

VK9MA EXPEDITION INSIDER

EXPEDITION PLANNING



Figure 1. David Assaf (W5UX) putting together the SteppIR 2el Yagi(s)

CURRENT EVENTS

If you haven't visited our website, please check it out the latest expedition news, at www.vk9ma.com/news. We will be updating the News section daily, as the expedition progresses.

The entire team has now arrived in Cairns. For the past few days, we have been working on testing our equipment, as well as purchasing the remainder of our supplies. Our focus is to do as much as we can prior to landing. This will significantly speed up our task of getting on the air after we step foot on Mellish Reef.

Yesterday we completed building out the RG6 cabling for the 160m DX Engineering RX array, and the

TEAM SCHEDULE

- Oct 25th - Team arrives in Cairns, Australia
- Oct 30th - Leave for Port Douglas, Australia
- Oct 30th - Load gear onto M.V. Phoenix
- Oct 31st - Depart for Mellish
- **Nov 4rd - Arrive Mellish Reef & setup**
- **Nov 16th - Teardown & depart**
- Nov 20th - Arrive Port Douglas
- Nov 21st - Team heads home



Figure 2. Helmut(VK4YKI) building an arm-strong rotator mechanism for turning the SteppIR 2el Yagi(s).

DHDL RX array. We found that three of our 12 DHDL directional switching units had been damaged during transportation due to vibration. In order to prevent this from happening again, Brian(N9ADG) and Paul(VK4APN) hot glued the ferrite transformer cores to the main board.

The task at hand today is to build out each of the 5 stations, the satellite network, and partially build out the two SteppIR yagi(s) and CrankIR vertical(s).

Hawk(SM5AQD) and Rob(N7QT) will travel up the coast to Port Douglas later this afternoon. Hawk wants to verify the state of our equipment that arrived by container ship from Sweden. There was sign of water contamination, but we are hopeful our equipment stayed dry.

DX CODE OF CONDUCT

Please be aware that this expedition will be using the DX Code of conduct. For those of you who might not be familiar with the code can be found [here](#).



Figure 3. Testing the SteppIR 2el Yagi(s). Notice the 9m(29.5ft) ladder/Yagi interface mechanism.

TIPS TO WORKING VK9MA

- The VK9MA team has published its [operating plan](#) and frequencies on the VK9MA website. These frequencies should be used as a guideline to where to find us on the air.
- The team will ALWAYS be running split. Therefore, NEVER call us on the VK9MA transmit frequency. Listen to the operator's instruction for either up/down guidance, as well as split range.
- We will work Oceania (OC) and Africa (AF) stations at any time, regardless of the region we are currently calling for.
- We plan to upload our log to Club Log in near real time. Before calling us for an insurance QSO, please check [here](#) to see if you have already been logged.
- VK9MA calls for NA is equal to both North America AND South America. This is needed when we are operating FT8.

HOW TO WORK US ON FT8

We have been thinking a lot about FT8 and how best to work us. Due to how relatively new this mode is, there is a lot of concern if operators understand how to correctly operate split. The VK9MA team has decided that **we will not operate split when using FT8**. Also, to speed up our exchanges **we DO NOT want/need your grid square**.

Typical exchange between N9ADG and VK9MA will be:

- 1) N9ADG transmits signal exchange “VK9MA N9ADG -02” , waiting for VK9MA to answer on his/her frequency.
- 2) VK9MA attempts to work N9ADG , and transmits signal exchange “N9ADG VK9MA R-5” on N9ADG’s frequency.
- 3) N9ADG replies to VK9MA transmitting “VK9MA N9ADG RR73” **OR** “VK9MA N9ADG RRR”
- 4) VK9MA transmits “N9ADG VK9MA RR73”
 - a. N9ADG has been logged by VK9MA and QSO is complete!
- 5) N9ADG transmits “VK9MA N9ADG RR73” **OR** VK9MA N9ADG 73”
 - a. If running older versions of WSJT-X N9ADG must manually log VK9MA.

Therefore, you should follow these steps for working VK9MA on FT8:

- 1) **You must download and install WSJT-X (Version 1.8.0-rc3)** from [here](#). Using older versions of WSJT-X will not properly decode VK9MA sending “RR73”.
- 2) Set your radio’s VFO to VK9MA’s band plan/frequency.
- 3) **Find and select an open frequency in the waterfall window.**
- 4) Select TX2 radio button to select
- 5) Immediately after seeing VK9MA transmit a RR73 to another station, click on the “Enable” button to enable transmitting a signal report to VK9MA. If VK9MA selects another station, press the “Enable” button again to disable/stop calling VK9MA. Repeat Step 4) until your station is called/worked.

UNSUNG HEROS

The team would like to thank Paul Newman VK4APN and his lovely wife Ann, as well as Helmut Giger VK4YKI, for their invaluable help during our stay in Cairns. Paul has allowed us to spend the last week at his home, practically taking over an entire floor of his home. Helmut has provided us with mechanical engineering design help.

Paul successfully repaired David Assaf(W5XU) Vibroplex paddle which was broken on route to Australia. Paul used part of sheet of carbon fiber mat, taken from his remote-control model aircraft that he is currently building, to shape a new paddle. These are just a few examples of the help they have provided to help make this expedition successful.

We also found a problem with one of our HP laptop power supplies. Paul directed us to a local computer store which fortunately had a replacement.

