

FT5ZM DXpedition To Amsterdam Island (A Rare DX Gem)



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FT5ZM Wants YOU!!



Anticipated to be QRV beginning this weekend!!

Topics

- Amsterdam Island Info
- Why Amsterdam??
- FT/Z QSLs from the past
- FT5ZH 1998 Video
- FT5ZM Team/Costs
- Sponsorship
- Getting to Amsterdam
- Operating Sites
- Equipment/Logging
- Bandplan/Propagation
- Keys to working FT5ZM
- QSLing
- References
- Door Prizes 😊

Amsterdam Island



Part of the French Southern and Antarctic Lands, an overseas department of France, claimed 1955, including Saint Paul Island and Crozet and Kerguelen Islands. Amsterdam has a mild, oceanic climate, with a mean annual temperature of 13 °C (55.4 °F), rainfall of 1,100 mm (43.3 in), persistent westerly winds and high levels of humidity.

- **Location:** ~1,900 nautical miles SE of Perth, Australia
- **Coordinates:** 27° 50 South, 77° 30 East
- **Climate:** Sub Antarctic – cool/windy year round
- **Geology:** Volcanic - Extinct
- **Population:** Zero permanent – research location only



Base Martin de Vivies



Why Amsterdam?

**The DX Magazine's
Most Wanted Survey
Conducted Sep/Oct 2013
Top-10 World-Wide Results**

1. P5 NORTH KOREA
2. KP1 NAVASSA
3. 3Y/B BOUVET
4. FT/W CROZET
- 5. FT/Z AMSTERDAM**
6. VKØ/H HEARD ISLAND
7. BS7 SCARBOROUGH
8. ZS8M MARION ISLAND
9. VP8/S SOUTH SANDWICH
10. FT/T TROMELIN

Previous Activations

- 1958 – FB8ZZ
1987 – FT8ZA
1988 – FT5ZB, FT0ZB, FT3ZC
1989 – FT4ZE
1989 – FT89ZE – Special Bicentennial call
1994 – FT5ZF
1997 – FT5ZG
1998 – FT5ZH, FT5ZJ, FT5ZI
-----16 Year Silence -----
2014 – FT5ZM – Starting this weekend

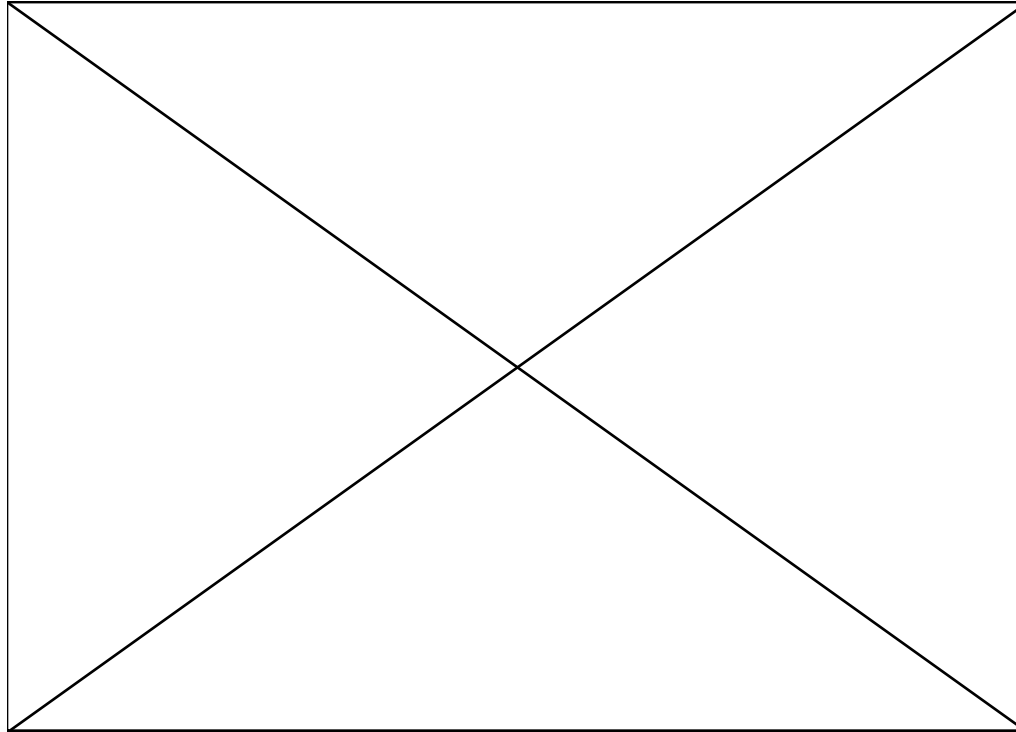
Safe bet that EVERY DXer needs FT/Z SOMEWHERE..

