



# ORBIT

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# Issue Number 6, April, 2012

## Roger Hill, Editor

Sorry for the tropically themed front picture this issue, but I couldn't resist. My wife and I went down to St. Thomas in the US Virgin Islands on February 29th, with another couple—actually my Best Man and his wife—for ten days of rest and relaxation. The condo we had rented was perfect for us, with one exception: I would have preferred being on the south side of the island, but it did allow me to take the front cover picture. From the balcony of our 2-story condo (we had the entire upper floor), I took the cover picture. I had hoped to take some time-lapse images of the stars circling Polaris, but our neighbours below had their porch light on most nights, except when it was cloudy (go figure!). So I had to be satisfied with just this one picture.

We had a wonderful time once I got over the weirdness of driving on the left side of the road. We'd visit a different beach most days, or do some shopping. We had some great meals and enjoyed the spectacular scenery. On several occasions, it was nice to have the beach to yourself (almost) as the cruiser ship passengers had to head back to their boats. It was also wonderful watching the ships leave while sat at a bar during Happy Hour and then seeing the Sun go down. The surf at night was great to listen to, as well.

On to Astronomy!

You'll have noticed that the changes to the Hamilton Centre are coming thick and fast. A lot of what Andy has been pushing forward is coming together. You can read about some of it in his report after this, but I have a couple of comments. For the previous few years, it was obvious that the Hamilton Centre was moribund; that what had been done before was not meeting the needs of the people who were interested in joining. Having been a member for 40 years, I was firmly of the opinion that there wasn't anything drastically wrong with the Centre, but perhaps a few tweaks here and there was all that was required. After all, when the Centre almost collapsed and disappeared in the early 90's and I had my first stint as President, all I did was to harken back to when I first joined and tried to emulate that. It worked, and the membership in the Centre blossomed, topping out at around 160 members. This time, when I took over the front of the room, I tried to do the same thing, but I couldn't seem to drum up the same kind of enthusiasm. Looking back on it, the first time I was trying all sorts of new things...we moved from McMaster to the Hamilton Spectator. We tried putting together a radio-telescope, we got involved in sidewalk astronomy, built a CCD camera, created our first web site (which ran out of my basement on an ISDN line), got involved in the nascent internet, and changed the by-laws to allow Associate Members.

This past time, I didn't do that, and I don't know why. We re-vamped the sidewalk astronomy, did the astronomy seminars in Burlington, moved our meetings from the Steam Museum to Burlington and then to Waterdown, got involved with Rockwood Pioneer village and changed the meeting structure, but there didn't seem to be the same level of excitement that made people want to roll up their sleeves and get involved. What was obvious, though, was that Andy did have the ability to get people involved. For instance, when we had the mould problem, it was Andy that called for volunteers, and people came. In fact, virtually everything that he got involved in resulted in people coming out to help.

Oh, he and his team are making mistakes, and anyone who has read the email threads over the last month is well aware of what I think about some things. I have some grave misgivings about a couple more that are coming as they have the potential to transform the Hamilton Centre to something almost unrecognizable. **However**, the Centre needs the cobwebs clearing out. It needs a strong wind to blow through, and unsettle a lot of things. It needs shaking up and being remade to face the challenges of the future, and Andy is doing precisely that.

So if there was ever a time to step forward, a time when you can make a difference, now is that time. Get involved and have some fun!

Until next month,

Roger Hill

## Presidents Message—Andy Blanchard

March was my busiest month since I became your President. The month started off with a visit to the McMaster Planetarium, we had two great tours of the galaxy with everyone having a great time. Next was Mars at opposition, we had planned on a Saturday Mars Madness but got clouded out, yet many of us made it out on Sunday and Monday. The 16" OG was spot on and the polar cap was visible.

On the Monday we had our 3rd committee meeting on AstroCasm. Planning is going well and we are pleased to report we have landed several commercial sponsors. Ticket sales are not yet "risk", but are proceeding well. I would like to stop here in my report and ask you to click on this link, <http://astrocasm.com/Purchase-Tickets.html> and purchase your advance tickets. Ed Mizzi and Mark Pickett are currently developing a list of helpers for AstroCasm. Each helper will be available for short periods of time to lend a hand with jobs like ticket collecting, or crowd control etc. I know this will be a lot of fun and I want to count on everyone to send an email right now to Mark by clicking on this link and letting him know he can count you in. [yumari@sympatico.ca](mailto:yumari@sympatico.ca). It will take a second to do this but it will really help us know who will be there.

