



## QUARTZ HILL ANNUAL REPORT - FEBRUARY 2007

Happy 10<sup>th</sup> Birthday to ZL6QH! It is now 10 years since we first started developing the amateur radio station at Quartz Hill 1n 1997. Over this time the station has built up a reputation as being one of the leading amateur radio facilities in the Southern Hemisphere. The project has been a source of challenge and enjoyment for everyone involved - whether it is an interest in contest operating, working DX, experimenting with antennas, building and maintaining the infrastructure, or just being out in the rugged coastal environment

It is likely that the current antenna infrastructure will have to be dismantled later this year to make way for the Meridian Energy wind farm. However we continue to be optimistic that it will be possible to build new infrastructure and continue operating the station after the wind farm is built. A critical issue is the impact of any radio noise that may be generated by the wind farm infrastructure. It will not be possible to reach a conclusion on this issue until we have more substantive information about the level of radio noise that is likely to be produced by the wind farm technology.

Meridian Energy is understanding of our situation and is supportive of the club being able to continue using the building and associated land to build a new station. The recent installation of new roof cladding on the building is an example of Meridian's Energy's interest in maintaining a longer term option for the club.

The number of financial supporters in 2006 was 33, slightly down from 36 in 2006 and 34 in 2005. We welcomed a number of new overseas supporters including Gary G4IFB (now ZL2IFB), Ralph K9ZO, Brian KA7KUZ and Phil VK2BAA.

We had a perfect day for the annual open day and BBQ on 4 February 2007, with 28 visitors coming out to enjoy the sunshine, views, food and good company. There were several technical displays inside the building (thanks to ZL2BSJ, ZL2TCU and ZL2AOH) and outside the more adventurous took the opportunity to try out ZL2ABC's 'Red Terror' racing kart.

Additional antennas have been added over the past year to substantially improve the performance of the station. The new antennas include a 20M 5-element yagi beam for North America, a 15M 5-element yagi beam for Europe, a 15M 5-element yagi beam for North America, and a 160M sloping dipole for North America and the long path to Europe. The current layout of the antenna farm is shown on the second page of this report.

The equipment inventory at Quartz Hill includes a Yaesu FT1000MP radio, a Drake L7 amplifier and matching MN2700 tuner, an Ameritron AL80A amplifier, and an Amp Supply LK500-ZB linear amplifier (currently undergoing repairs) along with various other tuners and accessories.