FT/Z QSLs from the past



Will FT5ZM be added to YOUR collection??

FT5ZH 1998 Video



<http://www.youtube.com/watch?v=QBZPXsCHAvE&list=PL9CDC3E00B32BA1E8>

On-Island Team



Bob Schenck
N2OO



Andy Chesnokov
UA3AB



Nodir Tursun-Zade
EY8MM



Michel Brunelle
FM5CD



Jorge Prieto
HK1R



Ralph Fedor
KOIR



Bob Alphin
K4UEE



Craig Thompson
K9CT



Erling J. Wilig
LA6VM



Jay Slough
K4ZLE



Arnold Shatz
N6HC



Neil King
VA7DX



Stephen Wright
VE7CT



Jerry Rosalius
WB9Z

Pilots and Off-Island Team



Val Hotzfeld
NV9L
NA Pilot



Hal Kukita
JR4OZR
JA/Asia Pilot



Col McGowan
MM0NDX
EU Pilot



Stan Schwartz
KH6CG
Oceania Pilot



Lee Jennings
ZL2AL
VK/ZL Pilot



Dean Davis
N7XG
QSL Software
Development



Gregg Marco
W6IZT
Network and
Interfacing



Stanislaw Strzyewski
SQ8X
Logos/QSL/Web
Design



Richard &
Charlie Martin
Equipment
Storage



Stu Phillips
K6TU
Propagation
Support



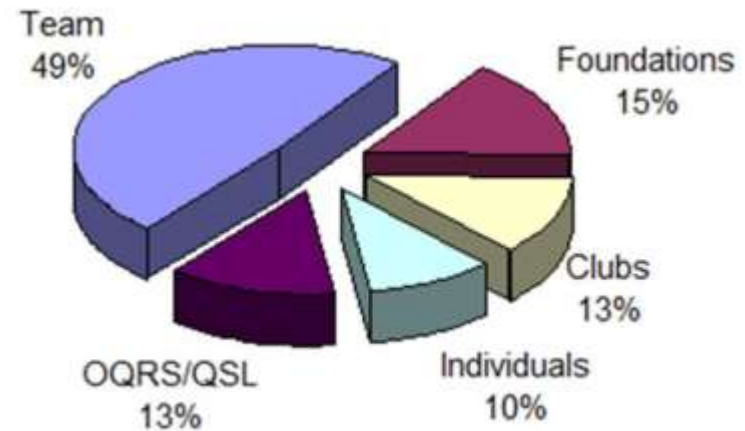
George
Nicholson
N4GRN
Logistics and
Shipping

FT5ZM Budget

- **DXpedition Budget** - \$450,000
- **On-Island team member cost** – Minimum \$10,000 + VK Airfare \$3,500
- **Perspective** - \$22.50/minute of on-air time, \$4.50/QSO
 - Based on estimated 14 days of on-air time and 100,000 QSOs
 - 14 days x 24 hours x 60 min = 20,160 min; $\$450,000 / 20,160 = \22.32



Cost Breakout

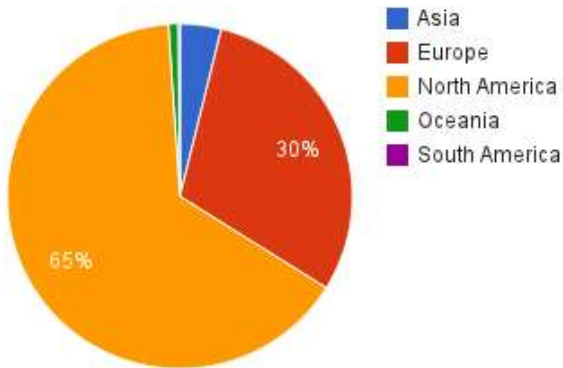


Funding Sources



















Sponsorship

The FT5ZM DXpedition would not be possible without the support of corporate, club and individual sponsors. Here are just a few.

FT5ZM DX Club/Foundation donation breakdowns by continent



Contributors \$250 and above:

 Delta DX Association	 DX-World.net	 The Willamette Valley DX Club
 Southern Arizona DX Association	 West TN DX Association	 Gwinnett Amateur Radio Society
 Fort Wayne DX Association	 Birmingham DX Club	 Kansas City DX Club
 Ehime DX Group	 Tennessee Valley DX Association	 Old Barney ARC
 Mile-Hi DX Association	 Albuquerque DX Association	 599 DX Association
 Begali - Fine Morse Keys!	 Far East DX-Pilfers	 DX University

Getting to Amsterdam

- In addition to the financial commitment team members will be away from home for ~ 6 weeks, including 18 days at sea aboard renowned expedition vessel, *M/V Braveheart*.



