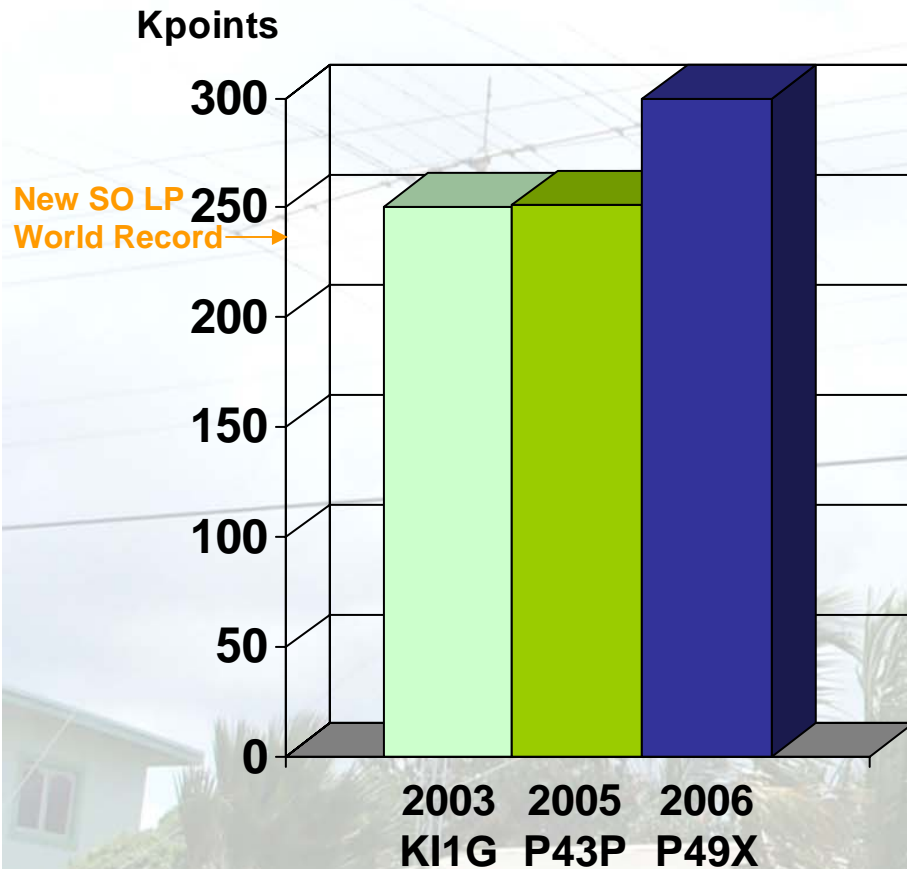


P49X

2006 ARRL RTTY Round-Up

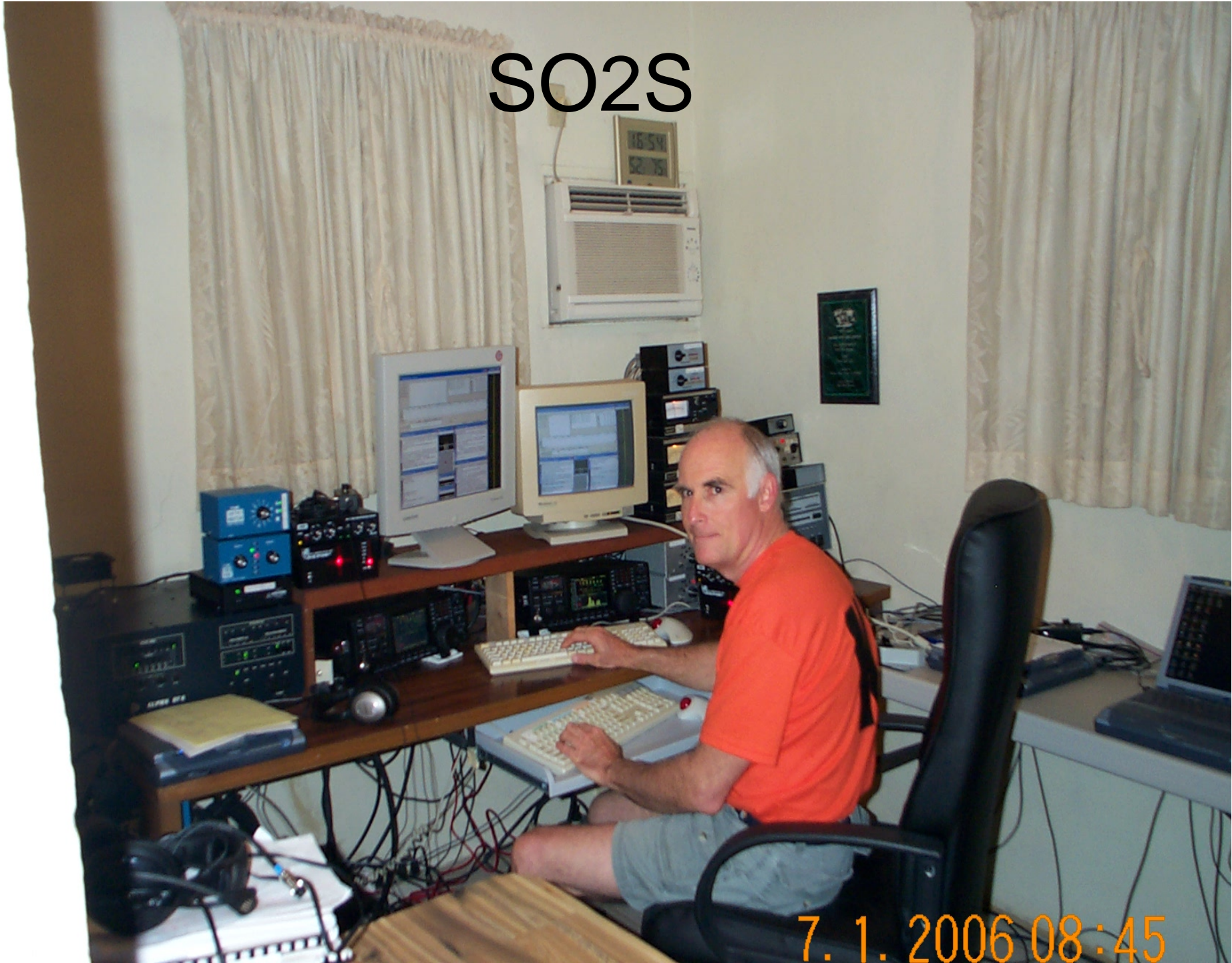
Results

RTTY RU SO HP World Records



