



Orbit

A photograph showing several construction workers on a dark wooden roof. One worker in a blue jacket and cap is in the center, another in a black jacket and blue jeans is to the right, and a third in a green shirt is in the foreground. The background shows trees and a clear blue sky.

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A photograph of a building with a corrugated metal roof. The roof is light-colored and has a scalloped edge. The building's walls are made of vertical corrugated metal. The background shows trees and a clear blue sky.

Issue Number 1, November, 2015

Roger Hill, Editor

Our first Board meeting of the membership year on October 8th was very productive. It's important to start off the year with the right tone, as it generally sets up what the rest of the year will be like. And make no mistake...our new President, Gary Bennett, has started off on the right foot.

It started with the agenda, where we were asked to bring our suggestions for top priorities broken down to what can reasonably be expected to accomplish in the next 30 days, 3 months and 12 months. Gary also wanted discussion on capital expenditures and possible changes to the general meeting format.

There were discussions around increasing the communication with the membership, and this brings on my main topic for this month: Forums!

Several times in the past few years the Hamilton Centre has bandied about the idea of moving from email lists to forums. In fact, it has been tried twice before, first by Les Nagy and then by Gary Bennett. Unfortunately, neither attempt was embraced by the membership. I'm convinced that this type of communication between members is the way forward. So...what is a forum? WiseGEEK says that an Internet forum is a discussion area on a website. Website members can post discussions and read and respond to posts by other forum members. A forum can be focused on nearly any subject and a sense of an online community, or virtual community, tends to develop among forum members. This type of forum may also be called a message board, discussion group, bulletin board, or web forum, but it differs from a blog, the name for a web log, as a blog is usually written by one user and usually only allows for the responses of others to the blog material. A forum usually allows all members to make posts and start new topics. An Internet forum is also different from a chat room. Members in a chat room usually all chat or communicate at the same time, while members in a discussion group post messages to be read by others whenever they happen to log on. Forums also tend to be more topic-focused than chat rooms.

WiseGEEK goes on to say: Before a prospective member joins a group and makes posts to others, he or she is usually required to register. The prospective member must usually agree to follow certain online rules, sometimes called *netiquette*, such as to respect other members and refrain from using profanity. When a member is approved by the administrator or moderator, the member usually chooses his or her own user name and password, although sometimes, a password is supplied. An avatar, or photograph or picture, supplied by the member might appear under the member's user name in each post. The separate conversations in a forum are called threads, and they are made up of member-written posts. Members can usually edit their own posts, start new topics, post in their choice of threads, and edit their profile. A profile usually lists optional information about each forum member, such as the city they are located in and their interests. An Internet forum administrator or monitor may also participate in the forum. An administrator can usually modify threads as well as move or delete threads if necessary. He or she can also usually change software items in the forum. Moderators often help the administrator and monitor and guide the discussion to make sure the forum rules are being followed.

Why would we want to do this? Several times in the past a topic has come up on the email list that has resulted in several emails being issued in just a few hours. There were requests after this from people who wished to be removed from the email list completely, as it was clogging up their inbox, was not interesting, or...well you get the idea. This had the effect that communication immediately shut down, as no-one really wanted to be the cause of more people leaving. A forum gets around this by allowing members to choose how they want to be notified (if at all) of forum activity.

Another advantage is that there can be several levels of activity allowed. For instance, anonymous users (guests) may only be allowed to visit certain sections with read-only access until they Register. Registered users are allowed further privileges, such as most to post text (but not necessarily pictures or links). Members of the Centre get the ability to access other areas (Orbit, perhaps, along with discussions on Centre and National RASC business) and the ability to post images and other material.

There are other facilities that are most useful as well. One of the most important is that all the old posts are visible. Users get access to what has gone on before. This makes it far easier to find out what happened in years past, or means that someone only has to post something once, and newer members only have to be referred to the previous post. Gary Colwell, for instance, used to be very proud of his first forays into astrophotography, but as he will freely admit, they were not the best things he has ever done. I, for instance, have watched Gary's skill increase hugely over the years. A forum allows newcomers to see how he managed to overcome the obstacles and blind alleys he went down to achieve the high quality of images he now routinely produces.