M/V Braveheart is a steel construction vessel 39 meters in length capable of carrying ~12 passengers plus 5 crew. It is capable of steaming 33 days without refuel.

Timeline

- Braveheart arrives in Fremantle, Australia 12 Jan for loading
- Team departs Fremantle 15 Jan
- At sea 15 - 24 Jan
 - ~ 1,900 nautical miles
- Landing begins when sea/weather conditions allow members access
- Team has 18 days on island to setup-2/operate-14/takedown-2
- On Air ~ 26 Jan – 9 Feb
- Est home departure ~ 11 Feb
- Est arrival in Fremantle ~ 20 Feb

Satellite Tracking

Track the FT5ZM Team on the satellite map LIVE!



The team arrived at Amsterdam Island safely.
Now the hard work begins!!!

Operating Sites



Amsterdam Island has an area of approximately 21 sq. mi (55 sq. KM) and is just over 6 miles on its longest side.

Landing site is on an outcropping along the north coast of the island near the base. Landing can be difficult due to the direct exposure to the open sea. Both arrival and departure times could be effected by the weather and high seas.



Operating cabins are 15'x15'. Two sites are located over a mile apart. Ops not allowed to walk from site to site at night. During the day them must be escorted.



Operating Sites (Separation)



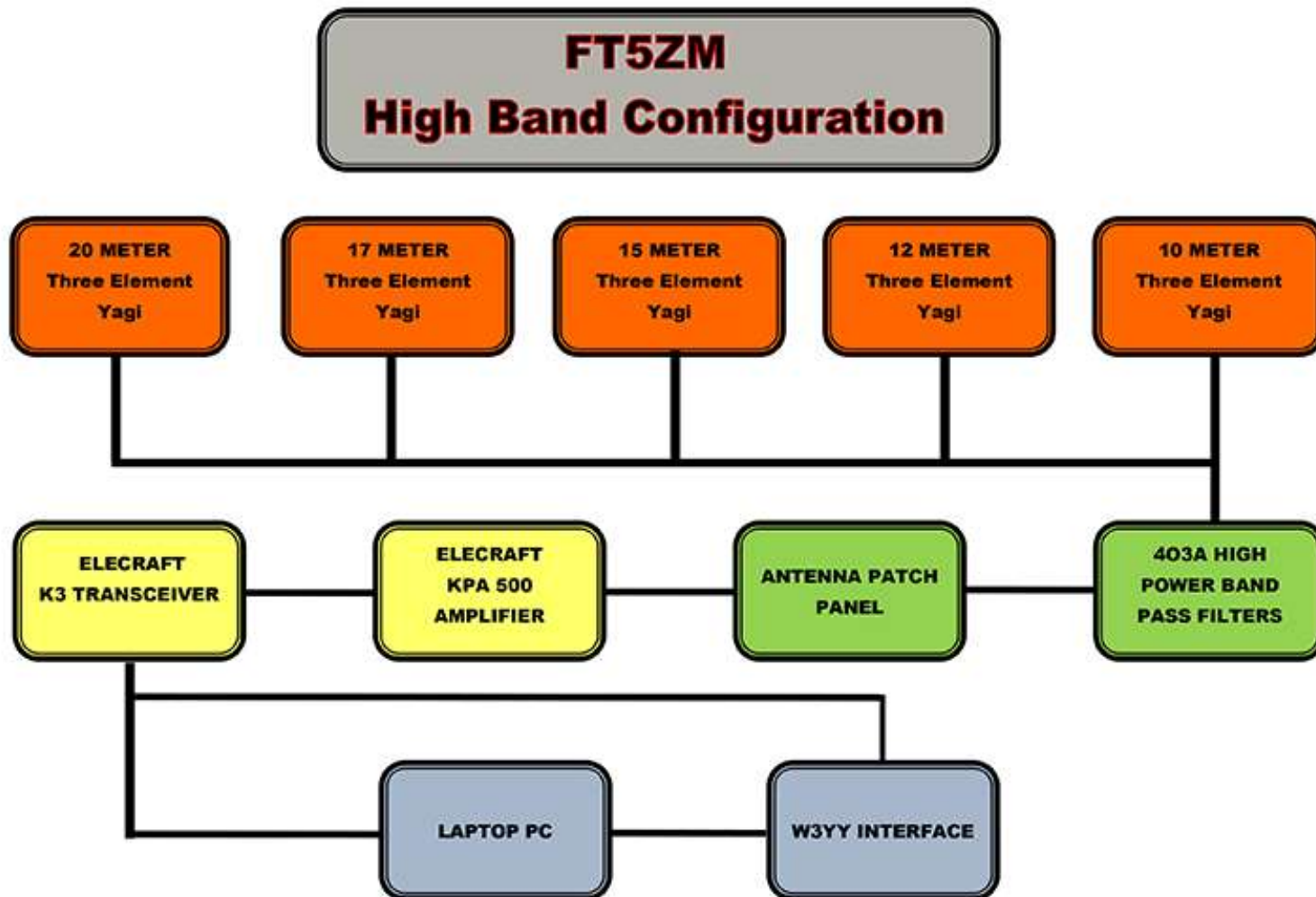
Cabins @ Operating Sites



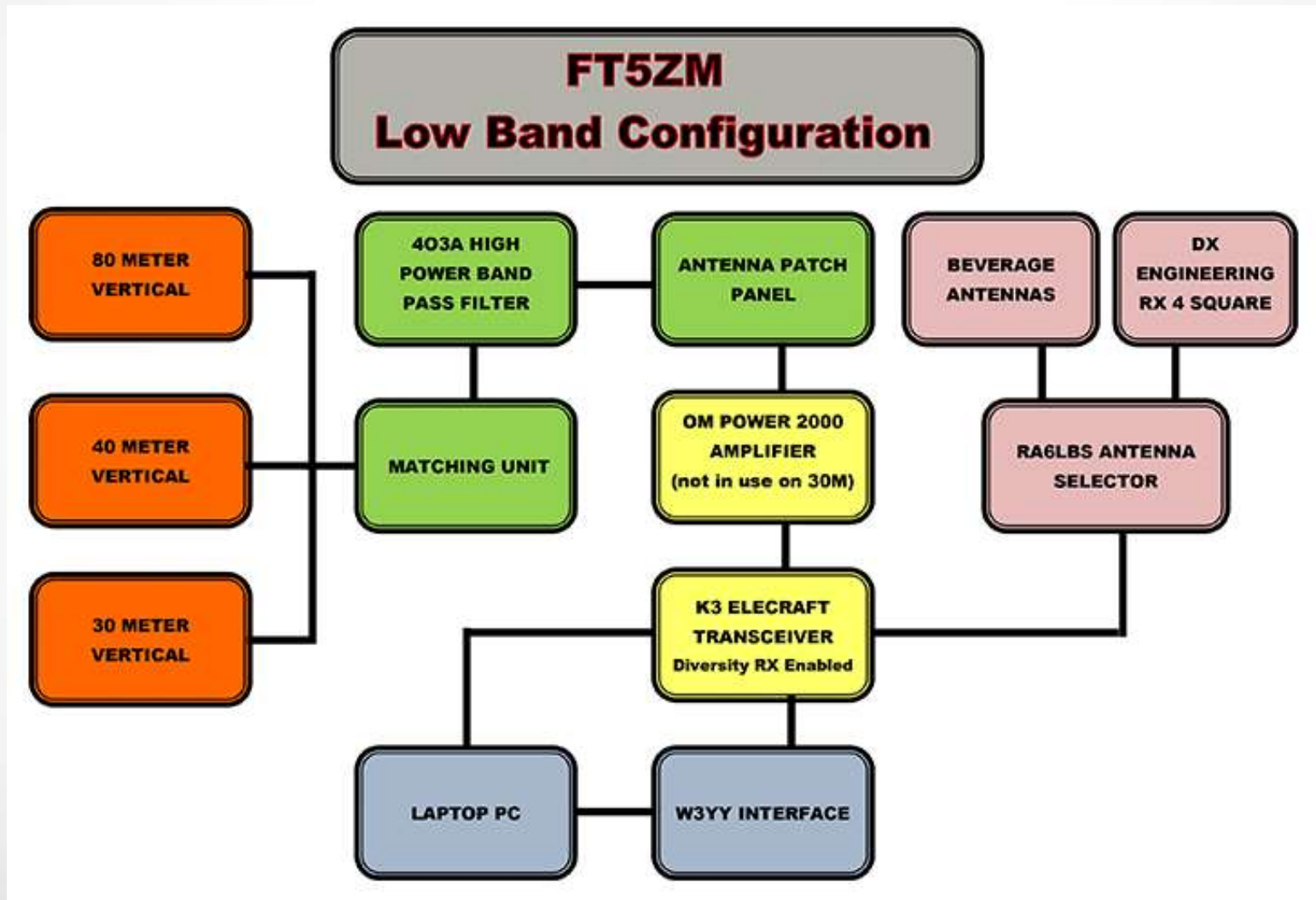
Equipment/Logging

- Total of 8 stations in 2 operating locations ~5,800' apart
- Rigs – Elecraft K3 Transceivers
- Amps – Elecraft KPA 500 for high bands, OM 2000 on low bands
- Antennas
 - 20/17/15/12/10m - 3 element monobanders @ 30'
 - 80/40/30m - verticals with 36 quarter wave radials each
 - 160m top loaded vertical
 - Beverage and DX Engineering four square receive antennas for 160-30m stations
- Bandpass filters – 4O3A High Power filters on each station
- Logging – N1MM Logger

