

Issue 1303

Air-Stream SLS Lonsdale

Continuing our partnership with Surf Life Saving Air-Stream has brought the second of three initial sites online, the first being Cement Hill.

Starting at 8:30am, Paul (Pazza), Matthew (Machspeer), Sam (Tanuki), Shawn (DJ_HiP) and Tony (Tomeyer) met David (Wimp) on site at Lonsdale to begin the days work. With the site already having a confirmed signal from Cement Hill thanks to the stumble two weeks ago the build got started.

With everything arriving prefabricated for the days work, all that was required was the assembly of parts and running of cables.. sounds easy!

The day started with unpacking everything, masting, mounts, wires, thimbles, wire rope grips, turn buckles, d shackles and tools!

Once a count had been achieved and the number of items was confirmed a rope was thrown over the edge of the building and everything was hoisted up.

This was Tony's first Air-Stream build, so he was very excited to get involved and to see how it all goes together. Between Shawn, Sam and Matthew we were able to teach him about attaching guy wires, handling wire rope grips and what to look out for in the builds. (Cont.)

this issue

Air-Stream SLS Lonsdale P.1
Cont. P.2
Network Updates P.3
Member Services P.4

Upcoming Events

Mar 27—Members Meeting (Parkside)
Apr 06 —Adelaide Mini Maker Faire
Apr 10 —Committee Meeting
Apr 16—Network Team Meeting
Apr 24—Members Meeting (Para Hills)
Apr 27—ASLAN #28

Did You Know?

Your Air-Stream membership gets you much more than just a membership to the Air-Stream community, it also gives you discount at many of our sponsors and connected companies!

Just visit <http://www.air-stream.org/membership/member-discounts> for more information!





Air-Stream

Photos

Air-Stream SLS Lonsdale (Cont.)

The weather outlook for Saturday was not faring well, with a forecasted 37°C the hope was to complete everything during the morning to ensure the heat was missed.

Thanks to Nathan for predrilling the Guy Wire Mounts, these were then secured to the C channel to ensure maximum strength.

The mast then went up, with the base plate and first set of guy wires being secured, this ensured the mast could be used as stabilization against the ladder for further works.

Using a spirit level and 4 people, we were able to get the mast exactly level with all three guy wires having excellent tension. With this in place the next set of guy wires were attached and the mast raised to the 6 metre mark for measuring and cutting the second set of wires.

Once the second set was in place the same was done for the last set and the mast was raised, tightened and ready for equipment to be mounted.

The equipment installed at Lonsdale is the following:

- Superpass 8dBi Omni with a Ubiquiti BulletM2 Radio
- Ubiquiti NanobridgeM5-25
- RF Elements 120degree 5GHz Sector with Ubiquiti RocketM5 Radio
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All equipment was connected using Ubiquiti ToughCable with Shielded Connectors to ensure the ethernet runs are as safe as possible.

Once everything was attached to the mast, the mast was then raised and the ToughCable cable tied to the mast to ensure a clean, safe and good looking install. All Guy wires were then given their final tightening to get the mast vertical and sturdy.

Cabling was done under the ridge cap, as to not create any further penetrations in the roof, it was then run internally, cable tied to the steel, to a server box on the wall. Inside the server box is a MikroTik RB750UP, handling all the core Routing and PoE.

Unlike normal installations, Lonsdale also has a complete x86 Ubuntu server, due to the fact Lonsdale is so far (network wise) from its nearest network services box we have decided to run a server primarily for the southern part of the network (DNS, File Mirroring and other services) to ensure if any links between Lonsdale and the northern part of the networks go down, members will still have services intact.

An RJ45 Socket was installed on the wall in the shed to give Surf Life Saving an easy point to connect into the Air-Stream network. Once West Beach is online SLS will be able to have network connectivity from West Beach through to Lonsdale with the click of a network cable!

As this also, in a sense, completes our 'Go South!' goal of 2012!

Thanks again to everybody that helped and to SLS for providing such a great site.





Network Updates

Amateur Radio Foundation Licence Course

On the weekend of the 23rd and 24th of March 11 people (7 Air-Stream members) attended the Amateur Radio Foundation Licence Course run by Paul Hoffman (VK5PH).