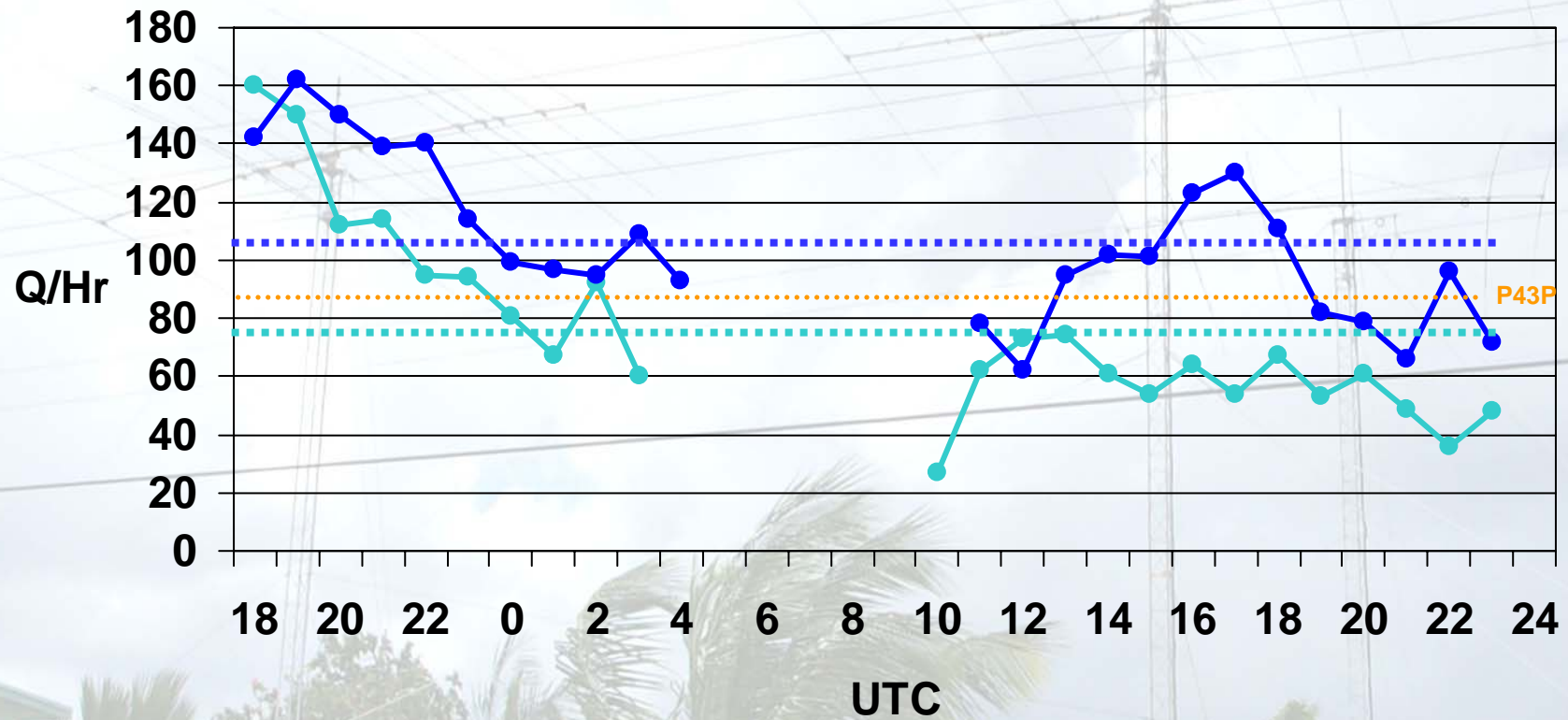
- 2455 QSOs, 122 multipliers
- 299,510 points: new SO HP world record
- 20% over prior record
