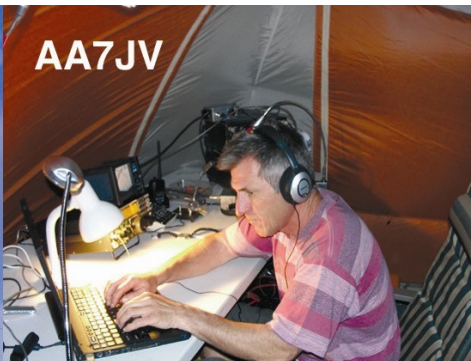
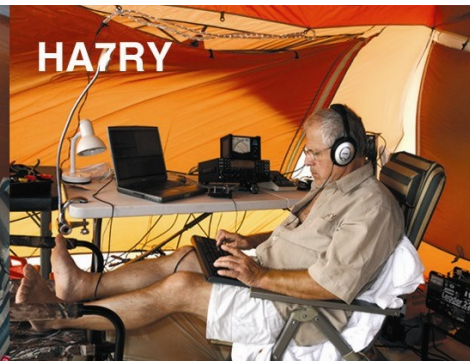




AA7JV



HA7RY



CQ: 30 • ITU: 56 • IOTA: OC-176 • Loc: 19° 53.285 S; 158° 27.962 E



George & Tomi

MRC 2010 BUDAPEST

TX3A

MRC 2010 BUDAPEST

AA7JV & HA7RY

George, AA7JV & Tomi, HA7RY

# Intro

- TX3A operated from Chesterfield Reef (OC-176) from November 3 to Nov 30, 2009.
- This was another simple low-band DXpedition by George (AA7JV) and Tomi (HA7RY).
- During 28 days of operation a total of 36,148 QSOs were made, of which 3,425 were on 160 meters.
- All along, we wanted to keep things simple; we wanted to put the “amateur” back into Amateur Radio.
- Chris (HG5XA) was pilot & webmaster of the expedition.

# Previous AA7JV & HA7RY DXpeditions

- VK9WWI  
Willis Islets (2007)
- C6AGU  
The Bahamas (2008)
- 5K0T  
Serrana Bank & Bajo Nuevo  
(2008)
- VK9GMW  
Melish Reef (2009)



# Low Band Focus

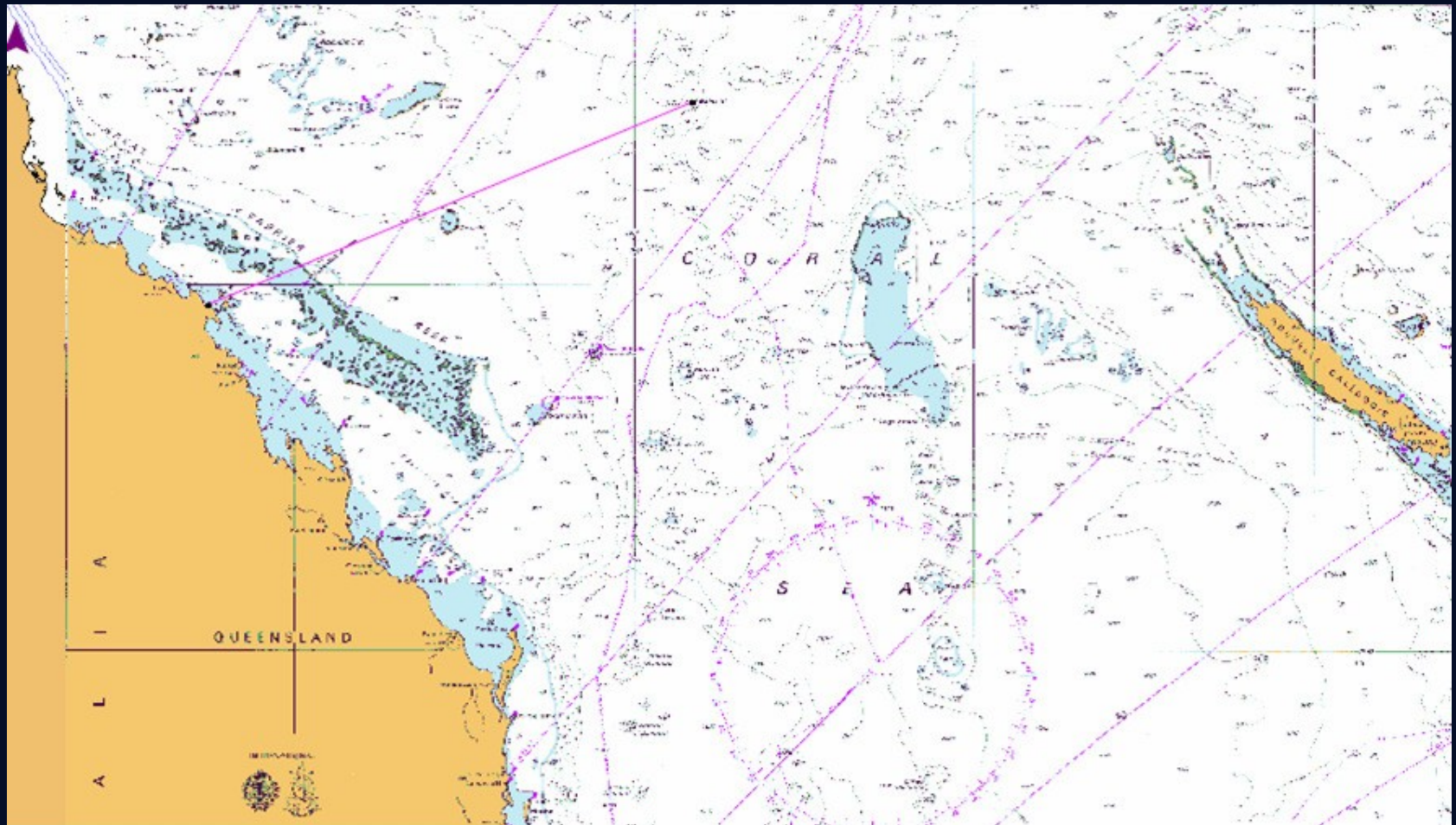
„[...] Focus is low bands: 160, 80 and 40, in that order.

