National Strategic Plan talks about objectives like Revenue, Membership #'s, and a general dedication to "advancement of astronomy and allied sciences". What it does NOT do is articulate why anyone would want to be a member. At our local level, we don't either.
We are a "hobby club" that exists to pursue a recreational activity for entertainment. Yes, we do have a distinct educational component, but we really aren't that much different than a model railroad club, stamp/coin collector, chess, etc. (at least it shouldn't be a different experience). But we don't do enough of what I would call "entertainment". The question is.... what is that?"

SO.... we think we need to inject some more "fun" into the club experience. That would include:
"Liven-up" our monthly meeting.
Add some regularly scheduled events.

SO.... here is where you come in. You get to help us have some fun! To get the creative juices flowing, we have put together a few sample ideas:

"Liven-up" our monthly meetings with a few more regular "fun features".
Weird Science – A segment about some new discovery... weird "factoids" like the new planet discovery where scientists believe it's made of diamonds.
Einstein's Corner – This could be a quick discussion about a particular aspect of his research, or interesting facts about the man, his family or colleagues. For example, it was his wife who plotted the graph (a rather simple one at that) that calculated the speed of light. The same graph showed time going backwards beyond the speed of light.
Fact or Fiction? Is the Moon made of cheese after-all? Astronauts report that the dust on the Lunar Surface is a powdery chalk like substance. Fans of Brie, and several other cheese varieties know that the rind (crust) of has a consistency exactly like the lunar surface. Namely, a dry silky powder atop a semi-hard crust. Coincidence? Etc., etc. At the end of the presentation the audience votes.. is it True or False?
Swap Meet – Every meeting is a swap meet. During our 15 minute break, wheel & deal your previously loved wares.
Equipment Review – What's your favorite gadget? New products? Etc.

New Regularly Scheduled Events
Sidewalk Astronomy.
A second monthly "Stargazing Night" at the observatory.
A "rain or shine" event:
Resume "armchair astronomy"?
Equipment Workshops (making, fixing, tweaking)

These are just a few suggestions. We want to hear from you!

Pilgrimage to Arizona—Roger Hill

When I was a kid growing up in Liverpool, I was interested in what the Americans and Russians were doing with their space programs. It was kind of cool to watch as various space probes crashed into the lunar surface, sending back pictures just before they smashed themselves to smithereens. I had a mild interest in astronomy, at that time, as many kids do, but then I got the teacher of a lifetime.

I wasn't a great student; okay, I wasn't even a good student, but Mrs. Cooper was nearing retirement and with her vast experience, she saw my nascent interest, and kindled it. She had a set of books at the back of the room, and she let me read them if I finished my work. One book was about the Chapman expedition to the Gobi Desert that found the first dinosaur eggs. Other books were by Percival Lowell.

I pored over those books every chance I got. I fell in love with the images that Lowell provided: an old and majestic civilization, hoarding its resources of water; Martians digging huge canals to spread this liquid life-giving fluid from the poles to the rest of the planet. Lord, what a story. And he had the evidence of what he had seen through his magnificent telescope to back him up.

Mariner 4 arrived at Mars after the school year ended, took a few pictures, and destroyed Lowell's visions utterly and completely.

Mars was an unbelievably arid place, with virtually no atmosphere to speak of. Craters were everywhere, and there was no trace of the fabulous canals. No possibility of a great and noble civilization fighting a valiant, but losing battle.

Strange as it may seem, it was this…catastrophe…that turned a passing interest into a lifelong love of astronomy.

Over the years, I have had the chance to travel, occasionally, on business. One trip to Chicago saw me telling my colleagues to drop me off at the Chicago Field Museum, as this was the place that funded the Chapman expedition to the Gobi desert in the 1920's and found the first dinosaur eggs. I entered the Museum (it was free that day), and asked where their dinosaur exhibit was. "Closed for renovations, come back in two years."

Two years later, I am back in Chicago on business again. This time I am a bit smarter…I phone the place and ask them about the dinosaur exhibit. "Come back in two weeks", they said. I was devastated. A trip to New York saw me at the top of the Empire State Building, but I passed on the Museum of Natural History. Which is a shame, because soon after getting back from New York, I found out it was this Museum, not the Chicago Field Museum that funded the Chapman expedition. Damn.