A bit of good news on the Year End Banquette, sales are proceeding well, but again if you have not registered for you and your significant other the link <http://astrocasm.com/Purchase-Tickets.html>. This is a great deal all for \$50, a fabulous meal and a chance to hear Terrance Dickenson our Key note Speaker.

Colin Haig and I also traveled to the Niagara Centre and pitched our first presentation on AstroCasm, to a very excited and interested membership, and the next day the registrations started coming in. We will be presenting at all of the Southern Ontario Centre meetings over the next several weeks to further introduce our Swap Meet.

Last week was my busiest of the month with astronomy activities every night. The two nights that I would like to highlight, being Wednesday when we had public night at the observatory. To say it was a success is an understatement. Gary C said it best, he could not remember a night when we had a traffic jam in the parking lot of the observatory. Many people experienced Jupiter and M42 for the 1<sup>st</sup> time. A great amount of fun for everyone was had.

My biggest announcement I have saved for last. On Thursday night Gary Colwell and I presented an idea that I have been working on for the last year to the Scouting Commissioners of Hamilton (30 commissioners). We had created a program that could, be a solution to the scouting astronomy badge and the outreach capabilities of this club. A program that I believed would benefit both our groups with a result of youth gaining a greater appreciation for our hobby. Although the presentation was not long it was very clear the support of the program was enthusiastic. The program calls for a cub leader to become a member of Hamilton Centre in exchange for a night of badge work by our Centre members. The leader will get all the rights and benefits of being a member. Within hours we received three new memberships with many more likely to come. A show of hands at the meeting indicated 100% of all those who attended will be signing up for the program. It is important to note we limited the number of cub packs to 30, a number we feel is manageable over a year.

Improvements in our communication to club members has been one of the most important goals that I wanted to see achieved in my term as President. As many of you are aware we launched our new email system in March. Not without a few bumps I might add. One of the biggest revelations when we launch was the discovery that the club had not just two email lists, but a 3<sup>rd</sup>, one just for major announcements. It seems some of our members opted out of our regular email chatter and only received communications via the "announce list" which was reserved making major announcements. I am sad to report, and I am the 1<sup>st</sup> to **apologize**, in the 10 years I have been on the board I have never sent an announcement to the club membership utilizing the "Announcement List". It seems this list was maintained by Mark Kaye and was the responsibility of the Board to advise Mark on changes in membership. I was treasurer of this club for 6 years and Vice President for three years and we just did not know. This means that members of our Centre never received communications from the board. A sad reflection on how bad we had lost control of communications up to this point by this board and past boards.

I assure you going forward on my watch, all major announcements from the board will now be sent via the new "Announce List", and general conversations will be on the "Member" and "Astronomer" lists. If you have questions or concerns about this news please send me an email directly.

I already mentioned this was a busy month but it was also a fun month. Thank-you for supporting us and your representatives, and I ask that you consider supporting your club by not forgetting to click on those links above.

Andy Blanchard  
President

## Report from the Board: Communications—Gary Bennett

### Update on new communication tools:

#### **On-Line Forum (Bulletin Board):** <http://forum.hamiltonrasc.ca/>

It's open for business and looking for more of you to sign-up and get in on the conversation. There are already some interesting posts for you to catch up on. It's Fun! Give it a try!

#### **New email System**

As of April 1 (no fooling) the old RASCals email system was taken off-line. Old habits die hard, so just in case you forget and post to the old RASCals email list you will likely receive a "reject" email in your inbox. So take note of the new email addresses:

[astronomers@hamiltonrasc.ca](mailto:astronomers@hamiltonrasc.ca) Unless you have "secret, for members eyes only", this is THE address you should use. It includes members (paid) and some "not yet members" that have asked to be on the list. We had a bunch of those on our Yahoo Group and most of them have since become paid members. Andy will be filling you in on the good news story about our association with Scouts Canada. Some of the new "non-members that will be joining the list are parents of Scouts. So let's not exclude these folks from joining in on our fun.

[members@hamiltonrasc.ca](mailto:members@hamiltonrasc.ca) This list includes Members (paid) only but excludes members who have "opted out" of receiving regular email correspondence. This list should be reserved for subjects that are **truly** for Members Only. There aren't many reasons that I can think of for using this list.

[announce@hamiltonrasc.ca](mailto:announce@hamiltonrasc.ca) This is reserved for special communications to EVERYONE including members who opted-out of receiving regular email correspondence. There are only a handful of people who are authorized to send to this list. When you receive one of these emails, DO NOT REPLY to it (it will just get rejected). Instead, you can "forward" to the [astronomers@hamiltonrasc.ca](mailto:astronomers@hamiltonrasc.ca) list instead.

