



Abstract:

Husband and wife team Joe VK3YSP and Julie VK3FOWL head off on another adventure to the Melbourne Museum for the International Museums Weekend (IMW). They learn a lot about planning and setting up for portable operations, including rigs antennas, power supply and safety. They explain the benefits of public Amateur Radio demonstrations and the history of the IMW. They have a historic QSO with the Mayor of Melville in WA and work many others eager to make contact with a museum station.

International Museums Weekend

Joe VK3YSP and Julie VK3FOWL



The International Museums Weekend (IMW) is an annual Amateur Radio event held over the third and fourth weekends in June. The purpose of the event is to promote the educational and cultural significance of museums in the community using Amateur Radio. Portable Amateur Radio stations are set up at the museums by local clubs, societies and individuals and operated over the weekend with the aim of contacting other interested stations. The public are free to observe and even participate in the operation by picking up the microphone and having an on-the-air conversation. The museum benefits from having a working exhibit promoting the museum itself.

The museum station, its antennas and equipment, including that unmistakable sound of short-wave radio, attracts a lot of attention. Many people are genuinely surprised that Amateur Radio is still so active given the plethora of broadband mobile and Internet communication options available today. They are astonished at seeing an "old-fashioned" telegraph key and hearing their name sent in Morse code. They are intrigued that Amateur shortwave communications is free and requires no fixed infrastructure. They are amazed that they can call into a net and be welcomed personally with intelligent conversation from friendly people they have never met before.

The museum venue attracts people with enquiring minds, and many stop at the museum station to ask questions. They ask about what Amateurs do, what equipment is needed, how much it costs, if a big antenna is required at home and how one might get involved. They are

pleasantly surprised that Amateur Radio has become a sport of sorts with many outdoor activities and contests. They can see pictures of clubs, meetings and events with Amateurs of all ages and gender participating. They can obtain brochures and contact details, venues and dates for the next foundation licence courses. They all seem to get the simple message that Amateur Radio is fun and easy to get involved in.

The IMW event itself came about through somewhat unlikely circumstances. It originated in the UK in 2002 when an outbreak of foot and mouth disease restricted public access to many rural areas causing the cancellation of the popular "Mills On The Air" weekend. The IMW was actually the brainchild of Harry, M1BYT. Museums taking part in the IMW have included ships, castles, air museums, Napoleonic forts, pumping stations, wireless museums, racing museums and many others. The event appears to have grown steadily, but this year's participation of over 100 museums surprised everyone by nearly doubling the turn out of recent years.

Also this year, in Australia, the IMW played host to a historic event at the Wireless Hill Telecommunications Museum near Perth. Cr Russell Aubrey, the Mayor of Melville was invited to officiate at the opening of the Western Australia VHF Group's premises at the museum. The signing of a five-year lease was the culmination of some 35 years of association by group members with the museum.

To commemorate the occasion, there was an on-air IMW contact between the Wireless Hill Museum station, VK6WH, operated by Bob VK6KW and Denis VK6FADF, and the Melbourne Museum station operated by Joe VK3YSP and Julie VK3FOWL. Speeches were exchanged with the Mayor, including call signs, signal strength reports, details of the equipment, locations and propagation conditions, the significance of the museum, the purpose of the IMW, thanks to all involved and gratitude to the traditional owners of the country.

The IMW is a great opportunity to really participate in Amateur Radio, not just as an individual, but as part of the community. Of course it requires some planning and preparation; more or less depending on the size of the museum.

In the case of the Melbourne Museum, which had not hosted this event before, planning started early in February. Initial contact was made with Museums Victoria Public Relations department. A plan introducing Amateur Radio and outlining the purpose, location, duration, format, benefits and history of the IMW event was positively received. This was followed up by answers to questions and more details showing an image of the station, superimposed on the front lawn of the museum.

The issue of public safety was of utmost importance to the museum and precautions would need to be in place to mitigate any potential hazards.

The association of the proposed museum station with the Wireless Institute of Australia was crucial here. Mal VK3FDSL from the WIA national office provided a letter of introduction for the two licenced operators. He also provided a complete PR pack including posters, magazines and brochures.