- (new SO LP world record)

SO2S



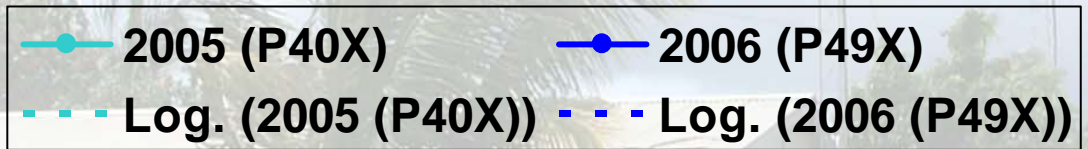
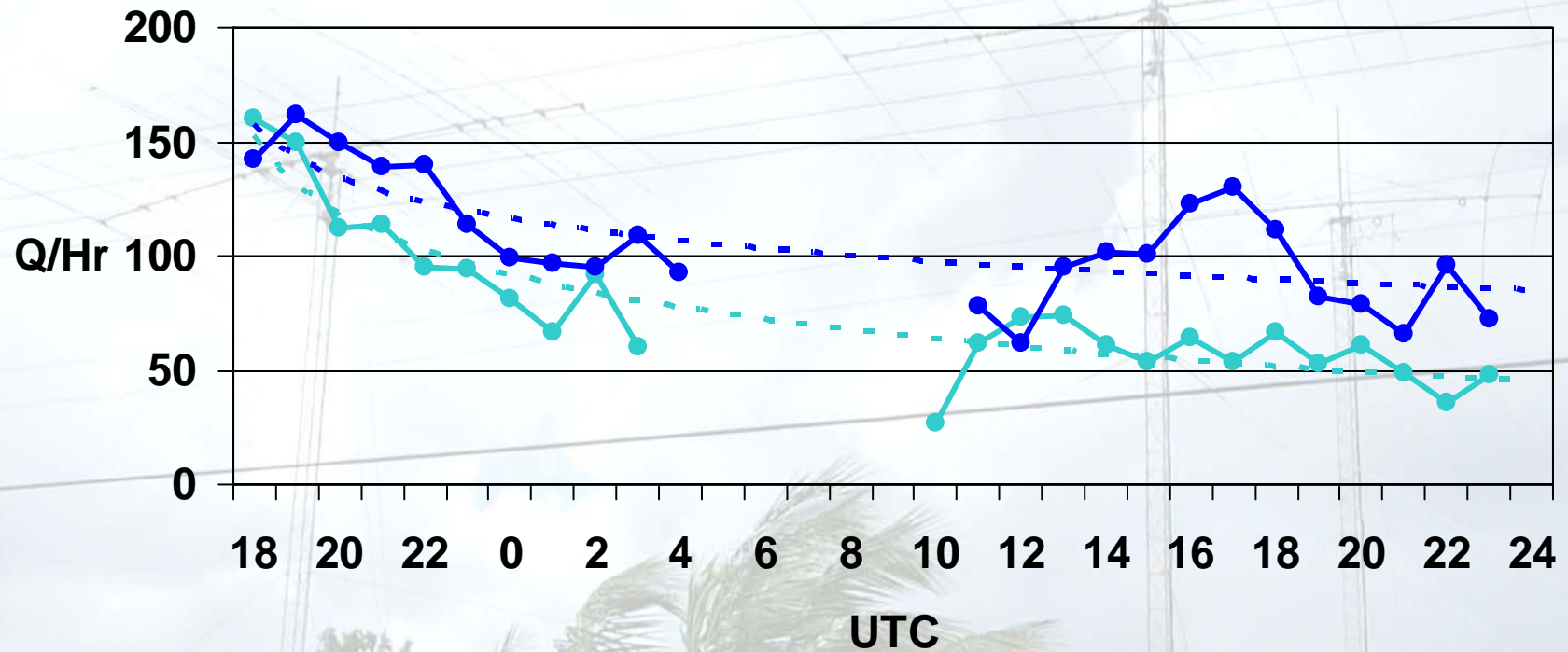
7.1.2006 08:45