#### **How does the email system work?**

As far as you are concerned, you are sending to an email address ([astronomers@hamiltonrasc.ca](mailto:astronomers@hamiltonrasc.ca)). But in fact, you are sending to a list of email addresses. Everyone who is on the list will receive your email.

If you choose to reply, you have a choice:

Reply to sender only: Only the person who sent the email will see your reply

Reply to ALL: Everyone on the list will see your reply.

This is also how the old RASCals list worked.

## March 2012 Board Meeting—Ed Mizzi

Highlights include the following:

Gary B. - Communications: Email transition in the works; Bulletin Board completed

Will G. - Looking into Banquet Insurance; Discussion about Director's Ins.

Mark P. - Outreach: Westfield went well; Venus Transit: discussion about hosting this event at Dundurn Castle on June 5

Gary C. - Observatory: working on No Trespassing signs and new washroom key

Andy B. - President's Report: Bylaw discussion - Roger Hill will assist in developing our new bylaws and will look at what National has to offer.

Next Board Meeting - April 12, 2012

## RASC National email list—Roger Hill

The Hamilton Centre is part of a national organization, and as such there are a number of benefits that come with this. Most members will be familiar with SkyNews and Society provided items: the Observers Handbook, the Journal and the Bulletin, but did you also know about the email list run by National? It is very similar to the local Hamilton list, but is national in scope. Hardly a day goes by without any traffic, and while Mark Kaye (The Moderator) has to step in from time to time to ensure that topics are astronomy related and kept that way, the feel about it is much like you would expect at an after-meeting gathering, but on a national (and international) basis. Want to join? Fire off an email to Mark Kaye—[Mark.Kaye@Sympatico.ca](mailto:Mark.Kaye@Sympatico.ca)

# The Planet in the Machine

By Diane K. Fisher and Tony Phillips

The story goes that a butterfly flapping its wings in Brazil can, over time, cause a tornado in Kansas. The “butterfly effect” is a common term to evoke the complexity of interdependent variables affecting weather around the globe. It alludes to the notion that small changes in initial conditions can cause wildly varying outcomes.

Now imagine millions of butterflies flapping their wings. And flies and crickets and birds. Now you understand why weather is so complex.

All kidding aside, insects are not in control. The real “butterfly effect” is driven by, for example, global winds and ocean currents, polar ice (melting *and* freezing), clouds and rain, and blowing desert dust. All these things interact with one another in bewilderingly complicated ways.

And then there’s the human race. If a butterfly can cause a tornado, what can humans cause with their boundlessly reckless disturbances of initial conditions?

Understanding how it all fits together is a relatively new field called Earth system science. Earth system scientists work on building and fine-tuning mathematical models (computer programs) that describe the complex inter-relationships of Earth’s carbon, water, energy, and trace gases as they are exchanged between the terrestrial biosphere and the atmosphere. Ultimately, they hope to understand Earth as an integrated system, and model changes in climate over the next 50-100 years. The better the models, the more accurate and detailed will be the image in the crystal ball.

NASA’s Earth System Science program provides real-world data for these models via a swarm of Earth-observing satellites. The satellites, which go by names like Terra and Aqua, keep an eye on Earth’s land, biosphere, atmosphere, clouds, ice, and oceans. The data they collect are crucial to the modeling efforts.

Some models aim to predict short-term effects—in other words, weather. They may become part of severe weather warning systems and actually save lives. Other models aim to predict long-term effects—or climate. But, long-term predictions are much more difficult and much less likely to be believed by the general population, since only time can actually prove or disprove their validity. After all, small errors become large errors as the model is left to run into the future. However, as the models are further validated with near- and longer-term data, and as different models converge on a common scenario, they become more and more trustworthy to show us the future while we can still do something about it—we hope.

For a listing and more information on each of NASA’s (and their partners’) Earth data-gathering missions, visit <http://science.nasa.gov/earth-science/missions/>. Kids can get an easy introduction to Earth system science and play Earthy word games at <http://spaceplace.nasa.gov/ecosphere>.