A dozen years ago I traveled again, this time to Phoenix, Arizona. I asked on the RASClist for places to go observing. Peter Ceravolo mentioned a site where he observes, or I could go down to Kitt Peak, or Mount Graham. Arizona is also home to the Grand Canyon, the Painted Desert, and the Petrified Forest…all places that were high on my "must visit" list. Alas, I knew I would have a day, at most, to do some traveling, and these places were either too far away, or would take more than a quick look to do them justice. A look at a map showed me two sites that suddenly moved to the top of the list: the Barringer Meteor Crater, and Flagstaff…home of the Lowell Observatory.

As a kid growing up watching the Apollo moon landings, I had seen many pictures of Gene Shoemaker wandering around a real crater. Not some minor ring shaped mounds, or a circular lake, but an honest-to-goodness lunar-like crater. Furthermore, it looked like I could reach Flagstaff with a two hour drive from Phoenix, and after that, the crater would be about an hour from Flagstaff. This looked do-able. Actually, this looked more like a pilgrimage.

I arrived in Phoenix at lunchtime, on Monday, and I had until lunchtime on Friday to get my work done. To ensure that I had Thursday off, I had to work like a dog. I managed!

Early Thursday saw me take the rental car and drive up the interstate. The batteries in my camcorder where charged up, and I had my 35mm with me, too, loaded with slide film. The people in our Phoenix office had told me that I must not miss a place called Sedona, which was sort of on the way to Flagstaff.

Speed limits on the interstates in Arizona were a civilized 75mph, and with Phoenix at about 1600 feet above sea level, and Flagstaff at 7200 feet, I was soon climbing high into mountains. I made really good time to the Sedona exit, passing through some spectacular country, and decided that I could spare the time.

If you ever get a chance to go to Sedona, do so. The drive from Sedona to Flagstaff through Oak Creek Canyon is breathtaking. I stopped several times to take some video, and I was awestruck by the scenery. I drove into Flagstaff, looking for a sign for tourist information, but saw one to Lowell Observatory instead. At 11:20 in the morning, I pulled into the parking lot atop Mars Hill. The observatory opened to the public at noon, so I had a few minutes to spare.

As I waited in the spring sunshine, I kept thinking about how I ended up there. A kid from Liverpool inspired by a fellow in Flagstaff into a lifelong love of Astronomy. So much of who and what I am, of the places I have been, and the things I have seen can be traced back to this, and to a great teacher.

The Observatory opened, and I took a quick glance at a map of the grounds. Here is where the 24 inch Clark is, where Tombaugh photographed Pluto for the first time, where Slipher made his observations. It turns out that you cannot just wander into the domes, you have to go on a tour. The only public observing with the Clark in the winter is on Saturday nights, so I did not get a chance to see through it.

So, I wandered the grounds until 1:30, when the tour started. I was taking some photographs of the various domes and other buildings, when I came across a small building with a dome that appeared to be made of black glass bricks. It was Lowell's mausoleum. In the shadow of the dome where the Clark 'scope is, I stood in front of Lowell's tomb, took off my hat, and said a silent thank you to Lowell, and to Mrs. Cooper.

I took the tour, but I did not finish it. I saw the big Clark, and a couple of other scopes, but I left before we were scheduled to see Tombaughs 'scope. I was worried about how long it would take me to get to the Meteor crater.

I pulled out of the parking lot and went looking for Highway 180. I followed an arrow that pointed me in its direction, and after a few miles, I saw a sign that said "Grand Canyon". I was going the wrong way. By the time I got on the right road, it was after 3 o'clock. I was now traveling over the high plains, and I could see for a long way. After about 40 minutes, I could see an odd shaped hill, off in the distance. It was a low, flat-topped rise, and sure enough, a few minutes later, the exit appeared. At 4 pm, I purchased my ticket ($8, US!!).

You have to pass through the inevitable gift shop to get to the crater rim, which stands about 30 meters above the surrounding countryside. I dashed through, turned a corner, and was greeted by a magnificent sight.

Like so many things, you have to see something with your own eyes to really get a sense of a place. Barringer Meteor Crater is no different. I have seen all sorts of pictures and TV programs, but nothing prepared me for the reality.