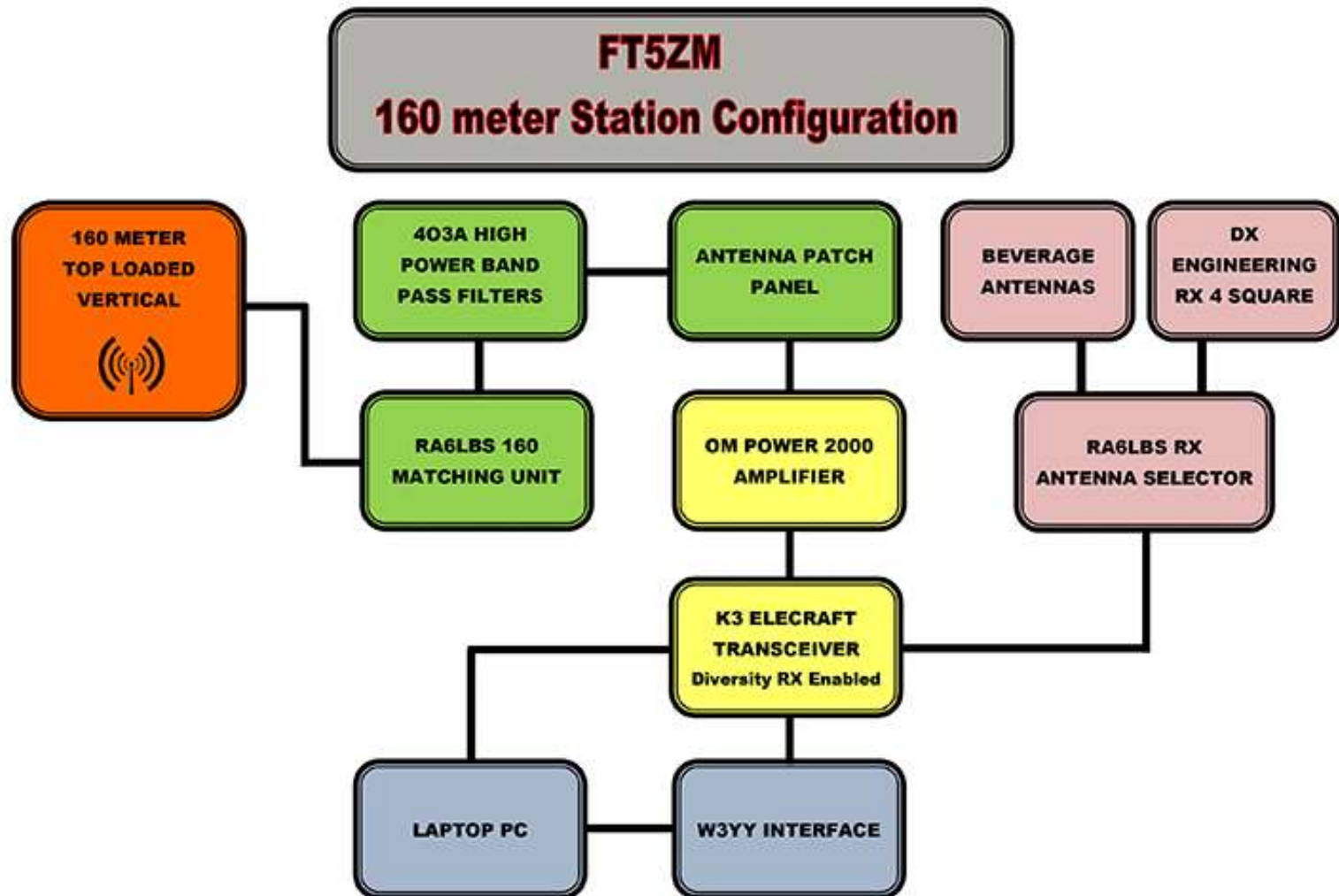
Station Layout – High Bands



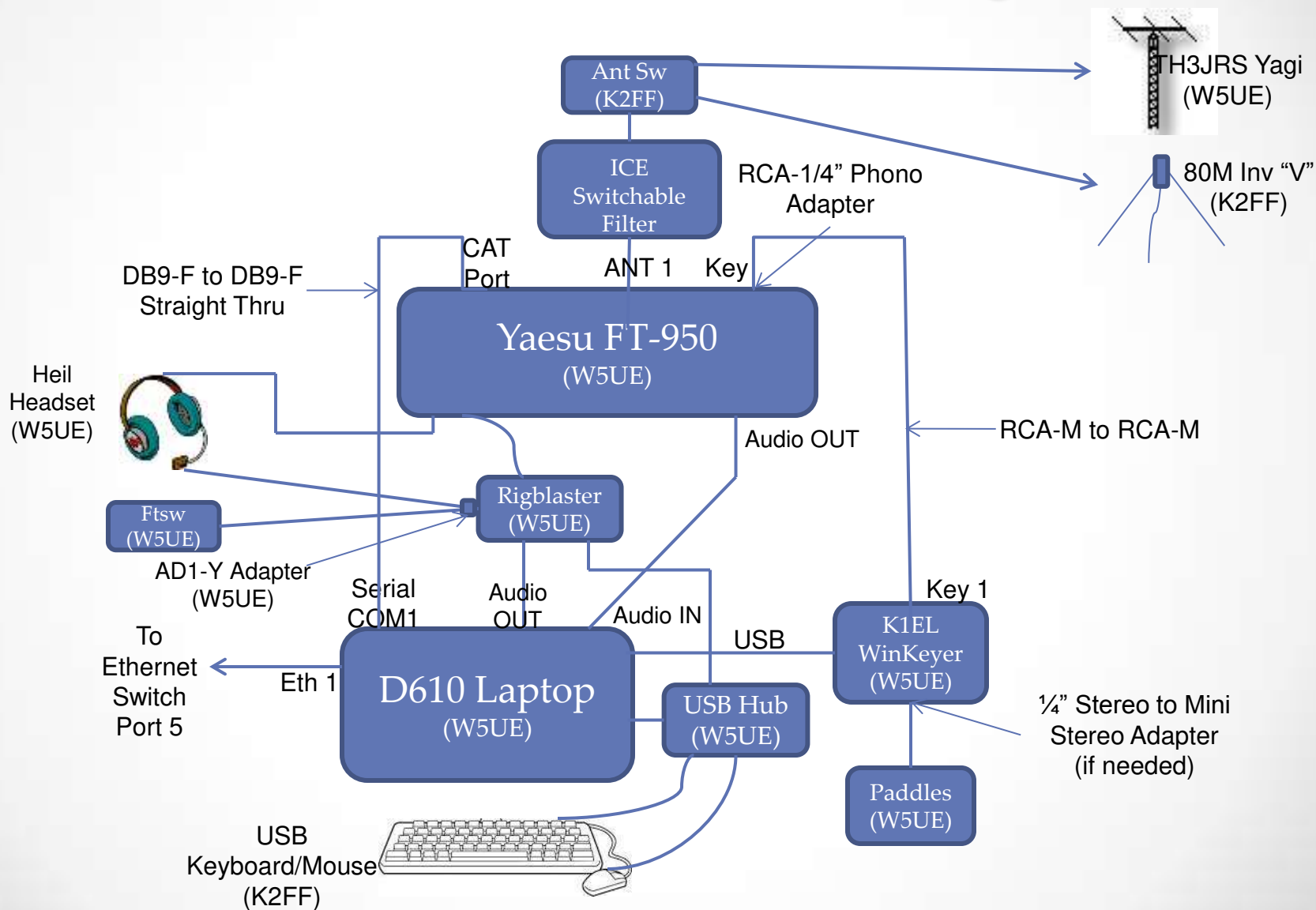
Station Layout – Low Bands



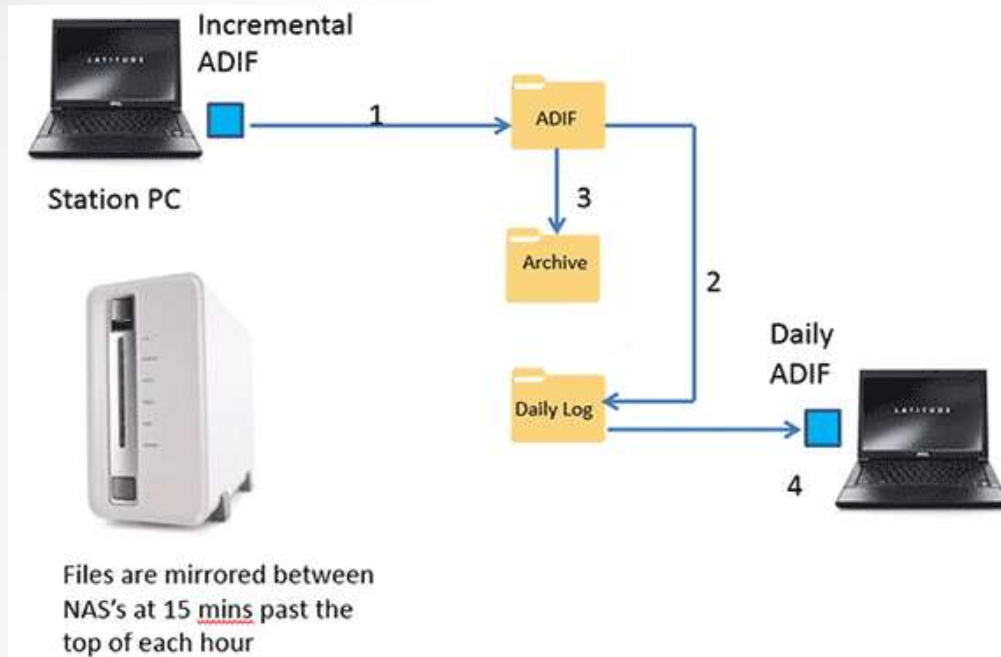
Station Layout – 160M



NA5NN 2013 FD Planning



Logging



- Leverage a logging app most ops know
- Develop automated solution for periodic log exports to ClubLog
- Minimize required Internet bandwidth for uploads
- Create redundant copies of logs for archival on separate network attached storage

Step 1 At the top of each hour an incremental .adi file is pushed to the NAS. This function is performed by the ADItoClubLog app from K8UT loaded on each station PC.

Step 2 Once per day at the bottom of an hour the Log Aggregation app will merge all of the incremental logs into the daily log.

Step 3 After merging, the incremental logs are moved to the Archive folder