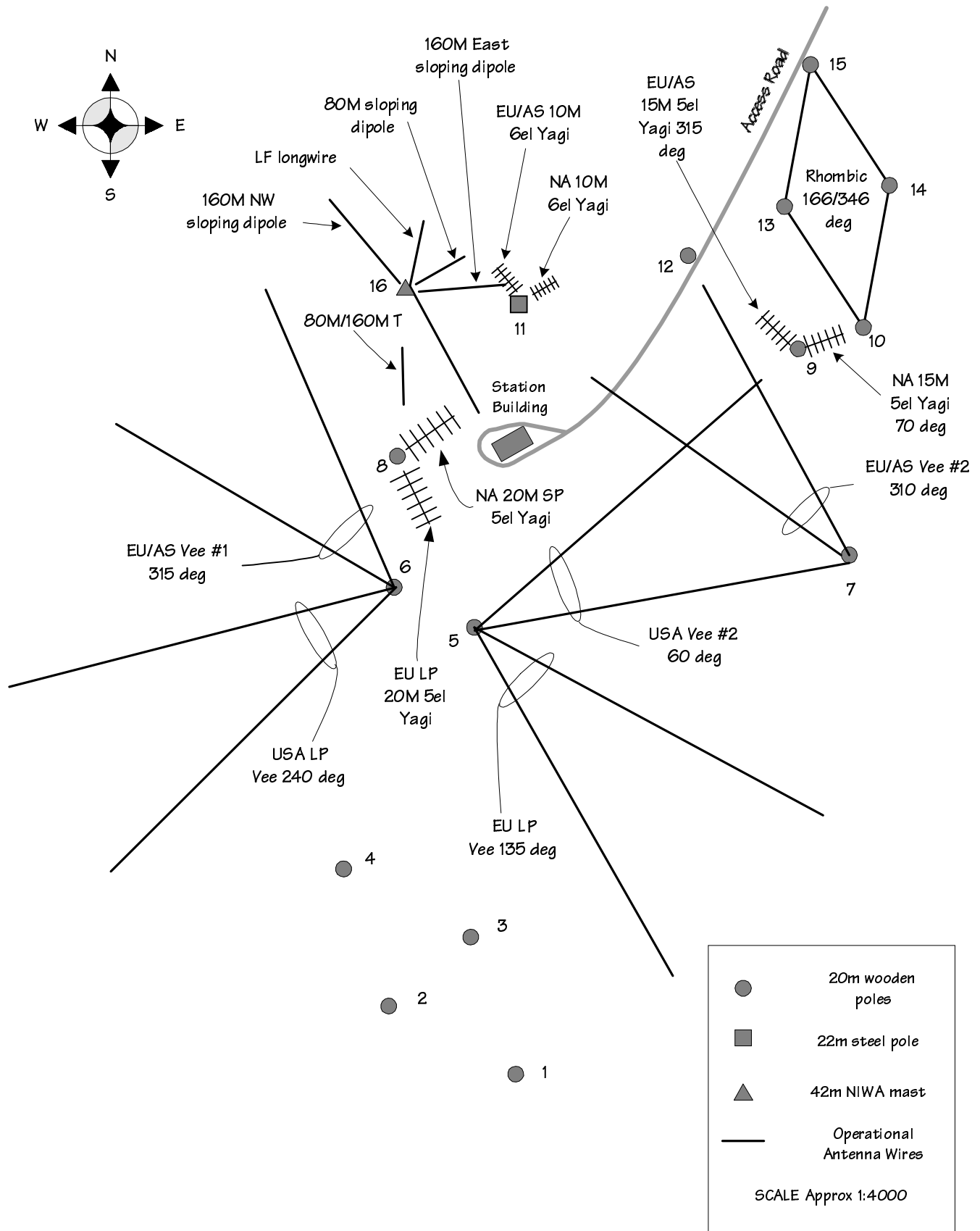
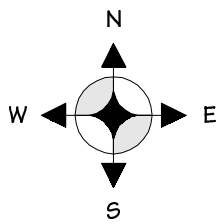
Quartz Hill continues to post the highest scores from the South Pacific in major international HF contests, but scores are generally down on those posted in earlier years, due to the depressed solar flux levels and associated reduction in contacts on the higher bands. On the other hand, there has been greater activity on the lower bands, and Quartz Hill is providing many stations with their first ZL contact on 160M. The total number of QSOs logged by ZL6QH is now 167,389 and 31,363 QSL cards have been dispatched. The huge task of managing the pile of incoming QSL cards continues to be ably managed by Ralph ZL2AOH.

Bob ZL2CA and other LF enthusiasts conducted further LF transmissions from Quartz Hill on two occasions, but unfortunately the conditions did not allow any new records to be established. The team is hoping to have another attempt in 2007 before the antenna infrastructure has to be dismantled.

The Quartz Hill account is in good shape with a net surplus of \$34.63 being recorded for the year to 31 December 2006. Expenditure over this period was \$3,021.20 and the income was \$3,055.83. The balance brought forward was \$3,102.27. The cost of antenna development maintenance and development was higher than in previous years, but this was offset by Meridian Energy waiving our 2006/07 lease payment and the level of donations continuing to be higher than anticipated.

Thank you to everyone involved for your support over the past year - in particular: Meridian Energy for access to the property; Vertex Standard (Japan) for the supply of QSL cards; Quartz Hill User Group members for their contributions of finance, time and other resources; ZL1AXG for hosting the web site; ZL2BSJ for his services as Finance Manager; ZL2AOH for his services as QSL Manager; ZL2AMI for his services as Bookings Manager; and the other members of the Management Committee (ZL2BCW, ZL2AOV, ZL2CA, and ZL2ABC) for their advice and practical contributions.

Brian Miller ZL1AZE, Chair Quartz Hill Management Committee, 18 February, 2007



## Quartz Hill Amateur Radio Station: Antenna Farm

antenna21.vsd, Updated by Z1AZE: 2 November 2006