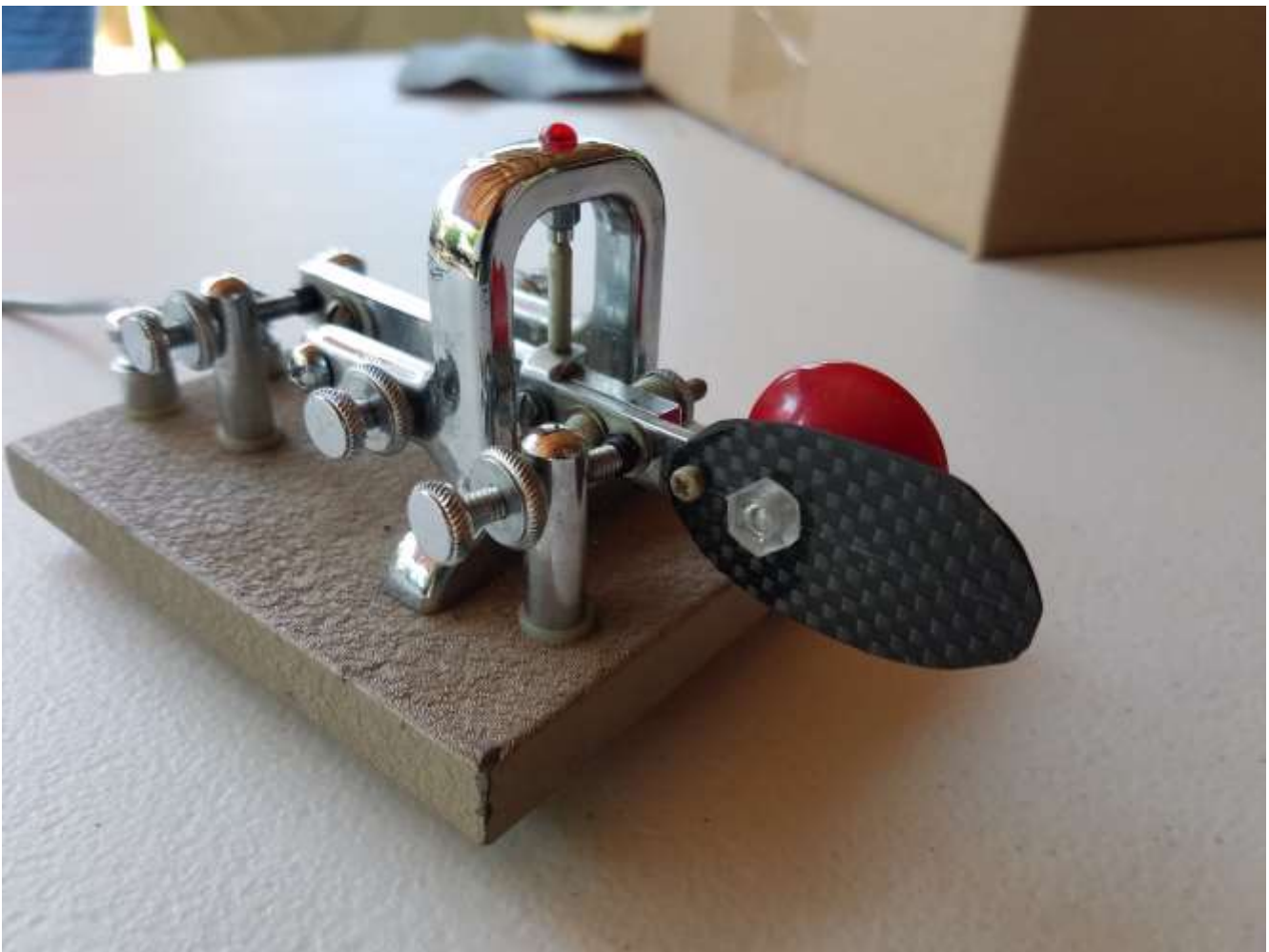


Figure 4. Repaired Vibroplex paddle.

DEPARTURE

We are almost ready for departure. Today will be spent testing the radio stations, and partake in a token effort on CQ WW SSB using the VK4/VK9MA callsign.

Tuesday morning we check out our hotel, and head over to Paul's home. Load up the moving van with all our gear, and drive up to Port Douglas. We will then load the M.V. Phoenix with fuel, all our radio equipment, food, and then depart to Mellish Reef. It will be a 4 day boat ride, reaching Mellish just before dawn on November 4th. The team will then work feverishly to first complete our shelters, generator/electrical distribution network.

The plan for the first day is to put up 4 CrankIR antenna(s) allowing us to operate from 10m-80m. The next day we hope to complete the 160m TX/RX antenna system, as well as our SteppIR yagi(s). Over the next 2-3 days, we will complete our DX Engineering 4sq TX/RX antenna(s).

The team is very excited and looks forward to getting the show on the road. Good DX to all of you and the very best of 73 from the VK9MA team.

DONATIONS

Due to the expense of this effort, we appreciate any donation no matter the amount. if you have not yet contributed to this expedition and would like to, please go to our [donate page](#) .

We wish to thank of you who have already donated to the cause. In particular:

- [Elecrafft Corp](#)
- [DX Engineering](#)
- [Low Band Systems](#)
- [Expert Linears](#)
- [Spiderbeam](#)
- [SteppIR](#)
- [W3YY](#)

Sincerely,

The VK9MA team