Steps 2 and 3 are performed by the ADIFAggregation app that is running on any PC as a scheduled task under windows.

Step 4 The daily log is copied from the NAS to any PC. This file is zipped and uploaded to ClubLog

This file is then imported into N1MM on any PC for analytics.

Hearing and Being Heard

The FT5ZM team is going to great lengths (literally) to ensure they are loud around the world AND can hear. Not every DXpedition employs monoband yagis on HF, multiple receive antennas for low bands, etc.

Jerry – WB9Z, and pilot, Val – NV9L, are shown with over 10,000 feet of pre-cut radials and over 10,000 feet of coax cut to length with connectors attached. These are not just spools of wire. The radials have been precisely tuned/cut for maximum performance.



Hearing

aka Attention to Detail

What headset do you use??

Heil

MFJ

Bose

Sony

Something Else???

David Clark

Koss

Sennheiser

FT5ZM Solution

The FT5ZM team put a tremendous amount of work into ensuring all aspects of the operations maximize QSOs. The advanced receive capability of the K3s, Four Square and beverage RX antennas, monoband yagis for HF. They wanted to go the extra step of ensuring operators had the best possible headset for the environment.



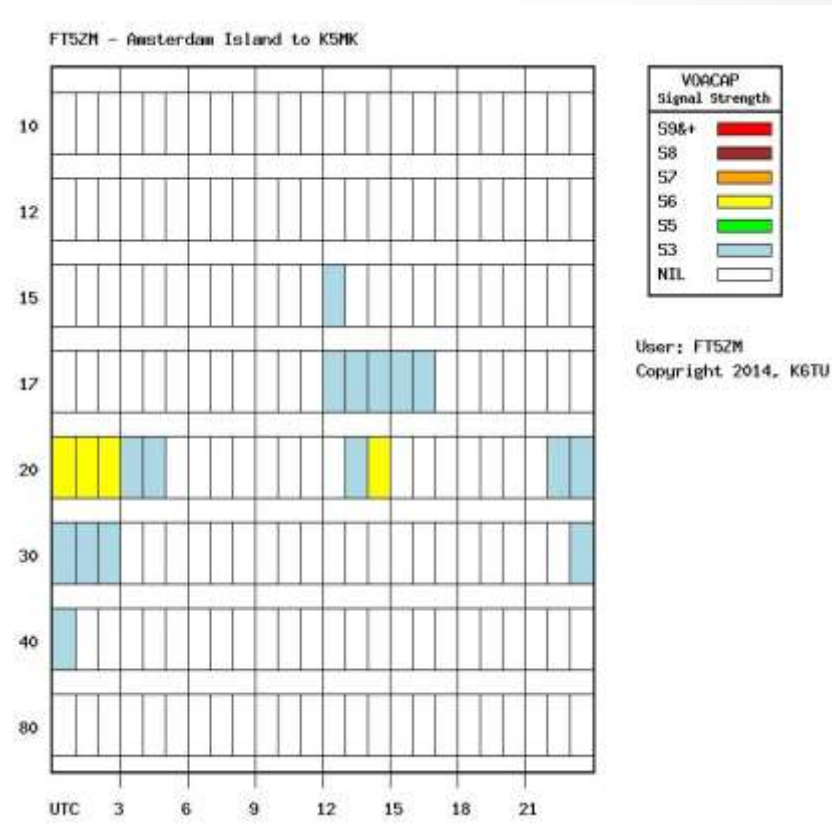
The team felt the Radiosport RS60CF headset would allow them to take full advantage of diversity receive capabilities of the K3, provide an auxiliary PTT if our footswitch failed, provide an auxiliary audio output for a second listener, and it's comfortable ear muffs would provide a 24 dB reduction in ambient noise levels. To top it off, the RS60CF is battleship strong.