Finally, a letter of permission was drafted, sent to the museum and returned printed on the museum's letterhead. Only then was it possible to register for the event and to prepare the museum station.

Registration for the IMW was a simple matter of entering the museum and station details on the IMW web site. A web site had to be created and linked to provide further details of the museum station and its operations. Introductions were made via the IMW forum. Harry M1BYT responded and Dave M1TWO sent an IMW certificate.

Advertising the event locally was as simple as contacting Jim VK3PC, who included the event details in the WIA news broadcasts. As well, QSL cards had

to be designed and printed via an on-line service and then registered with the WIA QSL bureau.

Next was to prepare the museum station itself. The IMW is conducted over a 48 hour period each weekend of which 24 hours would be operational. There would be no accommodation, shelter, facilities, power or antenna support structures available on the museum lawn site. Everything would have to be transported in and out with maximum efficiency.

It was decided that the station would be based around a single 4WD vehicle with a side awning to provide shelter for two operators. Tables would be set up for the radio equipment and Amateur Radio displays. There would be WIA and Melbourne Museum brochures, copies of "Amateur Radio" magazine, the "Your Introduction to Amateur Radio" book, a World Call Sign Map and a Morse practice key and code chart. An A-Frame sign bearing the famous WIA "Calling CQ" poster and "Amateur Radio Frequently Asked Questions" would be placed beside the station on the lawn.

To be heard both locally and all around the world would be tricky for a portable station setup during the winter months in Melbourne. The trade-off between sufficient power and battery life; and between portable antennas and efficient antennas would be really challenging. But the IMW is not a contest and the museum promotion is not just DX. The trick would be to find the right balance.

It was decided that the station would be designed for simultaneous operations on the 80, 40, 20, 2m and 70cm bands. The radio equipment would include a Barrett 2050, Icom IC7200, Elecraft KX3, Yaesu FT7900 and two FT60R handhelds.



The HF antenna would be a tri-band, half-wave, fan dipole, suspended 8.5m above the ground between two guyed, telescopic, aluminium masts. The antenna would be fed through an HF triplexer connected to the three HF rigs. The VHF/UHF whip would be mounted on the vehicle. An automatic CQer and a laptop computer would be available. The latter being for digital modes BPSK31 and JT65. logging would be via a HamLog app on a smart phone. Electrical power for the equipment would be provided by a roof rack mounted 12V, 200W solar panel into a 240Ah battery.

For safety, caution tape would be placed around the guy-points with a "No Entry" sign at base of the antenna masts. A copper ground stake, lightning arrestor and earth cables would be installed. The awning would be secured with sand-bags and all cables would be stowed well out of the way to avoid trip hazards.



The museum station would be operated on Saturday and Sunday from 9am to 9pm Melbourne time on both weekends. The overlap with any UK museums would be barely two hours each day. It would occur between 7pm and 9pm, which would be tricky on 20m.

When the time came, the museum station was setup and operational within an hour of arriving on site. The museum security guards were completely satisfied with the official letter and the safety precautions provided. Not surprisingly all the planning and preparation had paid off.

Operations commenced on 80 and 40m in the morning moving to 40 and 20m by mid afternoon and 80m at night. Sufficient solar power proved to be an issue due to the almost continuous overcast conditions in Melbourne. Accordingly the transmit power had to be wound back to 10 or 50 watts to permit operations over the 24 hour period. The digital modes worked all day and night and proved to be the best bet for DX contacts, albeit with a more substantial drain on the batteries. The 2m and 70cm repeaters and hand-helds were used very effectively for enticing members of the public on the air. The Sunday morning WIA broadcast and callback was regarded with surprising interest.

In all, there were 135 "relaxing" QSOs around Australia and overseas including HB0 Lichtenstein and CU3 Azores.

WIA Brochures and magazines were handed out to literally dozens of interested people with many staying at the station for over ten minutes to observe operations and ask questions. The contact with the VK6 Wireless Hill museum was definitely the highlight of the IMW. Disappointingly, however, no other museum stations were worked. In hindsight, the simple reason for this was a failure to pre-arrange QSO schedules via the IMW forum; a problem which can easily be corrected next year.