*CloudSat is one of the Earth-observing satellites collecting data that will help develop and refine atmospheric circulation models and other types of weather and climate models. CloudSat’s unique radar system reads the vertical structure of clouds, including liquid water and ice content, and how clouds affect the distribution of the Sun’s energy in the atmosphere. See animation of this data simulation at [www.nasa.gov/mission\\_pages/calipso/multimedia/cloud\\_calip\\_mm.html](http://www.nasa.gov/mission_pages/calipso/multimedia/cloud_calip_mm.html).*

*This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.*



# Dead Scope Gets Brain Surgery by Colin Haig

## Mystery Scope Arrives

A few weeks ago, someone mentioned that an ancient artefact was discovered at the observatory. Apparently, some anonymous person dropped off this mysterious relic at the site – with a note taped to it saying “FREE - Computer Not Working”.

Members were quick to determine:

- Nobody knows where it came from

- It is truly non functional

The telescope is a “Classic” – formerly a state-of-the-art Meade LX-200, 8” Schmidt-Cassegrain. Non-GPS version. After hearing about this dead scope, I figured it was worth a look. This castaway was suffering from runaway – that is, the declination drive just zips along at full blast, out of control. Speculation was it was a “millennium bug”, but in true Mythbusters fashion, I set out to prove this theory incorrect.

## Mythbusters meet the Meade

It was time to blow things up. Jamie and Adam of TV’s Mythbusters were merely my inspiration – plug it in, throw the switch, but sadly, someone had already blown it up. There was no need for me to explode anything. The electronics were not behaving, the Dec motor screamed along, and it was clear that some investigation was needed.

A quick round of internet searching (do the kids say “googling” anymore?) turned up ZERO hits on a millennium bug. Next step was to peek inside. After removing the power board – where the LX200 jacks connect all the cables – saw a few chips dated from 1998. That was pretty close to the millennium, and so if there was such a bug, owners would have been very angry I think. One more strike against a Y2K problem.

While in there, I spotted the fuse was wrapped in tin foil. This is the modern-day equivalent of a penny in the fusebox, and a real fire hazard. It’s amazing that this lack of protection didn’t cause smoke, fire, or a real explosion on a small scale. Very bad. Just because the fuse blew, you can’t assume there was no cause! BAD BAD BAD Astronomer!! The right thing would be to look for WHY it failed, and then replace with a correct replacement – a 2Amp Slow Blow is what was called for I think.

## The Usual Suspects

A new fuse, power on, and whir went the DEC motor, with the same problem. More internet research (Bing-ing?) uncovered a host of “RA runaway” and general motor problems with these Classic LX-200s. I found a great wealth of information, but found this site helpful: [www.bbcl03736.pwp.blueyonder.co.uk/LX200%20Faults.htm](http://www.bbcl03736.pwp.blueyonder.co.uk/LX200%20Faults.htm)

Apparently square waves weren’t coming from the optical encoders. After about 14 hours of work, we have: 2 new potentiometers, resoldered wire to the infrared LEDs, replaced 6.8uF tantalum cap with 35V version, and that was just on the DEC motor board. Then found that the pulses weren’t being seen by the main brain. A 74LS14 chip which takes 1s and makes them into 0s and vice versa had blown one of its 6 inverters. Lots of tricky desoldering and resoldering for all of this resulted in a not quite functioning scope.

Now I found the DEC drive would chatter back and forth, hunting clockwise and counterclockwise, even though everything seemed right. Turns out some genius had soldered the motor wires backwards, so when the brain said go RIGHT, the motor would go LEFT, and the brain would say WTF? Go the OTHER RIGHT. Anyway, swapped the motor leads around, and tada !

## The true cost of Free

Of course I'm oversimplifying the effort – it was about 20 hours of time, \$40 in gas, electronic parts, new CR2032 lithium battery, hot melt glue, stainless steel screws to get rid of the rusty ones, and fresh grease turned this dead relic into a working scope. Oh, and then I found another foil-wrapped former fuse in the power cord. Replaced that too, and redid the hack job that was done on the wiring.