So, given that the Hamilton Centre wants to increase the sense of being a community and that this tends to develop among forum members, then this seems like something that we need to do.

Particularly so when I see what other astronomy and non-astronomy groups are because of their use.

So...what do I envision for the Hamilton Centre forum? I'm hoping to make it look like the one run by the Orpington Astronomical Society, where I'm known as Canadian Roger. Here's what it looks like to registered users:

Orpington Astronomical Society		
Society		Unread Posts
	Announcements Here be announcements and alerts about Society Events. Important they are! Read them you will!	815 Posts 180 Topics Last post by Fay in Re: Moving the websites ... on 2015-05-04, 22:17:41
	Meetings and Events A public place to discuss, plan, and report on the Society's meetings, observing and imaging sessions, Deep Sky Camps, and other events. Moderators: Sue , Mike , Jim , Carole , Ivor	8340 Posts 445 Topics Last post by Roy in Re: Caravans for DSC on 2015-10-24, 22:28:24
	Introductions New users, please introduce yourselves by posting a brief message here. (New users who don't introduce themselves will be deleted.) Moderators: Ian , Sue , Rick , Delphine , Mike , Jim , Carole	1102 Posts 298 Topics Last post by Kenny in Re: Hi from Coney Hall V... on 2015-10-11, 16:14:47
Astronomy		Unread Posts
	Alerts! Questions? Discussions... Astronomical alerts! Did you see that fireball? Where's that comet? Have you seen this asteroid? When is the next eclipse? What was that light in the sky? You get the idea.	2461 Posts 611 Topics Last post by Carole in Re: Baader Filter Produc... on 2015-10-29, 13:28:17
	Telescopes Etcetera.... Seen a shiney telescope on eBay? A new scope you want to show off? An equatorial? A dome? A camera? Want to know how to put it all together? Ask here...	1733 Posts 196 Topics Last post by Apophis in Re: Image Stabilised Bino... on 2015-10-22, 09:11:26
	Astrophotography A place to show off your astro-photographs, and tell folks how you took them...	22076 Posts 2438 Topics Last post by Mac in Re: Three Degrees. on 2015-10-22, 17:27:29
	Technical Got a neat way to set that 'scope just so? A twiddly camera modification? A fancy image-processing trick? Discuss here...	7489 Posts 699 Topics Last post by MarkS in Re: Peltier Cooled Sony ... on 2015-10-27, 19:01:59
	In the Media... Media reports from around the world. This is the place to post links to those astronomy-related stories that have hit the TV and papers...	4374 Posts 1237 Topics Last post by Rick in Saturn's Geyser Moon Shi... on Today at 09:56:14
Random Rambling Ruminations		Unread Posts
	Chat General discussions on random (not particularly astronomical) matters of interest.	18782 Posts 2568 Topics Last post by RobertM in Calendar left behind at ... on 2015-10-31, 16:04:51
	PC Helpline Need help with an application or OS that is not directly related to astronomy, ask here. Mac owners need not apply... Moderators: Mike , Mac	1948 Posts 167 Topics Last post by Carole in Re: Downloading and open... on 2015-09-19, 19:41:50
	SkunkWorks@OAS A place for discussing any weird and wonderful technical projects which aren't exactly astronomical in nature... Moderator: Mike	569 Posts 44 Topics Last post by Rick in High-altitude balloons, ... on 2015-06-10, 09:03:22

There will be other areas for Members only, which will allow discussion of Centre and Society business, perhaps contain Orbit, requests for use of a Loaner telescope, telescope time, the combination for the lock on the gate, and the like. There'd be another area for the Board that could contain Agendae, minutes, discussions, committee reports, By-Laws, scans of important documents (receipts, purchase orders, etc.).

The single biggest issue with Forums is that it takes a certain critical mass to get them going, which was the downfall on the previous attempts.

I'm hoping that the issue was that registering with the forum was voluntary. How I'm thinking of doing it (and I'm hoping to solicit help, here) will be to email each paid up member (as of December 1st) with a username and password that you'll use to log in for the first time. After that, you can (or must) change the password. I'm hoping to get this done for January 1st, although it may become active prior to that.