We work the other bands during the day because the low bands are closed (and Tomi loves it!). There have been a lot of complaints about our low band (and CW) focus, including comments that "this is no way to run a DXpedition".

[...] many large DXpeditions do a great job of working the high bands, SSB and digital modes. [...] These operations, however, with a few exceptions, do not generate a lot of 160m QSOs. We specialize in low band operations. We bring 160 meter antennas, RX antennas, pre-amplifiers, etc. We come with a lot of patience and the willingness to endure pain. We put up with low QSO rates and seem to have a desire to spend hour listening to entropy. Stuff that most DXpeditions, and their operators, prefer not to do. We aim at giving out as many 160 m (and 80m) QSOs as we can. Everything else is cream! „



# Chesterfield Reef (FK/c)



# Getting Ready

- AA7JV & HA7RY met in Sydney 20 Oct 2009
- AA7JV flew to Noumea to finalize licence and meet Remi, FK8CP
- Tomi goes to Gladstone to help Captains Roy and Darrell to prepare and load the boat MV Pedro II (MV Varzin)
- Boat staff needed for safety & length of journey hurricane experience (@VK9GMW)



MV Pedro II

# Fuel & Food for 6 weeks

2 weeks at sea, 4 weeks operation on the island

Bladder tanks used for fuel



Limited dry storage and refrigeration for food: fishing equipment





# Crossing to Chesterfield

- 26 October: Leaving Gladstone (QLD Australia)
- 27-31 October: Waiting at Suamarez Reef Bad weather, up to 30 kts winds & big waves until 31 Oct (still about 19 knot winds and big waves).
- 2 November: Arrival at Chesterfield at night, had to wait until next morning to navigate across the coral and find suitable QTH