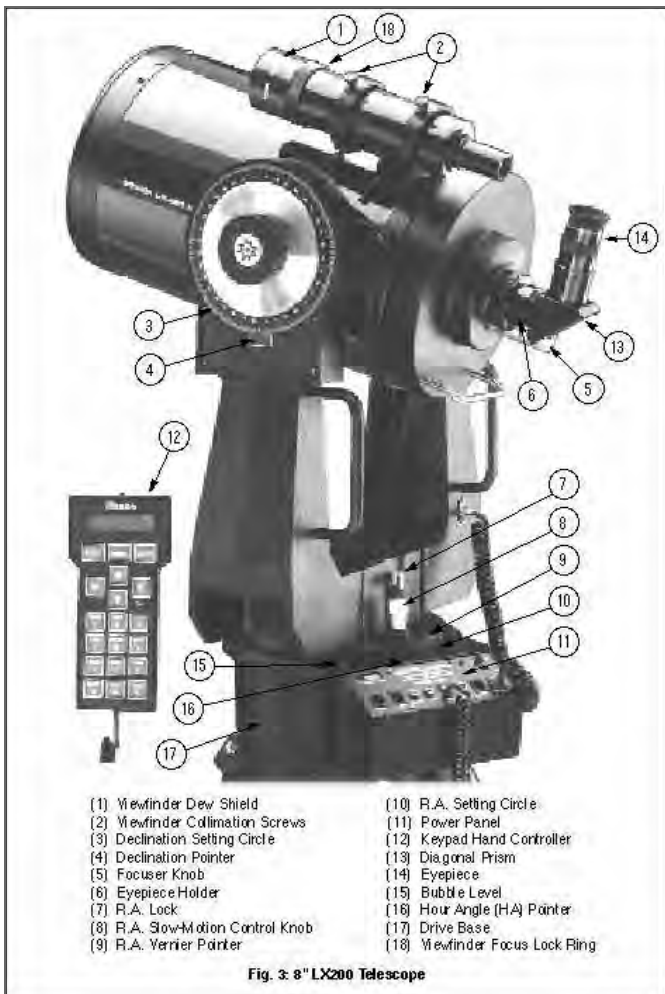
Next, the scope's telrad got a new knob, the RA clutch got adjusted, removed the dirt on the inside back of the corrector and the secondary and primary inside the tube got a light cleaning (canned air). Outside for a quick look, and the little lost scope showed the moon, Venus, Jupiter, M42 to the neighbours. Optics and collimation are now pretty good too.

## Ready to Go

The scope is now back at the observatory with an orange leaf bag over top. You'll need to unbolt the scope from the tripod with the big knob, move the tripod where you want it, and rebolt. Then plug in the keypad. Next, add the power cord, and plug the power pack into the AC. All the stuff you need is in the black case I provided. Manual is in there too. You'll need to align it each time you go to use it – there is no GPS or Park capability in this vintage. There is a crappy prism diagonal and I threw a 32mm Plossl in the box.

We'll need a wedge to polar mount it for photography, but for visual use, this is pretty easy go-to technology, from last century.

Many thanks to the unknown donor who dropped it off. I'm sure it would have been very expensive to repair commercially – for me, this was Friday through Sunday fun. I hope you enjoy using it as much as I enjoyed fixing it! And as the Mythbusters say - Don't try this at home – leave it to the (semi-)professionals.



## Obituary: Thomas J. Johnson.

*Editors note: It's not often that I print obituaries in Orbit, but so many of us have been affected by Celestron that I had to print this. It comes from <http://stargazerslounge.com/>. I owned, and loved, a Celestron Pacific C8. The Centre has one, as well, that belonged to the late Ian Stuart.*

Thomas J. Johnson, the creator of the modern Schmidt-Cassegrain telescope and the founder of Celestron, died early in the morning of March 13, 2012, according to Celestron president and CEO Joe Lupica. Johnson was 89.

He ranked among the most important figures shaping the last half century of amateur astronomy.

Johnson was in his early 30s when, in 1955, he used his World War II experience as a radar technician, and postwar employment in the electronics industry, to establish a company called Valor Electronics. Based in Gardena, California, Valor made various components for military and industrial customers, and by the early 1960s it had expanded to roughly 100 employees.

As Valor was growing, so too was Johnson's own interest in amateur astronomy. After first purchasing 4-inch and later a 10-inch Newtonian reflector, Johnson then headed down a path followed by many amateurs of the day and turned to the hobby of telescope making. The first scope he made was an 8-inch f/4 rich-field Newtonian, soon followed by a 12-inch Cassegrain. Meanwhile, in 1960 he established an "Astro-Optical" division of Valor.

His next telescope project demonstrated that his telescope-making talent and energy would be truly formidable. This scope was a highly unconventional 18¾-inch Cassegrain, made to be transportable. To reduce the weight of the 3-inch-thick primary mirror, Johnson had a ribbed pattern sandblasted into the back of the glass blank. Six months and about \$1,000 later, he had a fork-mounted scope that could be disassembled and packed into a car in about 15 minutes.