All this assumes that the Board approves. The presentation of the plan and it's approval (hopefully) should occur at the November Board meeting on Thursday, November 12, 2015 at the Observatory.

Finally, on this subject at least, we've been exhorted by Gary B that we need to have more FUN. So, how about this: Lets have some competitions. Things like Best solar system image taken with a phone. Best piggyback shot (DSLR, kit lens, driven). Best tripod shot (DSLR, kit lens, undriven). Best picture taken using one of the Loaner scopes, best picture taken using one of the observatory telescopes. That sort of thing. It doesn't have to be astrophotography, either...how about most observations made from the list in the Explore The Universe certificate, or best article submitted to Orbit? The competitions would be held every season. For instance, the Fall entries are to be taken between the Autumnal Equinox and the Winter Solstice. Entries would be placed on the forum and voting would take place for one week after the Solstice with prizes awarded at the January meeting. Keep the winners secret until the meeting. Put the winning entries on the web site, but use the forums to poll. Yearly prizes to be handed out at the October meeting. Prizes could range from Calendars, a two day pass to AstroCATS, a preferred spot in the parking lot at the Observatory, an observatory key for a year, that sort of thing.

So what else came out of that Board meeting in October? Chris Talpas produced an amazing PowerPoint deck outlining his thoughts on the future of the Hamilton Centre. Chris wanted to increase the use of the observatory by having at least one, preferably two monthly organized events. These would include things like star gazing for all experience levels, Activities for beginners, including, but not limited to: How to: set up a telescope/ collimate/ clean your optics/ use GOTO; Event Themes: Galaxy night/ Nebulae night/ Double stars etc; Include training on the use of observatory equipment. He also suggested some improvements to the observatory site, since better physical upkeep will improve attractiveness. For instance, some brush clearing has already been done, the roof on the Chilton Building has been replaced (see pictures later in Orbit), and some new book/storage shelves are being built.

Chris further went on to say that there should be special interest groups that meet regularly for things like Astrophotography, Solar Observing, Lunar and Planetary observation, radio astronomy and possibly a Remote imaging project using the Burke-Gaffney observatory. He also suggested that there should be extra meetings or more meeting time devoted to Q&A to leverage the collective knowledge of the group.

Chris had some longer term ideas, too, that could include things like the ability to use the site remotely for spectroscopy, exo-planet detection and supernova patrols..

So did all of this thought and energy result in anything? Well...by the time you read this, there will have been a BBQ and brush clearing; a roof replacement; a new pier for the C14 and an Armchair Astronomy meeting. Not bad for the first month, eh?

Anyway...three pages is quite sufficient for this month! Clear skies to one and all. Until next month...

Roger Hill

Presidents Message—Gary Bennett

I am honoured to greet you as your new President for 2015/16.

On Oct. 8 I chaired my 1st Board of Directors meeting and I am happy to report that we have a new set of wheels that are already speeding down the track! Some of you have seen first-hand evidence of the keen and hardworking spirit of the new board. Even better, many of our members have stepped-up and donated their hard labour to give our observatory a facelift. Thank you!

We have lots of good news to share, but I will let each of our committee chairs share the results of their hard work and I hope each of you will be attending our next monthly meeting to hear the news.

Our new board is committed to “walking the walk” and I know that you will be pleased with results. We promise to deliver the programs and events that you expected from being a member of an astronomy club. The theme? Let’s have some fun and do some stargazing!

We are also committed to sharing the wonders of the universe with the general public, scouting groups, and schools. In the coming months you will be hearing about some new and innovative outreach programs. Some are short-term, while others are a few years away, but we know that you will want to be part of that success story. We promise that your participation will be rewarding. In a word, it’s going to be... fun!

We will also be announcing plans to add to/improve our observatory and portable (outreach) equipment and facilities. When the time comes, we will be extending an invitation for you to help complete our “wish list”.

Observatory Keys: Our observatory is lonely! We are one of the few amateur astronomy clubs that has a proper observatory and 2 premium “observatory class” telescopes. All members are welcome to use the observatory grounds, but you can use the equipment too! All you need is a key and we would like to see each of our members have a key and invite their friends and neighbors to join you. Even better, tell your fellow members that you are heading out and invite them to join you! How do you get a key? Join us at our next meeting and we’ll fill you in.