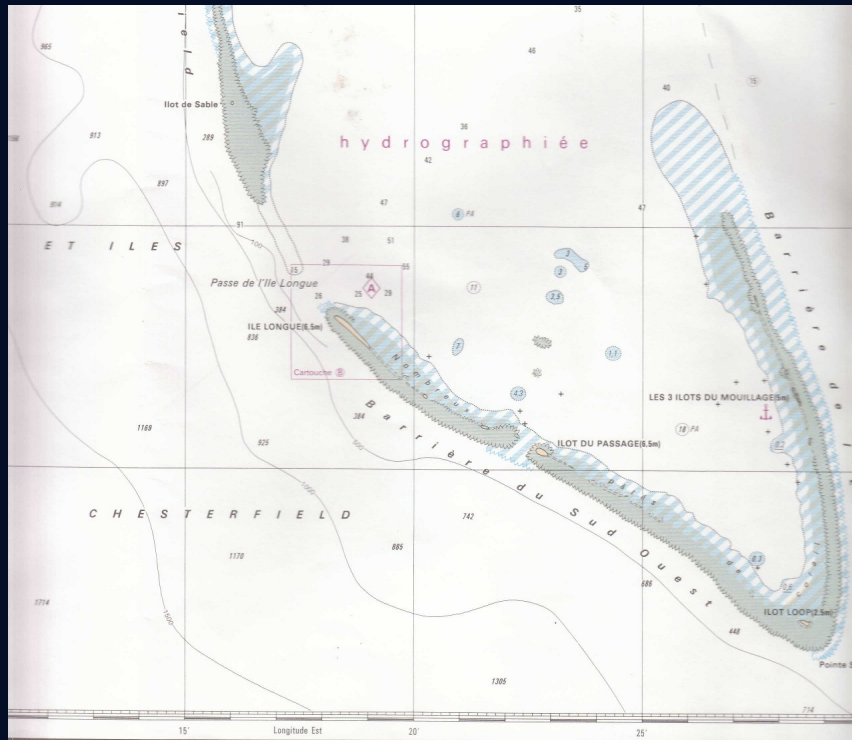






# QTH of TX3A

Les 3 Ilots du Mouillage



Antenna Lagoon







# ARCHIPEL CHESTERFIELD

TERRE FRANÇAISE  
DEPUIS  
1877

Parcs Armes de Nouvelle-Calédonie - 1986





# Setting up

Complete station: about 3 days, but QRV the first night on 160m!

















**„WHAT’S  
THE SECRET  
OF YOUR STRONG SIGNALS?“**

# The Secret

Only vertical antennas set up in salt water. Not near water, in water.

1.) No ground loss

2.) Better than best yagis.

OC-EU is about 3-5 hops with yagi vs 2-3 hops with vertical standing in salt water, 15-20 dB loss/hop!





# Antennas

Antenna standing in water:

- CORROSION!
- De-tuning (High vs Low Tide)

RF choke necessary

Automatic tuner for 1 kW

SGC235 ATU for 2nd station





# RX

No civilization and no electric/electronic equipment nearby helps clean RX

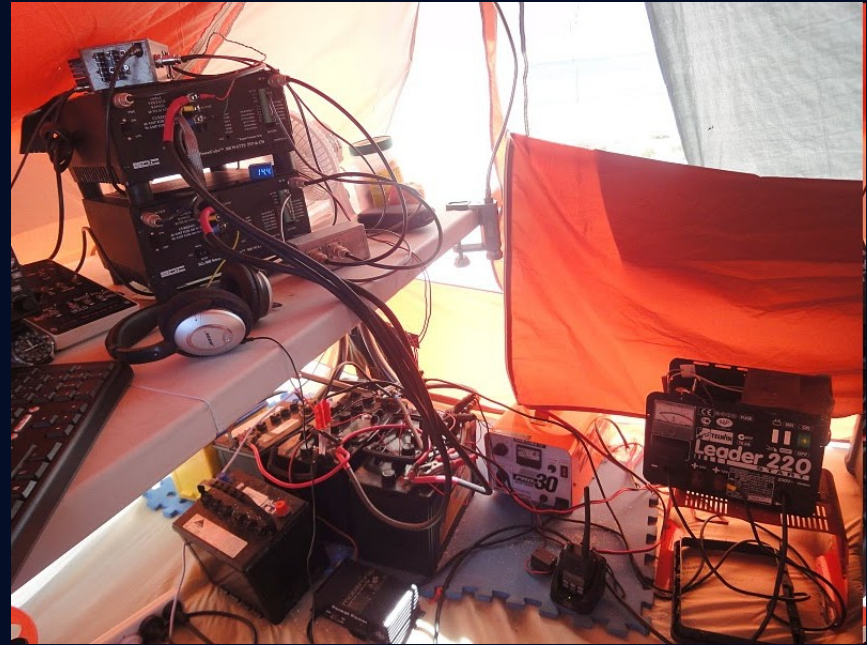
Power supply / Generator + auxiliary equipment need to be clean too!