Hourly Rate



—●— 2005 (P40X) —●— 2005 (P43P) —●— 2006 (P49X)

Hourly Rate Trend Line



Log Analysis

- 1512 unique call signs out of 2541 QSOs
- 164 stations worked P49X on 4 bands
- 86 QSOs lost in log check
- 122 multipliers
 - KI1G had 131
 - 16 missed from ARRL logs received:
 - Europe: ES, EU, IS0, LX, UN
 - Asia: 4X, HZ, DU, VR, UA9
 - Caribbean: 8P, PZ5
 - Central America: HP
 - Africa: CN, VQ9
 - Oceania: ZL

Aruba

- 15 miles north of YV
- 19 miles long; 6 wide
- 100,000 residents
- Desert geography
- Beautiful beaches
- South of hurricanes
- In Dutch Kingdom
- Western democracy
- US-friendly



Aruba Hams

- 50 Local Hams
 - Contesters: P43P, P43E, P43JB ...
 - Others: P43A, P43C, P43MB ...
- Visitors: P40E, P40G, P40K, P40W, P49V, P49Y, P40L, P49X ... nearly 100 P40's and 10 P49's
- AARC meets first Wednesday each month
 - P43ARC; www.qsl.net/aarc

Aruba Call Signs

- P43: permanent resident (one year renew)
P41: special resident (30 days)
- /P4: visitor (one year)
- P40: special visitor call sign (30 days)
- P49: permanent visitor (one year renew)

2005 Round-Up

- Same first two-hour rate as 2006
- Ahead of P43P for about 4 hours
 - Rate dropped much faster
 - 15% behind P43P at the end
- Many complaints ... “P40X has no ears”
- Beverages unusable

2005 Round-Up Critique

- RX-limited
 - Beverage RFI from 2nd transmitter
 - Poor RX audio quality?
- No self-spotting on 2nd transmitter
- Another major P4 operation (P43P)
- P43P location/antennas superior?