Johnson's first really ambitious creation graced the cover of the March 1963 Sky and Telescope. On July 28, 1962, he hauled the scope to the parking area atop Mount Pinos for its public debut at one of the Los Angeles Astronomical Society's star parties. It made a big impression among the group's advanced amateurs, who examined it in detail. The telescope was so noteworthy that it became the cover story of Sky & Telescope's March 1963 issue.

But it was another S&T article that prompted Johnson to change history. As he was finishing the 18¾-inch scope, Donald Willey published a seminal analysis of Cassegrain telescope designs in the April 1962 issue. Johnson was intrigued by the excellent off-axis optical performance of the Schmidt-Cassegrain design. Based on his experience building the 18¾-inch scope and a plan to use optics made to order by Perkin-Elmer Corporation, Johnson took the bold step of advertising a 20-inch multi-purpose Schmidt-Cassegrain telescope, called the "Celestronic 20," in S&T's January 1964 issue.

The Astro-Optical Division name quickly morphed to Celestron Pacific, a division of Valor. By December Valor was dropped, and Celestron's ad introduced pictures of 4-, 6-, 10-, and 22-inch Schmidt-Cassegrain telescopes as well as mention of a 36-inch. But most of Celestron's sales were for the 10-inch, which cost about \$2,000 when outfitted with basic accessories.

Despite his initial arrangement with Perkin-Elmer, Johnson was soon making his own Schmidt-Cassegrain optics. A breakthrough came early on when Johnson created a method for mass producing the telescopes' optically complex corrector plates. For this and other contributions to optics, Johnson was later awarded the Optical Society of America's David Richardson Medal; he was one of only a few non-Ph.D. optical engineers to ever receive the honor.

In the late 1960s, Johnson and his colleagues speculated that the sweet spot of the market would be for a compact, quality 8-inch portable Schmidt-Cassegrain costing around \$1,000. And unlike most telescopes of the day, it should be as photography-friendly as the technology of the time allowed. Johnson returned to the drafting table, and what emerged was the \$850 "classic C8," first advertised in S&T's June 1970 issue. With a radically new orange and tan motif, the C8 was an overnight hit. It set the pattern for all the amateur Schmidt-Cassegrains that would follow in the coming decades from Celestron, its competitor Meade Instruments, and others.

Writes Celestron's president and CEO Joe Lupica: "Tom's innovative, pioneering spirit created a revolutionary method of mass producing an affordable Schmidt-Cassegrain telescope design, which allowed millions of amateur astronomers to pursue their passion for astronomy. Other notable achievements include a 1978 David Richardson Medal from the Optical Society of America, a 1993 Bruce Blair Medal from the Western Amateur Astronomers, and a 2009 Lifetime Achievement Award by the Small Telescope & Astronomical Society. Our hearts go out to Tom's wife and family and to all who were touched by his achievements and innovation."

## Contact, by Stuart Atkinson

It could happen today, or in a dozen  
Years from now. The news could break  
As you're making your next cup of tea,  
A "We interrupt this program" message flashing  
On the screen as you reach to turn off the TV,  
Heading out to fill up the car, or hang out in a bar  
With friends. But whenever it happens  
The First Age of Man will end; human history  
Divided by a neat, coloured line; on one side  
"Before the Signal", on the other, "After".

As for *who* will draw that line, chances are  
It will be no doe-eyed, Ellie Arroway  
Sitting on a dusty jeep, hugging her knees,  
Headphones pressed to her ears,  
Scanning the light years for Radio ET.  
They'll probably be a teenage geek,  
Sitting at their PC in their battlefield of a room,  
Or a 30 year old Citizen Scientist,  
Surrounded by Cylon toasters and faded X-Files posters,  
NASA TV playing 24/7 in the background.

They won't be able to keep it secret, of course.  
Not in this day and age. Word will get out.  
The cat will leap out of the bag,  
Into our laps and laptops, screeching.  
But *how* will we hear? An OMG! Tweet  
From an intern who just overheard SETI boffins  
Whispering through an almost-but-not-quite-closed door?  
An embargo-busting blogger, desperate to post  
The Biggest Story Of All Time  
An hour before the President, nervously straightening  
His tie behind a podium, tells the world  
"It's true"...?

Cue all the well-laid plans for secrecy  
Being swept away as gaily-coloured banners on TV screens  
Around the world declare "Breaking News –  
Message from aliens received!" as shocked and disbelieving  
Anchors, fingers in ears, or peering at under-desk screens  
Stutter "We're getting reports...?"