I heard a couple of people grumble to each other that it was a lot of money to pay to look at a hole in the ground. I wanted to yell at them: "This is what PLANETS look like. This is what it looks like on the Moon, Mars, Venus, and so many other places. This is what most of the real estate in the universe looks like." It was awesome, and I just shook my head in disbelief that it could ever be "just a hole in the ground".

I bought a couple of souvenirs at the gift shop, and scooped a handful of pebbles from the craters rim. I took my photographs, my video, and when the place closed at 5 o'clock, I took my leave.

The journey back to Phoenix took just over three hours by taking the Interstates all the way. One sign I came upon indicated that the road would take a 6 % downward gradient in 13 miles. Nice of them to give so much notice, I thought, and then looked again, as I read "6% gradient FOR 13 miles!" Well, it was not quite the entire 13 miles, but it was most of it. A spectacular drive, as the sun went down. I would love to do it as a passenger.

I made it to Arizona several times after that, getting to see Grand Canyon, the Petrified Forest, the Painted Desert, Bio-Sphere II. The drives were just as spectacular and the vistas were just as awe inspiring.

They weren't pilgrimages.

How to hunt for your very own supernova!

By Dr. Ethan Siegel

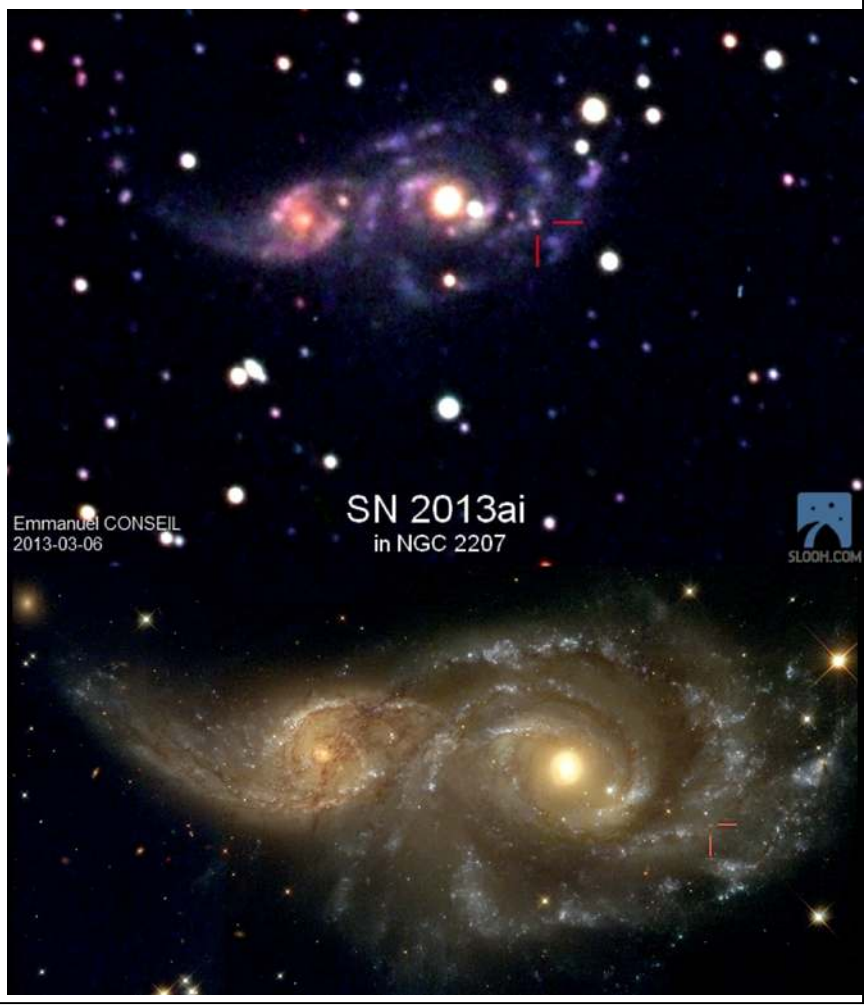
In our day-to-day lives, stars seem like the most fixed and unchanging of all the night sky objects. Shining relentlessly and constantly for billions of years, it's only the long-term motion of these individual nuclear furnaces and our own motion through the cosmos that results in the most minute, barely-perceptible changes.