Over the two day course topics like Basic Physics and Science, how radio waves propagate, how amateur radio operators talk to each other and how to control and handle certain types of radios were covered. All who attended passed their exams both written and practical and all have obtained their amateur radio licence!

Thanks to Paul again for running the course and we look forward to interacting with fellow VK's over the air soon!

Brompton

Brompton was connected to Ferrydenpark recently with a 26db hills grid pointed at Ferrydenpark while also adding an 8dB Superpass omni with Bullet M2 for clients to connect to.

Para Hills 5

On Saturday 16th March, Para Hills 5 was upgraded. The backbone to UniSA was upgraded to a Ubiquiti Nanobridge M5-25 connected to the sector at UniSA. In addition a 120degree 5GHz sector was installed covering some of the Para Hills area and the Parafield Gardens area.

After the installation of the Nanobridge on the backbone we have seen a significant increase in performance. This is due to moving to Dual Polarity.

The sector is an RF Elements SECM5120 sold by Duxtel. These allow members to connect at much greater speeds than previously available when using single polarity connections and omnis.

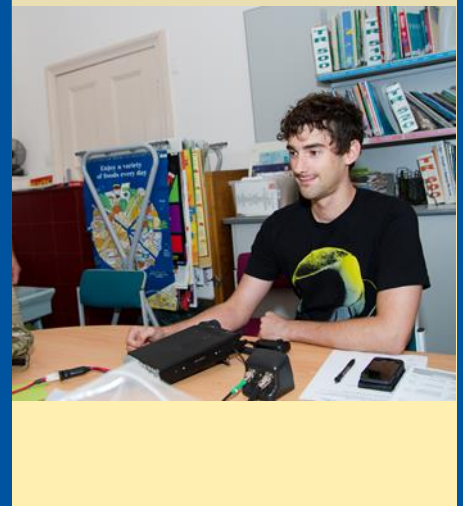
Big thanks to the guys that came out and did this upgrade, Archangel, Blue18, Biggy and Pazza. Especially like to thank Archangel for donating the equipment to Air-Stream that made this upgrade possible. Donations like this are what keep the Air-Stream Network growing and make our Network the strongest Community Wireless Network in Australia.

Upcoming Projects

Suntrix-Hermitage is a new build in Lower Hermitage, this will provide amazing connectivity between EARC and Modbury North.

EARC has now been passed on to the council and we are awaiting the response.

Carrick Hill has had a 5ghz Nanostation installed to aid the relocation of its backbone into the network. It is likely it will connect to the new SLS West Beach Site.



Q: What is 'Air-Stream'?

Air-Stream Wireless was established by a handful of dedicated wireless enthusiasts in 2001 and became an Incorporated Association in September 2002. It is the first and largest Community Wireless Network (CWN) in South Australia to successfully build a Wide Area Network (WAN) using wireless technologies.

With hundreds of active members the network now forms part of the largest community wireless network in Australia and is continuing to grow with the help of wireless enthusiasts and radio amateurs across Adelaide and Australia.

Q: Want to know more?

If you want to know more about anything Air-Stream you can always email us! **committee @ air-stream.org**

Q: Got something to sell?

Our monthly members meetings draw a crowd of likeminded people, if you have surplus equipment to sell bring it along. Check out the Air-Stream website for upcoming meeting dates and locations.



Member Services

Update your information and Node DB

<https://members.air-stream.org>

Webmail

<https://mail.air-stream.org>

Wiki

<https://wiki.air-stream.org>

Issue Tracker

<https://tracker.air-stream.org>

Want your article here?

We are always looking for more information to hand out to our members. If you have some news on Network Events, New Builds, Upgrades, Amazing deals or just want to ask a question feel free to send your ideas, stories and questions to **committee @ air-stream.org** and we will get back to you as soon as we can to ensure we can include the content in our newsletter.

Are we missing something?

Is there a service that you would like to see on the network? As a member you are more than welcome to run services on the network.

If you have an idea for a service and don't have the knowledge or time to set something up.

Email **committee @ air-stream.org** or check out the suggestions section at **wiki.air-stream.org**

Air-Zine

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