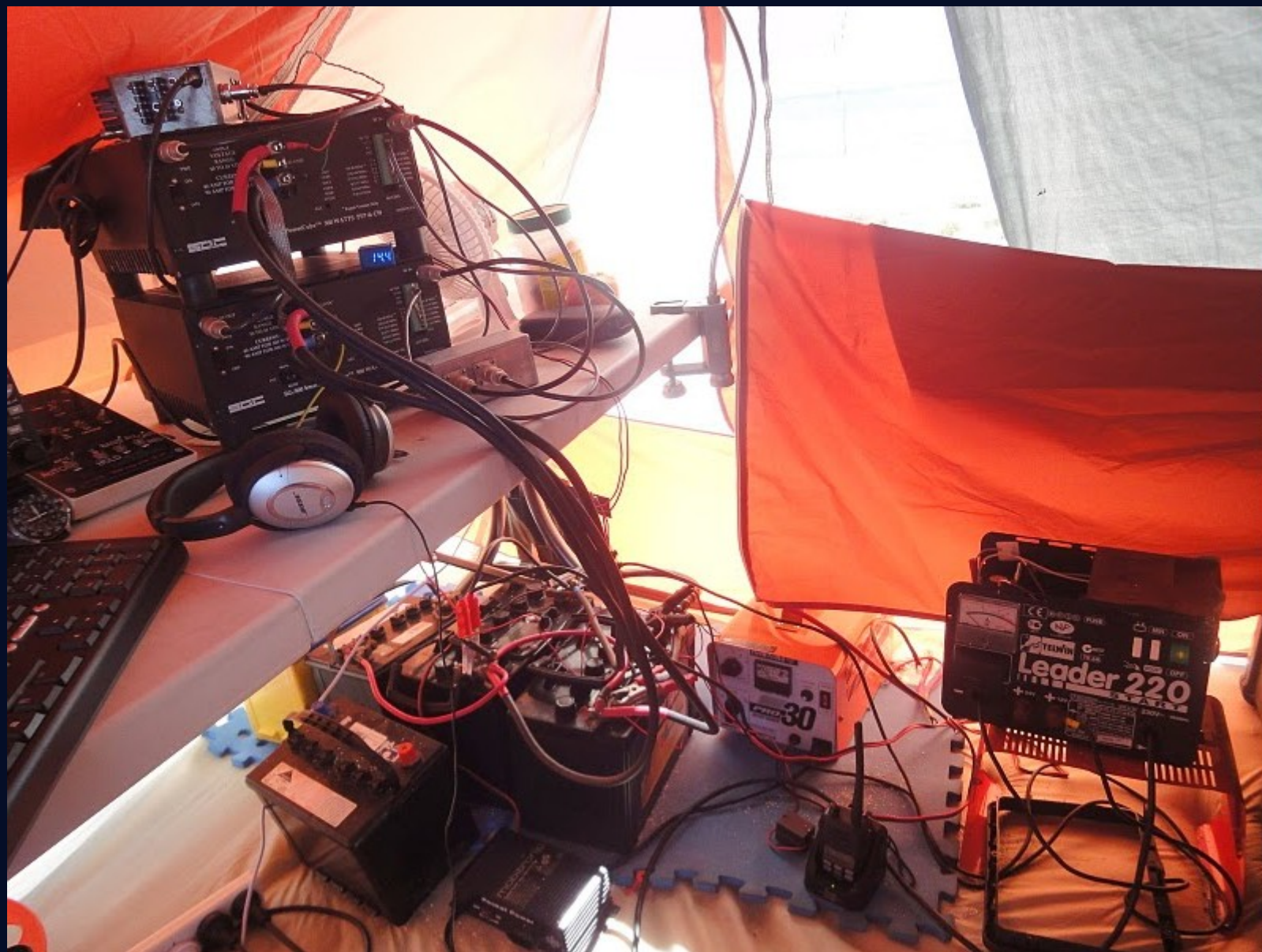
RX antennas are needed, especially to avoid JA-wall. When North America and Japan are calling at same time, difference in signal is about 20-40 dB! Same is true for EU, but EU and JA direction difference is only abt 20°, such RX antenna was not achieved.