Unless, that is, you're talking about a star reaching the end of its life. A star like our Sun will burn through all the hydrogen in its core after approximately 10 billion years, after which the core contracts and heats up, and the heavier element helium begins to fuse. About a quarter of all stars are massive enough that they'll reach this giant stage, but the *most* massive ones -- only about 0.1% of all stars -- will continue to fuse leaner elements past carbon, oxygen, neon, magnesium, silicon, sulphur and all the way up to iron, cobalt, and, nickel in their core. For the rare ultra-massive stars that make it this far, their cores become so massive that they're unstable against gravitational collapse. When they run out of fuel, the core implodes.

The inrushing matter approaches the center of the star, then rebounds and bounces outwards, creating a shockwave that eventually causes what we see as a core-collapse supernova, the most common type of supernova in the Universe! These occur only a few times a century in most galaxies, but because it's the most massive, hottest, shortest-lived stars that create these core-collapse supernovae, we can increase our odds of finding one by watching the most actively star-forming galaxies very closely. Want to maximize your chances of finding one for yourself? Here's how.

Pick a galaxy in the process of a major merger, and get to know it. Learn where the foreground stars are, where the apparent bright spots are, what its distinctive features are. If a supernova occurs, it will appear first as a barely perceptible bright spot that wasn't there before, and it will quickly brighten over a few nights. If you find what appears to be a "new star" in one of these galaxies and it checks out, report it *immediately*; you just might have discovered a new supernova!

This is one of the few cutting-edge astronomical discoveries well-suited to amateurs; Australian Robert Evans holds the all-time record with 42 (and counting) original supernova discoveries. If you ever find one for yourself, you'll have seen an exploding star whose light traveled millions of light-years across the Universe right to you, and you'll be the *very first* person who's ever seen it!



SN 2013ai, via its discoverer, Emmanuel Conseil, taken with the Slooh.com robotic telescope just a few days after its emergence in NGC 2207 (top); NASA, ESA and the Hubble Heritage Team (STScI) of the same interacting galaxies prior to the supernova (bottom).

Making my own Losmandy Rail by Roger Hill

Over the years, I've been wanting to mount all sorts of things on top of my 12" Meade LX200GPS, and I've tried all sorts of methods from ring clamps, to v-shaped blocks of wood and tie downs. All the time, though, I've wanted to use a standard dovetail. The problem was, I couldn't justify to myself the exorbitant cost of machined aluminum. And until recently, I've lacked the tools to do anything but use wood.

Enter the Table Saw!

A couple of years ago, I spotted a YouTube video (http://www.youtube.com/watch?v=ZABNA1EfnSE) that showed how to make a Losmandy dovetail using an ordinary table saw and some other common woodworking tools. These guys, Gary Bennett and a friend of his, Dave Y., demonstrated that it was possible to turn an inexpensive piece of aluminum into just the dovetail I wanted.

The problem for me was that while I had a drill press, I didn't have a table saw. Of course, once I wanted one, I was able to find all sorts of projects around the house that would be easier, or do-able with a table saw that I couldn't do otherwise. So, it's taken a while to get those done before I could get around to cutting metal. Actually, I've had a few other projects on the go, as well.

I'd bought a 6" wide, 24" long, 5/8" thick bar of aluminum and reduced it to 20" as well as creating two radius blocks by slowly pushing it through my small band-saw. I'd managed to mount the resultant slab on top of the 12", after putting a dovetail puck I'd picked up (used) from KW Telescope on it. This had allowed me to put my 6" Ritchey-Chretien on top of the SCT and have it go for a ride.

This worked, after a fashion, but balancing it was a pain, and it didn't have enough adjustment for my purposes. There was no doubt that a dovetail was the way to go.

AstroCATS provided the final pieces, as OPT had some really nice, cheap, Vixen dovetail pucks, so I bought three of them. The Vixen dovetail was what was on the bottom of the 6", and the old puck I had was a Losmandy (or so I thought). I'd made an adapter that filled the gap between the Vixen bar on the bottom of the RC and the Losmandy puck on top of the SCT.