Mission Unknown

- Passion to try again in 2006; “do better”
- “No holds barred” RTTY RX chain ... eBay:
 - NIR-12 noise filters
 - DXP-38 TNCs
 - PCMCIA quad RS-232 cards
 - W2IHY iBoxes
 - HP 510 wireless laptops
- Optimized message buffers
- Propagation forecast & operating plan
- 5-day on-site shakedown

5-Day Shakedown

- High quality RTTY RX chain
- Optimized Beverages
- Computer networking
- Inter-station RFI
- Optimized WriteLog
- Practice

Antennas

5-el 6m

4-el/4-el 15/10m

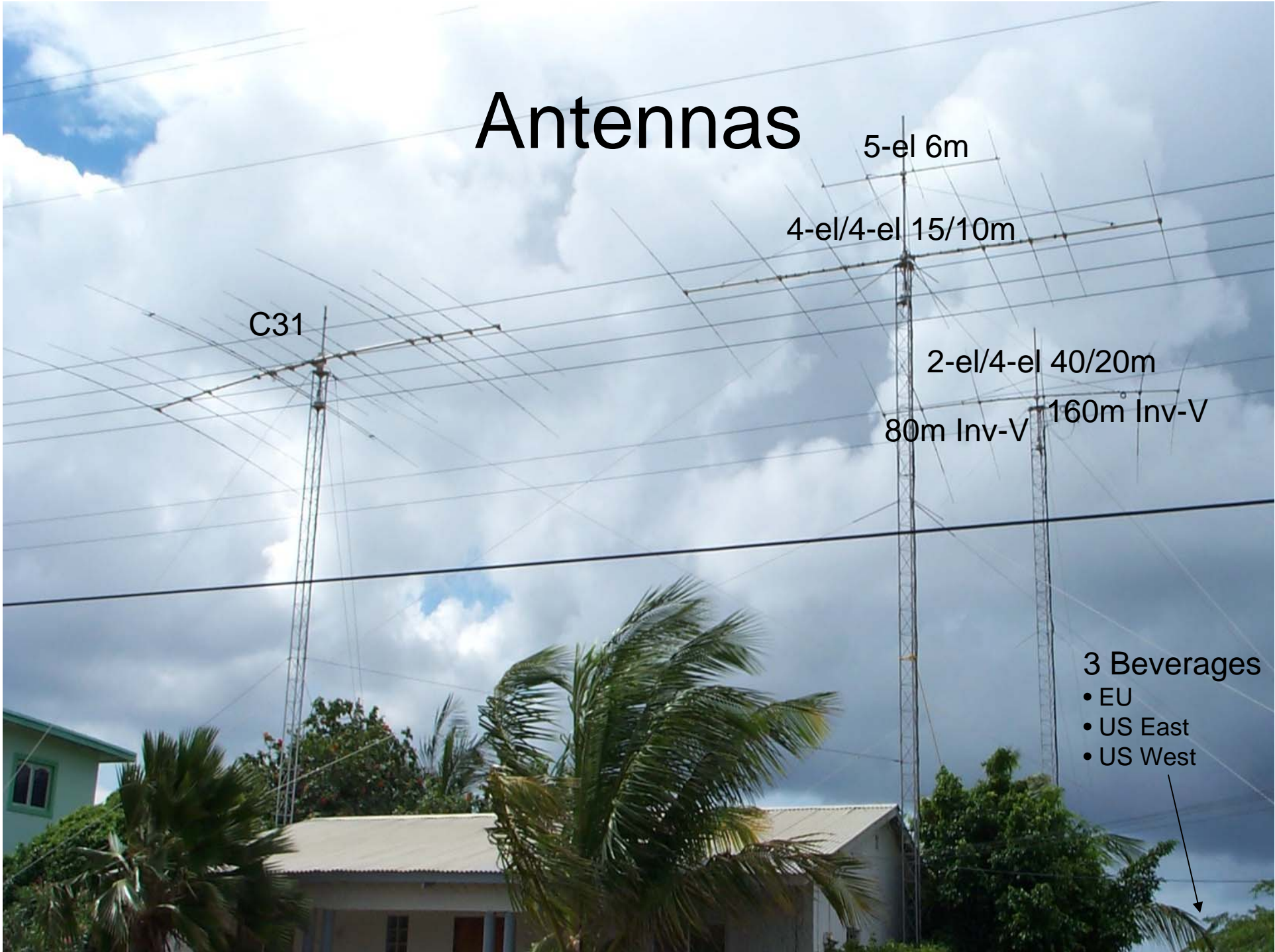
C31

2-el/4-el 40/20m

80m Inv-V 160m Inv-V

3 Beverages

- EU
- US East
- US West



Radio Equipment

- 2 ICOM 756Pro2s
- Alpha 87A, 89
- 2 ICE-419A band pass filters
- W2VJN coax stubs
- 2 Top-Ten band decoders
- Array Solutions Six-Pak & Stack Match
- Dunestar band pass filter for Beverages
- AMECO pre-amp for Beverages

RTTY/Computer Equipment

- 3 HP OmniBook 510 wireless laptops
 - networked multi-2 style (3rd spare/email)
- Socket Quad Serial I/O PCMCIA cards
- 2 Hal DXP-38 TNCs
- 2 W2IHY iBoxes
- 2 JPS NIR-12 DSP noise filters
- Homebrew FSK cables
- WriteLog 10.55D & MMTTY 1.65D