Bandplan/Propagation

Where to look for them

Band	CW	SSB	RTTY
160	1.826.5		
80	3.523	3.790	3.580
40	7.023	7.082	7.045
30	10.115		10.142
20	14.023	14.185	14.080
17	18.079	18.130	18.099
15	21.023	21.285	21.080
12	24.894	24.955	24.912
10	28.023	28.485	28.080

Local Propagation Charts



Printouts being provided for you to take with you

Keys to working FT5ZM

- LISTEN, LISTEN, LISTEN
 - Pay close attention to operator instruction
 - Don't call if you can't hear
- Optimize your equipment
 - Check antennas and other station components and adjust if needed for lowest possible SWR – EVERY WATT COUNTS!
- Turn volume down on rig
- Utilize dual-receive if your rig has that capability
 - Monitor pile freq looking for operator tendencies
- Be aware of possible LP openings
- Monitor packet cluster for unexpected openings
 - But ALWAYS verify anything you see on the cluster by listening
- Pileups will be HUGE, especially early in the DXpedition
 - If your station is 100W and dipole, better chances at success after 1st week
- Be a considerate operator and follow DX Code of Conduct
 - <http://dx-code.org/english.html>

FINAL Key To Working FT5ZM

- Exercise **PATIENCE**...MURPHY is present on ALL DXpeditions!
 - WX causes delay in safe landing for hours...hours turn into a day or more
 - Top Band operator gets sick...misses scheduled shift...no 160m that night
 - 2-hour QRX (when going to 5's) to reroute main power cable causing QRN
 - Rain starts...shelter leaks...40m amp shorts out...just as you began to copy
 - High SWR on 12m yagi @ pileup start...wrong driven element installed
 - Generator at CW camp keeps tripping...all stations must run barefoot
 - ADIF aggregation app fails on 2nd RTTY station...only 50% Q's show online
 - At midnight SSB camp needs spare rig at CW camp...no night walking
 - At high noon spare rig needs to be returned...escorts required in daylight
 - Switch on 4-SQ receive antenna fails...NA signals fall below noise floor
 - Major Solar Flare strikes...all bands go totally silent (2003 CQWW @ PZ5A)
 - Someone smells smoke...then two smell smoke...and it's not meal time
- So when “strange” things seem to happen, FT5ZM is probably fighting off MURPHY...please be **PATIENT!**

QSLing

Announced QSL Processing Order

- OQRS DIRECT via ClubLog
- DIRECT MAIL via N200
- OQRS bureau via ClubLog
- Regular incoming BUREAU

Consider using OQRS if at all possible – easy and quick. LoTW likely uploaded soon after your donation.

See N200's QSL page for more details

<http://www.sjdxa.org/ft5zm-qsl.htm>

References

- WorldAtlas.Com - <http://www.worldatlas.com/webimage/countrys/islands/indian/amstrdam.htm>
- Wikipedia - http://en.wikipedia.org/wiki/%C3%8Ele_Amsterdam
- FT5ZM Web Site - <http://www.amsterdamdx.org/>
- DX Magazine - <http://www.dxpub.net/DX-Magazine.html>
- Braveheart info - <http://www.braveheart.pn/>
- DX Code of Conduct - <http://dx-code.org/english.html>
- French Colonies – St. Paul & Amsterdam Is. - http://www.discoverfrance.net/Colonies/St-Paul_Amsterdam2.shtml

QUESTIONS & THANK YOU



DX IS

