

GippsTech the 10th

Roger Harrison VK2ZRH

Australia's 'stand out' amateur radio event reached a significant milestone this year and deserves to set more in the future.

The GippsTech Conference is the 'premier' amateur radio technical event in Australia. Held annually each July at the Monash University campus in Churchill, located in the heart of Victoria's Gippsland region, the two-day event is organized by the Eastern Zone Amateur Radio Club. The 10th was held over the weekend of 7-8 July, attracting some 100 registrations to hear a dozen speakers deliver 15 presentations. Participants this year came from VK1, 2, 3, 4, 5 and 7.

Although I'd long heard about GippsTech and the wondrous things said and done over the years, even to the extent of my chasing up copies of presentations from past events, this was the first I had ventured to attend. I was encouraged to do so during a casual conversation I had with Conference Chair Peter Freeman VK3KAI at the Wyong Field day back in February. A persuasive fellow. He subsequently talked me into giving not one, but two, talks.

The event actually starts with an informal get-together and dinner on the Friday night. This year's was well attended by participants and partners. It was a convivial evening, with some long-past acquaintanceships renewed and new ones made. The electric anticipation of a stimulating two days of presentations, discussions, challenges, arguments and debates crackled in the bistro of the Morwell Hotel Motel. I was not disappointed.

This year's subject matter ranged across UHF and microwave hardware techniques, software tools and techniques both for equipment design and on-air operation, VHF-UHF propagation, portable power supplies, moonbounce and new challenges for VHF-UHF operators.

It was refreshing to see a younger generation deliver talks on practical topics and their own experiences, such as those by Richard Gipps VK3ZCL on bandpass filter design (with giveaway software), Andy Sayers VK2AES on a 23 cm cavity-backed dipole feed (with



Robbie VK3EK and Ruth Cook lead the participants of the Alternate activity (aka Partners' Tour) off to the coach. Photo by Chris Morley VK3CJK.

home-brewed example shown) and the exposition by Charlie Kahwagi VK3NX on microwave EME trials and successes. Home brew lives!

Two out-of-left-field talks sparked some lively interest: Bob Tait's (VK3XP) on auto alternators as portable field power supplies (with good industry 'insider' info) and David Smith's (VK3HZ) effort on Google Earth tools – giving user-customisable aerial views of the Earth with overlays providing locations of beacons, stations and field day locations (for example), with other overlays possible, showing aircraft positions, propagation paths, etc. Neat!

The parade of hardware presentations was truly inspirational, demonstrating what can be achieved with home workshop tools. Dale Hughes VK1DSH set the standard with a home brew network analyzer to 2.5 GHz, showing what is possible with bits from surprising sources. Peter Freeman VK3KAI bravely bared his soul on his prototype 2.3/2.4 GHz transverters – works in progress. Neil Sandford VK2EI gave three short

talks covering the practicalities of his simple microwave PLL (revisited from an earlier GippsTech), a 24 GHz waveguide power monitor, and waveguide quarterwave transformers, all produced with modest home workshop tools.

On the subject of propagation, Brian Tideman VK3BCZ followed up on talks he had given at previous GippsTech events with his intriguing observations and views on 144 MHz propagation, Es, Sun and Earth, in the true amateur tradition of technical investigation and self-training. Your scribe delivered a lecture on sporadic E (Es), how it happens, its vagaries and habits, and how we might beat the 'classical' MUF. I issued a challenge: who will make the first 432 MHz Es contact? Judging from a few crestfallen faces, I shattered some fondly held beliefs, and from the 'light bulb moments' that appeared on others, the pennies dropped on long-remembered puzzles about Es propagation.

With some late arm-twisting by Peter VK3KAI in the weeks leading up

to GippsTech, I gave another talk on the haunts and habits of transequatorial VHF-UHF propagation, posing the next challenges for VK offered by this exciting mode. The amateur radio community still has much to contribute to propagation observation and research.

Two out-of-right-field presentations provided some awe-inspiring highlights. Chris Skeer's (VK5MC) travelogue and report on the European EME 2006 Conference showcased some of the well-known European EME operators and their stations. Wow! Andy Sayers VK2AES treated us to a video of the microwave radar technologies his employer, CAE Systems, is manufacturing. Clever stuff is still produced by Australian industry.

Saturday's Open Forum saw WIA President, Michael Owen VK3KI, outline the Institute's recent achievements and the challenges it faces about its role and functions in the immediate and longer future. He stimulated some frank and fearless debate; a wide variety of views were aired and opinions exchanged. Valuable feedback for all.

The Sunday closing forum threw up the subject of beacons, their operations, locations, frequency allocations and role in today's VHF-UHF activities. A lively, animated debate led to a sort-of consensus that the 'beacon policy' prevailing for the past 30 years needs revisiting and revitalizing.



Alan Devlin VK3XP was kept busy with discussions and selling his useful items during every break in the main lecture program. Photo by Waldis Jirgens VK1WJ.



The audience listening intently during one of the presentations. Photo by Chris Morley VK3CJK.



Many gathered at the Morwell RSL for the Conference Dinner on Saturday evening. Photo by Chris Morley VK3CJK

From both a participant's and a presenter's viewpoint, the organization and conduct of the Conference gets a nine out of ten. The lecture theatre and its audiovisual facilities are first rate. The facilitation of eyeball QSOs and discussions during breaks is good – an important component of these events. Good support from equipment suppliers adds an extra fillip and was appropriately different from that seen at hamfests and field days. And the partners' program is popular! GippsTech the 11th? – train, plane or automobile – get there!

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