A special thank you to all those who pitched in over the past 2 weeks. The turn-out was impressive and we are happy to report that the hard work is finished for now. Let’s get out there and enjoy the night sky!

Gary Bennett

President, RASC Hamilton Centre

Positions vacant!

The Board is looking to fill a few vacancies. Some of these don’t have to be Board positions, nor do they necessarily require an obsession with astronomy. In a few weeks the Board will be meeting to set-out short/mid/long term goals for our outreach program. The division of labour is always a stumbling block, partially because it is assumed that each Board member will need to take on more work than they figured on. The solution to this dilemma is to increase our talent pool.

Our immediate needs are for:

Webmaster: Our current webmaster has been doing this for the past year or so and has asked that we begin the search for her replacement. The candidate does not need to sit on our board and does not need to be an amateur astronomer.

Finance Director: Our current treasurer would like to focus his attention on other activities within the club. Treasurer is an executive position and is required to be a Board Member (and by definition, a Club Member).

We would like to get a lot more serious with public outreach & education, and we could use some expertise in: *Public/Media/Corporate Relations, Legal Council* (Some possible activities may require things like waivers, permission forms, etc), *Graphic Design*, (possible branding exercise around some long-term objectives), and a *Public Education Advisor*.

Please contact Gary Bennett via email, or see him at a meeting: president@hamiltonrasc.ca

THE HALLOWE'EN STAR by Eric Golding

At Westfield Heritage Village on Friday and Saturday October 30 and 31st - a monstrous Halloween party was held for the general public. This event was well advertised and the turnout was nothing less than amazing. Hundreds and hundreds of children and their parents, teens and adults - paid their admission and roamed through the village in their Halloween costumes - going from building to building seeking the surprises that awaited them. And there were many thrills and much excitement to be had for the kids - as the staff had created a great Halloween wonderland throughout this nineteenth century village.

On the Friday evening, I teamed up with Bill Leggitt as assistants to Mark Pickett - to help adjust the telescope when needed and to direct the crowds once they gathered. As usual, Mark in full nineteenth century costume, was ready at the helm of the Bell Telescope - carefully guiding a great many new eyes to the eyepiece of this fine old antique telescope. While we were waiting for the skies to darken sufficiently and the Summer Triangle to make its appearance, I overheard Bill speaking to a few of the visitors as he suggested that we might be looking for the Halloween Star - said mostly in jest I think. And how their interest was tweaked - and how my ears perked up! What a great idea Bill - The Halloween Star - something for kids to relate to, and be interested in actually seeing up close - and seeing through a real antique telescope! Now, I've been in amateur astronomy for over 35 years but do not remember ever hearing of the Halloween Star - and what's more do not believe one even actually existed. So, on the drive home, I'm thinking, even if it's really only one, single, star - it would be a star for all time for those kids to remember! For ALL kids to remember!!! But 'which star?' I wondered...

Once home, it didn't take too long for the answer to emerge. What about Algol! (β Per). The perfect Halloween Star! Steeped in legend and myth, Algol is the paragon of mysterious stars. And Algol could be the perfect star to create a lasting memory for any young person for their first experience at looking through a real telescope, at a real star!

Of course, while at the telescope, some facts could be mentioned about this Halloween Star - just to help make it more special and memorable for the kids. But if it's to be remembered, keeping those facts simple is essential. No need for confusing volumes of scientific details that might be intriguing to you and me as amateur astronomers, such as those found in Burnham's Celestial Handbook, Vol.3. There would be no need to make mention of the spectroscopic analysis, relative luminosities, slight secondary dimming mid-eclipse, or even the fact that there are possibly two additional stars in this curious system. No, the rule of kiss will be essential when dealing with kids. (Keep It Simply Stated).

And simply stated - Algol is an eclipsing binary star - two stars revolving around each other - perhaps like two wrestlers challenging each other. One being a bit brighter than the other - causing the starlight to change regularly from bright to dim. Any one, two or perhaps three of the following easy-to-know facts about the Halloween Star would be enough for a youngster to remember:

- The Halloween Star, Algol is 100 L.Y. distant.
- It's 100 times brighter than the sun.
- It's also named the 'Demon Star' in ancient mythology.
- It dims every 3 days, and that lasts for about 10 hours.
- It varies in brightness from 2.1 to 3.4 magnitude.