Station Setup

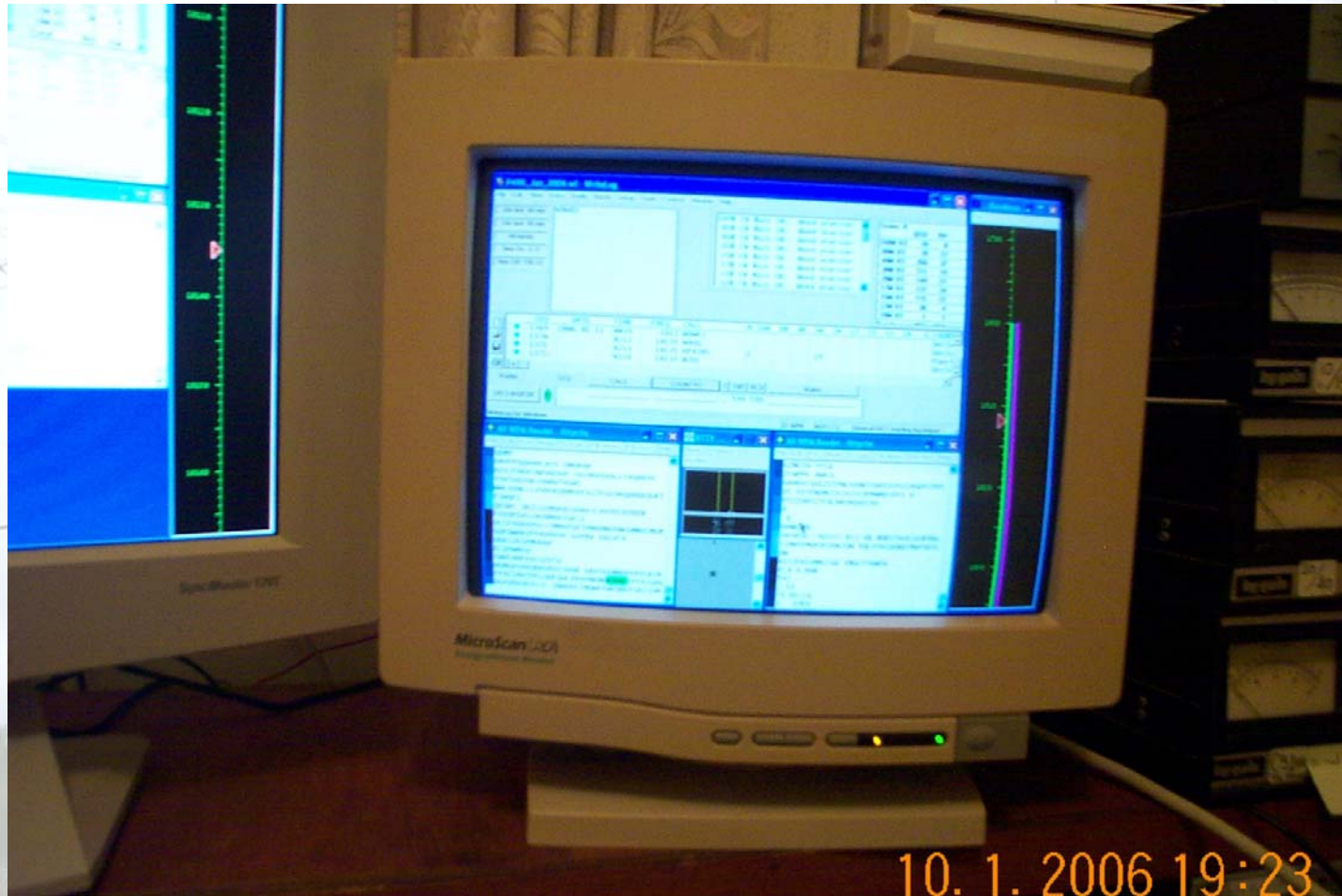


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WriteLog Configuration

- SO2S ala Multi-Two setup
 - Lockout “Last One Wins”
- Stateful Enter key, ‘Insert’, ‘+’
- QSL/Next message buffer
- “PSE 14081” message buffer
- Super Check Partial with AA5AU database
- ADI pre-fill database from prior logs

WriteLog Screen Layout



Message Buffers

CW/RTTY/SSB Memory Setup

F2:	%RCQ RU DE P49X P49X CQ %0%E	Browse...
F3:	DE P49X %E	OK
F4:	DE P49X P49X %E	Cancel
F5:	%R%C 599 %N3 %N3 %E	Help
F6:	%RTU DE P49X QRZ? %0%E	<input checked="" type="radio"/> Normal keys
F7:	%RPSE 14084 %E	<input type="radio"/> Shifted keys
F8:	%R&P1 TU NOW %C 599 %N3 %N3 %C %E	<input type="radio"/> SSB
F9:	%RQRZ? DE P49X %E	<input type="radio"/> Shifted SSB
F10	%R?AGN? %E	
F1&F11:	%R%N3 %N3 %N3 %N3 %E	

- CQ, Exchg, QSL/QRZ
- QSL/Next
- Repeats
- “PSE 21083”
 - WriteLog feature

CW/RTTY/SSB Memory Setup

F2:	%RCQ CQ RU DE P49X P49X P49X CQ %0%E	Browse...