Problems with my leg meant that I had to wait until August before finding the time to get to work.

I dug out the table saw, removed the big bar of aluminum and started measuring. It was only after I had everything ready, that I looked at the blade in my saw and at the block of metal and decided that this was just not going to work. I had visions of shattered bits of razor sharp blade being shot around the room, and I chickened out. I had a metal cut-off blade that I was much happier using, since it said FOR METAL on the side of it.

When I started it was almost impossible to push the aluminum through the blade. So, I lowered the blade and cut a groove 1/10 of an inch deep, raised the blade a tenth, and cut another groove. When I say "cut" I actually mean that if ground away the groove. The noise was tremendous, the metal got scorching hot and I had to stop after every slice and cool it down in water. I suspect that the neighbours were very happy when I finally stopped. I know my wife was! Actually, so was I!

It was then that I found out that the dovetail puck I'd bought at KW Telescope was not actually the same size as a Losmandy. Fortunately, the gap in the puck need to be enlarged by less than half an inch, and I had just over an inch to play with. I mounted the new bar on top of the 'scope and the puck fit perfectly, sliding back and forth and yet when tightened down, it seemed rock solid.

So, now I had a Losmandy rail on top of my 12” scope, and a dovetail that I could tighten. The next stop was to bolt a Vixen dovetail puck onto the (now correctly sized) Losmandy, back to back. So, I drilled three holes into the Losmandy and tapped them. I only needed two,, really, but I countersunk the wrong side of the Vixen puck on the second hole, so I had to drill a third!

Success!

The Vixen rail fit beautifully into the Vixen dovetail, now bolted to a Losmandy dovetail and mounted on a Losmandy rail. Everything was now completely adjustable, and yet, when hand-tightened, was rock solid.

Next up was a balancing system for the underside of the SCT.

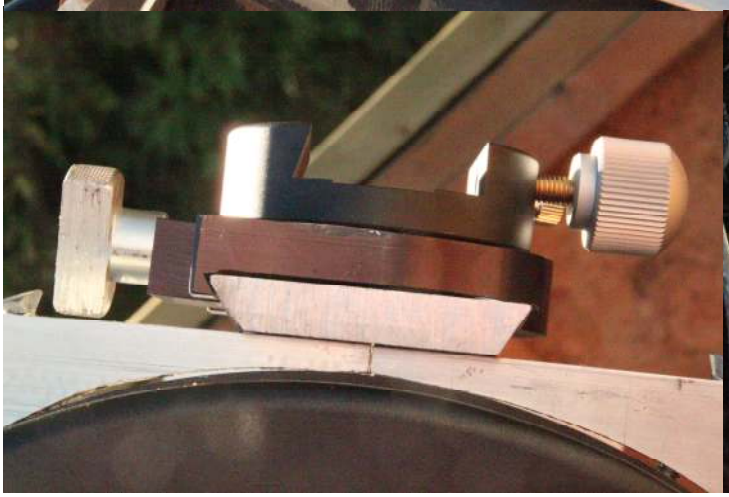
I decided to use one of the pieces of aluminum I had left over from my marathon grinding session, but there was a Board meeting before I did that, and I had a chat with the excellent Mr. Bennett. He patiently explained that as long as the blade was carbide tipped (it was), that it would go through the aluminum like, well, a cold knife through butter.

So, I donned facemask, long sleeved shirt, leather gloves and with much trepidation, I turned on the saw and pushed the bar of aluminum and exactly as Gary said it would, I had a beautiful cut: in seconds, in relative quiet and without having to deal with scorching metal!

So, I took one of the remaining Vixen dovetails and put a long 1/4-20 bolt into it and hung a 5lb weight on it. With the 6” scope and camera, I was able to nicely adjust the balance to lessen the load.

I’m very happy with the result! Just to check, though, at the last Board meeting at the Observatory, I took my combined Losmandy/Vixen dovetail and put it on the Losmandy rail on the 16”...it fit like a glove! Now, I can take my 6” RC to the site and use it on the big mount there!

Now, if I could just find some pare time to spend with my scope...



