

VK2 Notes November 2009

Tim Mills VK2ZTM

c/- arnews@tpg.com.au

Mention was made last month that operation was planned from **Mt. Kosciusko** for the **Summer VHF – UHF Field Day** in mid January. Dave VK2JDH has sent in details of the planned operation.

“As part of the 100 year anniversary of the WIA in 2010, ARNSW is supporting a number of ham radio events during the year. For this particular event ARNSW is sponsoring the operation and signing the National Parks consent documents and providing a copy of their Public Liability policy.

Dave VK2JDD, Col VK2KCM and Dave VK2JDH are currently in the process planning to operate from the summit of Mount Kosciusko in the 2010 Summer VHF / UHF field day. National Parks are also assisting by providing fee free consent and logistical support for the operation.

As it is a National Park and in the Alpine Region there are several restrictions on what we can do. Such as no generators, camping locations and transport to the site. The weather during this time of year is still highly variable and can range from mid to high 20 degrees to very windy and below 0.

Power to run the radios at high power is one of the biggest issues. We are currently doing a power budget says Dave VK2JDH and it looks like we will have to supplement the batteries with solar panels to be on air for 18 hours.

They will be operating on 6m, 2m, 70cm and 23 cm. They are hoping to have 10 GHz if they can borrow a station.

Over the weekend NP expects that there will be several hundred people who will make the walk from Charlottes Pass and Thredbo so we have to ensure that we do not impede access to the summit or spoil others visitors enjoyment”. [Mark you calendar 16 / 17 Jan 2010 to work the team.]

Also mentioned last month was that the **Radio Expo** will be on in January and I got the date wrong. It should have read Sunday the 24 th, not the 17 th. Still, a week in Coffs Harbour at that time of year for those who like the holiday format would be most enjoyable. Again mark your calendar to attend the first VK2 field day for the year. Co-ordinator Gary VK2ZKT advises it will be bigger and better at the same location as in previous years. It is sponsored by the **Mid North Coast Amateur Radio Group**.

While in the summer mood **VK2WI News** will observe the usual break with only a morning transmission on December the 27 th and January 3 rd and 10 th. The first Trash & Treasure at Dural for 2010 is likely to be on Sunday the 31 st. January will be a busy month in VK2.

The final scheduled T&T for the year at VK2WI will be at the end of this month, Sunday the 29 th November. Perhaps by then there may be access to the 'shed' . During September and into last month the internal fitout was undertaken.

Mentioned in recent notes was that **Amateur Radio New South Wales** was checking over the register of members and contacting those who showed up as unfinancial. Membership Secretary 29 Norm VK2TOP has advised that there was confusion in the minds of some that ARNSW was not the [former] NSW Division. Some apparently thought that membership of either the National WIA or ARNSW [the NSW Division] provided membership of the other. When the WIA was reorganised, the NSW Division became ARNSW, a State wide club within VK2. Some of the confusion was that the name – NSW Division – was still being used at intervals. The ARNSW Council has determined to reduce possible confusion by referring to all activities, other than that required for official purposes, as Amateur Radio New South Wales. ARNSW would like Amateurs to be members of both bodies. It is particularly important that the National body [WIA] receives

the support of as many Amateurs as possible.

A big date in the early part of next year will be the **Central Coast Field Day** at Wyong on Sunday the 28 th February. On the preceeding Saturday evening there will be a dinner co-hosted by ARNSW. Another big date in VK2 will be the 11 th March, the centenary of that Sydney meeting which created the Wireless Institute.

Some anniversaries of a different kind. It is 40 years since an experimental broadcast was conducted through **VK2WI** at Dural [Sydney] when a live two way interview was conducted with a mobile station driving down Northbourne Ave. Canberra. It would be no trouble these days with modern technology at our finger tips but in 1969 it was a challenge. To achieve the operation field relay stations set up at Newnes Junction near Lithgow and on Mt. Ginini west of Canberra. Both then used 'Fred' the Orange repeater to complete the circuit. During the morning broadcast a two way contact was established with the mobile and several overs conducted. It worked well considering it was all manually switched along the path. It was tried again for the evening broadcast but Murphy took a hand to upset the show. This time it was a shorter path out to Forbes. Before the broadcast the team at Newnes Junction had been down to the remote transmitters to refuel the generators used for charging the batteries. It was still in the era of valve equipment. There had to be some separation between the transmitters and receivers - all of which were operating on 2 metres in a mixture of both the AM and FM modes. In the dark someone tripped over the changing cable to a battery and the point of failure was a few seconds into taking the remote signal. The signal just faded out in the VK2WI link receiver and the show was over. It was an interesting exercise.

Another anniversary is in January 2010 when it will be 40 years since the launch of **Australis – Oscar A** which became OSCAR 5 after launch. It was the first amateur radio satellite constructed in Australia by amateur radio members of Melbourne University. They had won the right to produce the satellite against the USA and Germany. It was launched in the USA via a piggy back operation. In Australia arrangements had been made to have telephone circuits to the launch control location and the proceedings were grafted into a broadcast which originated in Sydney. Channel 7 at Epping made a empty studio available to anchor the presentation which lasted 3 hours and was linked out to be transmitted on every available frequency by Sydney Amateurs. During quiet times at the launch site local interviews were conducted and provided program content until something came in from the States.

OSCAR-5 was launched on the 23 January 1970 and was a beacon only, battery powered system. It was a rectangler package 30 x 43 x 15 cm weighting about 18 kg. It achieved an almost circular orbit at about 1450 km. It had transmitters on 10 metres [29.450] with 250mW into a half wave dipole. On 2 metres [144.050] there was 50mW into a quarterwave rod. It also had a command receiver and rod antenna on 2 metres. It transmitted its H I identification every 52 seconds followed by 7 measurements in sequence, being the X, Y and Z axes of its position to the sun. Then battery current, voltage and temperature and finally the structure temperature. It was modulated by a tone centred on 1 kHz which varied +/- to indicate the value of the reading. Its two groups of batteries started at 20 volts and contributed 10 kg of the weight. Internal temperatures were higher than expected which shorten battery life due to increased current consumption. The 2 metre transmission lasted for about 23 days and 10 kept going for over 40 days. By years end over 200 reports had been received from nearly 30 countries.

OSCAR-1 was launched 12 th December 1961, OSCAR-2 on the 2 nd June 1962 and OSCAR-3 on the 9 March 1965. OSCAR-4 was on 21 December 1965 but the launch vehicle failed to reach orbit. A while back there was renewed Australian amateur interest in OSCAR's with the Blue Sat project but I have not seen any recent reports.