F3:	%R%C %E	OK
F4:	%RUP1 %E	Cancel
F5:	%R%C 599 %N3 %N3 DE P49X %E	Help
F6:	%RKE DE P49X QRZ? %0%E	<input type="radio"/> Normal keys
F7:	%RQSL WOYK WOYK WOYK %E	<input checked="" type="radio"/> Shifted keys
F8:	%R&P1 KB NOW %C 599 %N3 %N3 %C %E	<input type="radio"/> SSB
F9:	%RCALL? CALL? %E	<input type="radio"/> Shifted SSB
F10	%RQTH? QTH? %E	
F1&F11:	%RNR? NR? %E	

QSY Message

- Old way

- F7: %RPSE 14083 %E → *PSE 14083*

- WriteLog 10.60

- F7: %RPSE %Z2 %E → *PSE 14083 KHZ*

- F8: %RPSE %Z1 %E → *PSE 21096 KHZ*

QSY Message, con'd

- WriteLog 10.61 Beta

- F7: %RPSE %Z2 %E → *PSE 14083 KHZ*

- F8: %RPSE %Z1 %E → *PSE 21096 KHZ*

and

- Radio A, F7: %RPSE %ZB1 %E → *PSE 14083 KHZ*

- Radio B, F7: %RPSE %ZA1 %E → *PSE 21096 KHZ*

QSY Message, con'd

- Two Further Improvements:
 - Drop '*KHZ*'
 - Provide a third syntax alternative:
 - F7: %RPSE %Z %E → *PSE 14083* or *PSE 21096*
 - Grabs the frequency of the “other” radio, assuming only Radios 1 & 2 are connected to the same computer.