Cloudy Night—Stuart Atkinson 2013

Not much to look at, at the start.
Just half-hearted wisps of watercolour white and blue,
Airbrushed on the sky,
Emerging slowly from the summer twilight
Like ghosts caught in moonlight.
Brightening, blossoming, blooming into
An orchid of colour beneath lonely
Capella's golden spark.

Where there was only empty darkness
An hour before now there is a sight to make
Even the heaviest, most sleep-starved eyes
Go wide with wonder.
Here – teased-out streamers of electric blue,
Threaded through with delicate faerie stitches
Of silver, violet and grey.
There – whirls, whorls and curls of pale purple,
Graffiti sprayed on the midnight sky
By some unseen alien hand;
Nature's tag shining bright
Above a world long since deserted by the Sun.

Easy to believe you're looking at a beach,
Tide sucked away leaving dunes
Of glowing cerulean sand behind;
Or an ocean of energy, its mother of pearl
Waves undulating, surging,
Whitecaps burning magnesium bright…

Soon, silhouetting the northern peaks,
They have no rivals.
The streetlights scattered across the Auld Grey Town
Below are mere fireflies, and the summer stars
Fainter by far and more feeble still,
Surely feel ashamed to share the same sky
As the rippled and ruffled clouds
Hanging above the faraway fells like cobwebs
Heavy with sparkling emerald dust,
Sagging under the weight of powdered diamond.

Below, a handful of yawning souls
Are no doubt looking at the sky and sighing
"What the hell is that..?" as they put out the cat
Or take the dog for one last, unwanted walk.
Many will think it's an aurora,
And smile with misplaced delight,
Believing the fabled Northern Lights are dancing above
Their I-thought-we-were-too-far-south-for-that town.

Others – the ones living happily in fruit loop fantasy worlds
Where Armstrong never left the Earth,
Insisting Comet ISON will 'Shine brighter than
The Moon!" – will swoon then rush inside to witter away
On Twitter how a UFO is hovering o'erhead,
Or seeing some celestial phenomena
Evil NASA knows the truth about but
Is keeping to itself…

Standing above them all,
An unwitting sentinel
Waiting for dawn,
I savour the silence, drinking it in,
Bathing in the rare and blissful peace.
The night is still; the breeze
Warm and soft; every 90 minutes
The space station's phosphorous spark
Arcs from west to east, soaring over
Castle ruins framed by the starry froth
Of the Milky Way's core;
Behind me an owl hoots forlornly
In one of the crumbling towers,
Sending shivers down the spines
Of unseen creatures hiding
In the shadows of the trees…

And to the north now, a blaze of NLC.

I know what they are, of course;
My cold astronomer's brain tells me I'm just seeing
"High altitude clouds of ice-coated meteoritic dust";
Essentially powdered comet corpse glinting
In the summer sunlight eighty K
Above my head, so high
Space-walking astronauts could lean over the side
And trail their white-gloved fingers through them –

But they must be more than that…

Perhaps a Stargate, or a Wormhole,
Opening up to allow a mighty starship
To pass through, its noble crew of Ambassadors
From a star in some faraway spiral arm
Greeting Earth and her people with a fanfare
Of extraterrestrial Elgar,
Ending our galactic childhood…

Or maybe they're the flare of a magic spell
Cast by some cosmic wizard or warlock,
An incantation tearing a hole in the night
To release Hobbit-carrying eagles, or a flight
Of screaming dragons, into our skies…

Whatever they are, at this perfect hour they're mine,
And as I stand here, camera click-clicking,
With the sleeper train rumbling
On its way to my right, and Wainwright's
Pipe-puffing ghost drifting through the sleepy streets
Below, I wonder…
If I reach out my hand to touch them
Will it come back dripping liquid blue,
Fingers sparkling with mesospheric glitter…?

What you missed in September.

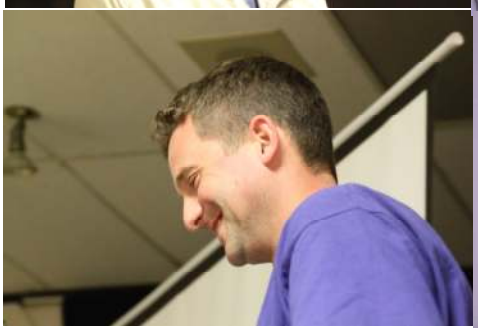
September is, for me, one of the best meetings of the entire year. It's the time when you get to hear what other people have been doing. You get to hear of projects started, completed, or in progress. You find out about Starfest and all manner of interesting stuff.