Algol is well-positioned on Halloween evening, rising to about 20° altitude by 7:30 pm and an altitude of nearly 40° by 9 pm. All that is needed to view it is a clear Eastern horizon on October 31st. So for me, it's a done deal - Algol should be the Halloween Star! (see finder chart for Algol on Page 12—Roger)

My two other possible candidates for the 'Halloween Star' designation were Betelgeuse and Antares - both for their appropriate colour. But with both of these alternatives there was a problem: Betelgeuse rises much later in the evening - at about 11 p.m. on Halloween - and Antares is simply not visible in the right season. So, Algol it is!

Seeing kids faces and their parents' expressions at a moment of discovery while at the eyepiece is well worth the time and effort it takes to volunteer at these public star-parties. Westfield Heritage Village was a great place for this as it was well-advertised and well-attended by the public. Plus, on a good night, there are fairly dark skies for us to enjoy too. So, with thanks to Bill Leggitt for the initial idea, I'm hoping that Algol, the 'Halloween Star' can be the thing to be remembered when shown at future star parties at this time of year.

From the Observatory Director by Gary Colwell

COME SEE WHAT WE HAVE DONE!!!

Hello all!

I just can't stop saying THANKYOU to everyone who has helped out over the last 2 weekends at the Observatory...If you haven't been there recently...here is what we've got done so far....

Weekend of October 24, 25

- Grass cut throughout site – shrubs pruned
- Trees pruned and some removed that were overhanging the driveway
- Clean out of the upper floor and staircase in the Main building
- Total revamping of the inside of the Chilton Building including installation of 14” on new pier
- Clean out of the Butler building
- Clean interior of Main building including fluorescent fixtures.
- Relocation of heater on side wall to accommodate new book shelves
- Begin construction of new book shelves.
- Relocated telescopes from Chilton building to main building upper floor

Weekend of October 31

- Removed old shingles on Chilton
- Install new vapour barrier on the roof
- Install strapping and new white steel roof on building

To say the least the place is looking AWESOME!!! I wish I could remember the names of everyone who helped out the past two weekends, but it was REAL encouraging to see so many New Members come out and help out!

Plans are also in the works for providing a 15'x20' concrete observing pad complete with power posts to be installed in the spring.

Once again, THANKYOU to all who helped out the past two weekends...we could not have done it without you

Dave Surette had this to say:

What a difference a day makes...

I spent the day up at the observatory today and was amazed at the work that was done on the 24th The road into the property has been cleaned of brush and stuff and the entire lawn is now cut, even the hay that use to be in back of the roll-off is gone. The roll-off itself is now clean and uncluttered. I saw Gary B's handiwork in setting up the new scope, looks real good! The observatory meeting room got a makeover too and the results are stunning! Even the upstairs are now usable and the loaner scopes are all neatly stored.

The entire site looks great, WELL DONE!

I noticed that the dead and arching trees were removed too. WOW!

I would like to give a great big hand of applause to the entire group that worked so hard to restore the site back to something we can all be proud to show off to anyone!!!

On the following two pages, you'll see some pictures from the clean-up and BBQ as well as the roof replacement. Thanks to Gary Colwell and Ian O'Neill for the pictures.

October 24 BBQ and Cleanup
Photo's from Ian O'Neill



On November 1st, the roof was replaced on the Chilton Building.