A "Where were you when...?" moment to be sure;  
Right up there with the death of JFK,  
Challenger's final flight and the toppling  
Of the Towers.  
Will you be on your own, reading it on your phone,  
Riding the bus to work or killing time,  
Sighing in a supermarket queue?  
Or will you be at home, micro-waved meal  
Balanced on your knee, waiting to see  
Your favourite show start on TV only to see, instead,  
A studio full of talking heads, figures famous  
For their planet-sized brains suddenly just  
The same as us – trying in vain to take  
It in, the news that We Are Not Alone...

God, I hope I'm not at work that day!  
I want to watch it all unfold from my sofa,  
Drinking one cup of tea after another  
As word ripples around the world, confirmation  
That a voice has been heard calling to us  
From a faraway star.  
I want to watch the endless interviews  
With sci-fi scribes and scientists, all insisting  
"I knew it all along, the numbers alone  
Meant it was impossible for it to be just us!"  
I want to watch reporters prowling city centres,  
Asking Man or Woman in the Street  
How they feel about the news,  
Carefully choosing people who they think might actually care,  
Just one or two with spiky- or brightly-coloured hair  
Approached for comic relief.

Oh, I want to see the politicians preening,  
Declaring a sudden, new-found love for science  
After years of slashing its budgets to the bone  
Like migraine-maddened bears;  
I want to see priests scrambling to rearrange their faith  
Like kids with Rubiks Cubes,  
Twisting and turning the pieces, clicking and clacking  
Their beliefs until they'd "known it all along"  
And hadn't been wrong at all.

I want to see Brian Cox standing on a windswept summit  
Somewhere, hair blowing in the breeze,  
His young Einstein eyes wide with wonder,  
Smiling that knowing, Northern smile...  
I want to see the first, leaked grainy  
Screenshot of The Signal, its discoverer leaning in  
From one side, beaming proudly,  
Blissfully unaware their messy, Post It Note-  
Smothered monitor is The Key  
To a real Pandora's Box.

I want to see the so-called experts struggle  
To juggle each new scrap of news,  
Refusing to admit they have absolutely no idea  
Just what the hell is going on,  
Adding two and two to get ten million,  
Joining in the greatest game of Chinese Whispers  
Ever played...

...and at the end of that historic day,  
The Day When Everything Changed,  
I want to head out into the night,  
Find somewhere quiet to stand alone beneath  
The starry sky, look up and say  
"Hello..."

# What you missed in March...!

W.J. McCallion Planetarium Visit, March 1, 2012

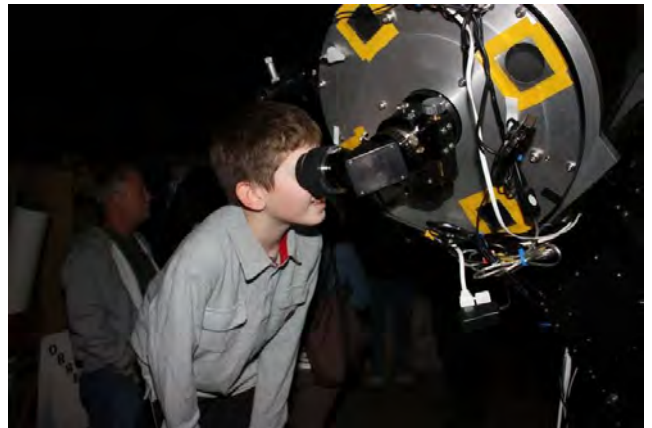
On March 1 the Hamilton Centre hosted yet another visit to the McMaster University Planetarium and it was a great success by all accounts. We had two showings, one at 7:00 PM and the other at 8:30 PM, with a total of 44 participants. Our president, Andy Blanchard, held a short monthly meeting before each showing to discuss club business and events and we were then treated to a wonderful display of images, covering topics from the solar system to the Milky Way, and beyond! As we travelled the heavens our guide kept us entertained with stories and interesting facts, all the while inspiring us to get outside and explore the “real thing” whenever the opportunity presents itself. Thanks to Gary Bennett, Dana Barton and Andy Blanchard for helping to make this the success that it was.