For instance, we got to hear about a trip to Lowell Observatory in Flagstaff and the Barringer Meteor crater near Winslow in Arizona, that triggered all sorts of memories for me (resulting in the article earlier in these pages).

Gary Colwell gave us a good look into the stars visible at this time of year.

And I got up on my hind legs and talked about taking a large slab of aluminum and making into several much smaller pieces (again, see article earlier).

This year, Andy also handed out some awards that were given to people who were unable to make the banquet. Some of these people's pictures are below. I should also mention that it's fairly difficult to take a good picture of Andy. I did get a reasonable one of Gary Colwell...I just chose not to use it!



576 Concession 7 East, Flamborough ON
N43° 23’ 27” W79° 55’ 20”

Hamilton Centre, RASC
c/o Mr. A. Blanchard
2266 Lakeshore Rd. W.
Oakville, Ontario
L6L 1G86L 1G8

Gary Colwell, President
Gary Bennett, Membership Director / AstroCATS Chairman
Jason Blane, Observatory Director
Roger Hill, Orbit Editor
Bill Legitt, Treasurer
Mark Pickett, Outreach Director / National Council
Shawn Preston, IT Director
Dave Surette, Secretary
Andy Blanchard, Past President / AstroCATS Co-Chairman

Calendar for November, 2013

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				01	02	03
04	05	06	07 • 8pm» Public Monthly Meeting • 8pm» Public Monthly Meeting	08	09	10
11	12	13 • 7:30pm» Star Gazing at the Observatory	14 • 8pm» RASC Board Meeting	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

NOMINATION FORM for the Board of Directors - October, 2013.
I, _____ , being a member in good standing of the Royal Astronomical Society of Canada 1968, Hamilton Centre, do hereby nominate _____ for election at the Annual Meeting.

_____ _____
Signature of nominator and Date - 2013MM/DD

I, _____, being a member in good standing of the Royal Astronomical Society of Canada 1968, Hamilton Centre and being at least 18 years of age, do hereby accept my nomination to the Board of Directors of the Royal Astronomical Society of Canada 1968, Hamilton Centre.

_____ _____
Signature of nominee Date and 2013/MM/DD

NOMINATION FORM for National Council Representative - October, 2013.
I, _____, being a member in good standing of the Royal Astronomical Society of Canada, and of the Hamilton Centre, and being at least 21 years of age, do hereby accept my nomination for National Council Representative for the Royal Astronomical Society of Canada 1968, Hamilton Centre. (Two year term)

_____ _____
Signature of nominee and Date—2013/MM/DD

Bylaw Number One of The Royal Astronomical Society of Canada 1968, Hamilton Centre (September 13, 2005)
5.04 NOMINATIONS
Any member of the Centre may make nominations to the Board. Such nominations shall be submitted by the member to the Secretary of the Centre in writing at least ten (10) days before the annual meeting, and shall contain the name of the nominator and the written consent to the nomination by the nominee.

Bylaw Number One of The Royal Astronomical Society of Canada (February 2006)
4.07 CENTRE COUNCILS AND OFFICERS
(2) (2) Every member of the Centre Council shall be elected by the members of the Centre, for such term and in accordance with such procedure as is established by the Centre by-laws, at the Centre's annual meeting or at such other meeting as is duly called for that purpose.

4.08 NATIONAL COUNCIL REPRESENTATIVES
(2) Subject to Article 4.08(4), the National Council Representatives of a Centre shall be elected by the members of the Centre in accordance with the procedure established in Article 4.07(2) for the election of Centre Council members.
(4) If for any reason a National Council Representative of a Centre is unable to attend a meeting of the National Council, then the Council of the Centre may appoint another member of the Centre as an alternate for that National Council Representative. The alternate will be entitled to exercise all the rights of the National Council Representative for whom he or she is the alternate only upon presentation to the National Council of proof in writing from the President or Secretary of the Centre as to the due appointment of the alternate.