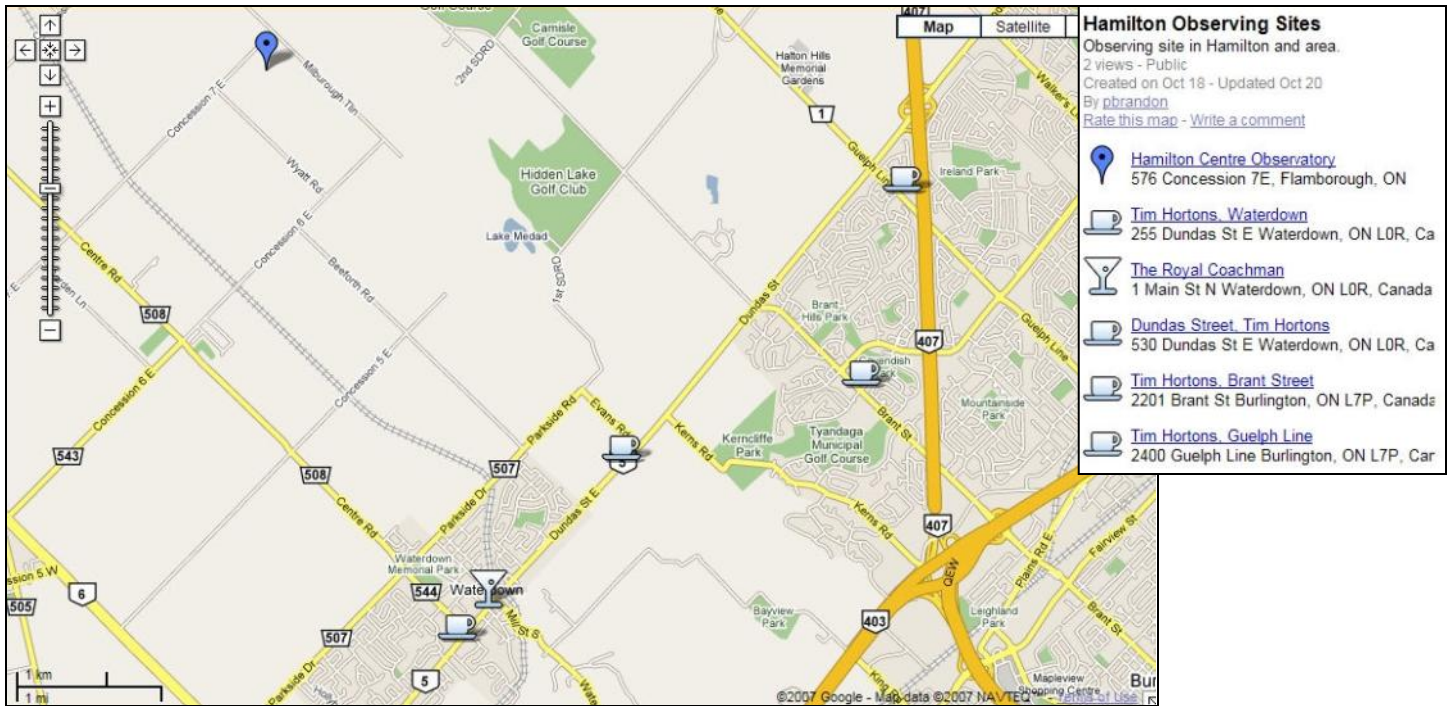
Pictures of the Chilton Building Roof Replacement Project taken by David Surette.



Calendar of Events

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
November 1	November 2	November 3 Last Quarter	November 4	November 5 General Meeting in Waterdown: Taurids Meteor Shower	November 6 Conjunction between Moon and Jupiter	November 7 Conjunction between Moon and Mars Conjunction between Moon and Venus
November 8	November 9	November 10	November 11 New Moon	November 12 Board Meeting. Contact Gary Bennett for loca- tion.	November 13	November 14
November 15	November 16	November 17 Leonids Meteor Shower	November 18 Leonids Meteor Shower	November 19 First Quarter	November 20	November 21
November 22	November 23	November 24	November 25 Full Moon	November 26	November 27	November 28
November 29	November 30	December 1	December 2	December 3 General Meeting in Waterdown:	December 4	December 5

Mercury is too close to the Sun to be observed all month. **Venus** continues to shine brightly at dawn all month. **Mars**, in the morning sky, starts the month close to **Jupiter**, and ends it halfway between **Jupiter** and **Venus**. **Jupiter** shines brightly in Leo in the eastern pre-dawn sky all month. **Saturn** is too close to the Sun to be observed all month.



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Finder chart for
 Algol...the Hal-
 lowe'en star! See
 Eric Golding's arti-
 cle about Algol
 inside.