Lessons Learned

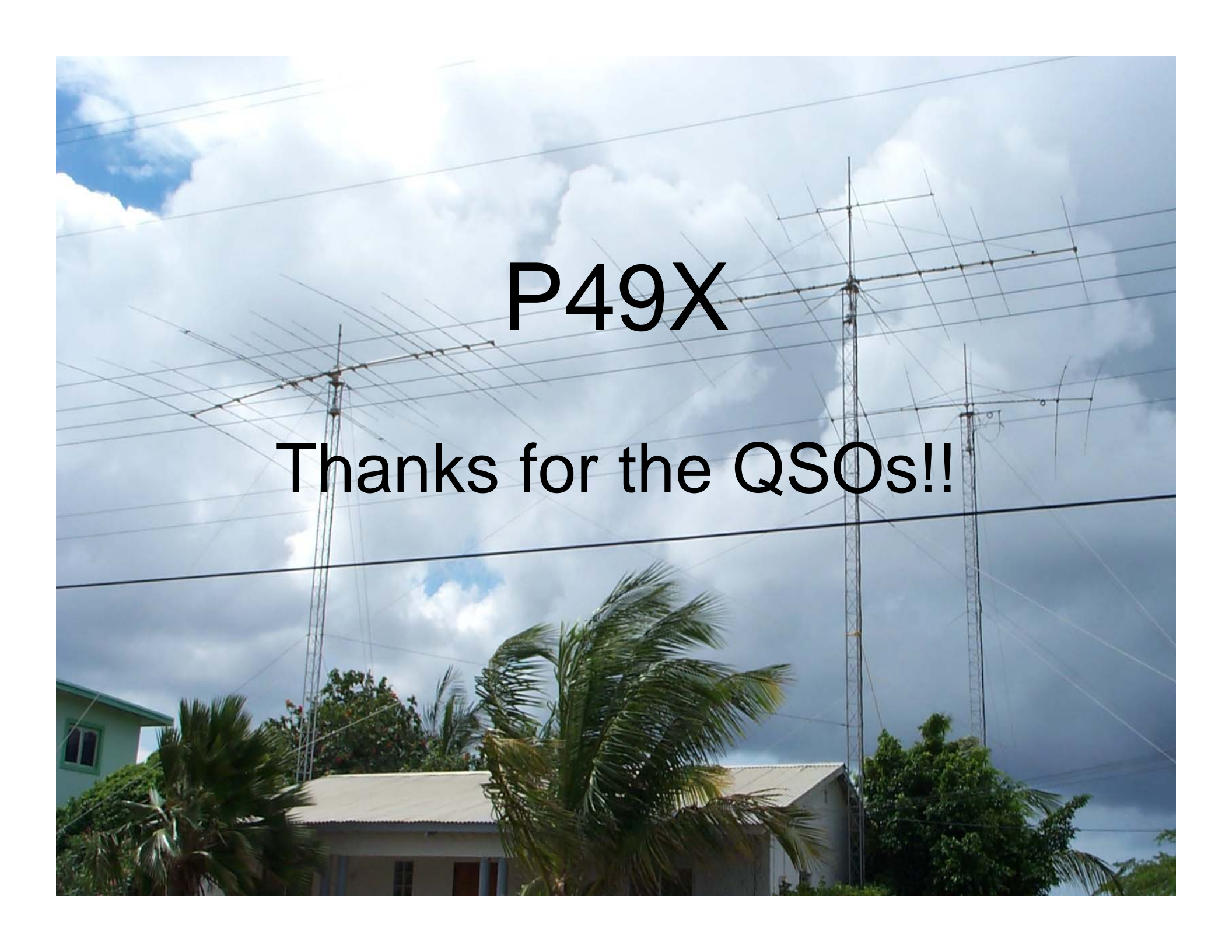
- No compromise RTTY chain
- Optimized SO2S
- ICOM 756Pro2
- Need more multipliers
- Practice!
- Two run-bands for 24 hours
- Lots of stations calling
- SO is a bit of a myth

Success Factors

- Great location
- High quality station
- Single P4
- Excellent propagation
- Increasing number of RTTY contesters
- Planning, preparation, practice
- Clear run frequencies
- Luck!

P49X in 2007?

- ARRL RTTY RU in January
 - Propagation iffy; 10 meters doubtful
 - Multi-Op, but unfavorable bandchange rule
 - Would like to do RU from home sometime
- CQWW WPX in February
- CQWW?



P49X

Thanks for the QSOs!!