# Power supply

- Generator + chargers + batteries
- Refuelling and generator repair without interruption of operation
- 11 liters / day (8.5 ml / QSO 😊)









# RIG in the „shack”

- 2x Elecraft K3 transceivers
- 2x SG500 linears combined for 1kW output
- ATU controller (fast band switching)
- Second radio with SGC235 ATU used for 40-10m, mainly for RTTY
- Software: N1MM logger, MMTTY for RTTY









# Daily routine

- 7 pm Start on 160m (NA/JA)
- Some 80/40m at night
- Back to 160m for EU until about 5 am
- Saving LOG to pendrive, George swimming to boat (600m) to write news, and send by Internet to pilot in Hungary
- While George on boat, Tomi QSOing on 80,40,30,20m
- 9-10 am Tomi rowing to boat for shower, breakfast and rest, propagation quite weak between 12 - 3 pm, some little sleep
- Until about 5 pm: high bands (Tomi)
- George and boat crew fishing/diving
- Dinner normally in the tent together with boat crew
- 40m or high bands until 7pm when QSY to 160m



































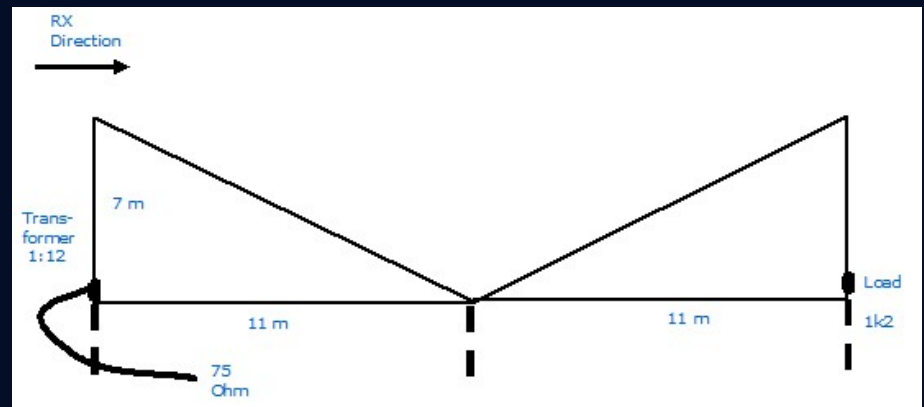
# Double Half Delta Loop Antennas

2 DHDL antennas built for RX  
(EU and NA)

Good 160-30m RX antenna at  
low noise with good directivity.  
Bottom of antenna abt 1.5m from  
ground.

See more info on the [tx3a.com](http://tx3a.com)  
website.

Antenna later tested at home, but  
because of RFI, you need to put  
it 10-15m+ over ground!





# Pile up operation

- DON'T call DX while he is in QSO!
- DON'T call when DX asks for a different callsign!
- DON'T call if you don't hear the DX!
- Send callsign ONCE and listen! (except 160m, where send TWICE) Even if you have good QSK, do not transmit continuously, the DX will get irritated
- QSO is only complete if you hear your callsign and the „TU“
- DON'T jump in split! If the DX picks you up but you move your frequency, he will not hear you, so he will TX again and again
- LISTEN carefully on both the RX and TX frequency before transmitting
- If you hear ZOO or LIDs, DO NOT become a policeman! You only become another LID. Mentally ill people will only enjoy that they have audience. Just sit back, and come back a few hours/days later.
- DON'T hold up the pileup. Be concise: do not send polite greetings etc, only what is important.
- If you have heard your callsign, only re-send it if the DX miscopied it, even then only once

# Fauna

They make noise, smell,  
are danger to tent,  
cables, antennas.

BUT

It is their place, not yours!  
And you LOVE them!













































# QSO Totals

160m	3435
80m	5943
40m	5530*
30m	4345
20m	4979
17m	3632
15m	5004
12m	1597
10m	1683

**Total: 36148** + dupes (cca. 4000)



\*40m RX problems:  
„Chinese Dragon”

# IT Support

- Website with daily updates
- E-mail info list, RSS
- Daily log updates to online log
- LoTW and eQSL.cc upload DURING expedition
- OQRS for bureau & direct QSL requests



# More info

WEBSITE: <http://tx3a.com/>

E-MAIL: [info@tx3a.com](mailto:info@tx3a.com)