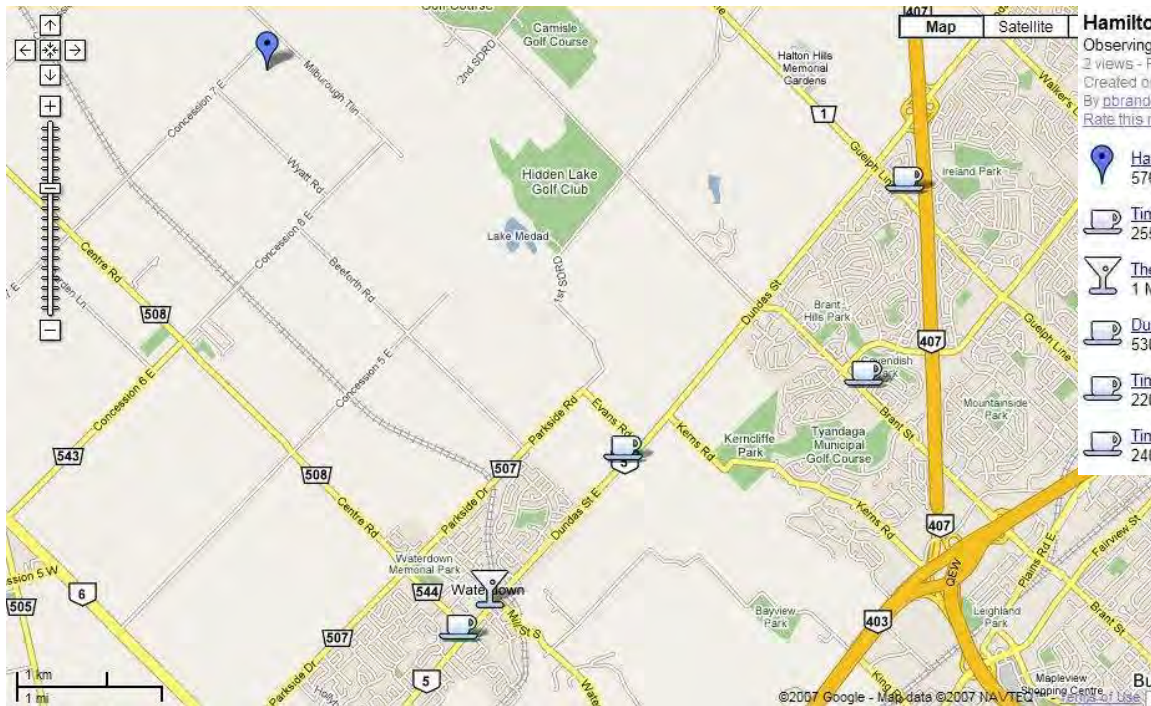
Public Night, March 21

What does 9 Boy Scouts, 10 Hamilton Centre members, 7 visitors, an observatory and a beautiful sky add up to? Yes, you guessed it...the best Public Night of 2012, at least so far! The visit by the Scout group was the first of many to occur over the next several months and it was a great start to this program of helping these young people obtain their astronomy badges, immersed in a pure astronomy setting. The entire group, including the adults in attendance, was treated to a slide show (prepared by Gary Colwell) that covered topics from the Solar System to Galaxies and everything in between. Following the presentation, everyone was treated to multiple views through the 16” telescope, of Jupiter (with the 4 Galilean moons), the Great Nebula in Orion (M42) and the red giant, Betelgeuse. Gary described the evening perfectly when he commented that it was the first time he remembered seeing the parking lot clogged with vehicles!

Ed Mizzi







- Hamilton Observing Sites**  
 Observing site in Hamilton and area.  
 2 views - Public  
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 By pbrandon  
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530 Dundas St E Waterdown, ON L0R, Ca
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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 1G8**

## Calendar for April, 2012

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>Week 14</b>	1 [Add]	2 [Add]	3 [Add]	4 [Add]	5 [Add] 7:30p Monthly Meeting - Wayne Parker - Inventor of the SkyShed POD (and rock star!)	6 [Add]	7 [Add]
<b>Week 15</b>	8 [Add]	9 [Add]	10 [Add] 7:30p Armchair Astronomy	11 [Add]	12 [Add] 7:30p Board of Directors Meeting	13 [Add]	14 [Add]
<b>Week 16</b>	15 [Add]	16 [Add]	17 [Add]	18 [Add] 7:30p Public Night	19 [Add]	20 [Add]	21 [Add]
<b>Week 17</b>	22 [Add]	23 [Add]	24 [Add]	25 [Add]	26 [Add]	27 [Add]	28 [Add]
<b>Week 18</b>	29 [Add] 6p Orbit Deadline	30 [Add]	1 [Add]	2 [Add]	3 [Add] 7:30p Monthly Meeting - Dale Armstrong - Weapons In Space!	4 [Add]	5 [Add]