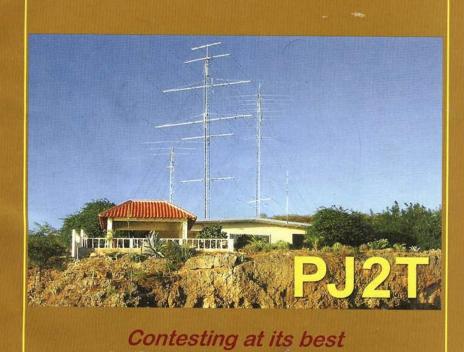




In this issue:
PJ2T SUPER STATION
2010 Most Wanted Survey
DX Conventions in September
Visiting the Southern Appalachian Radio Museum



Who cares?

• Active contester for 37 years.

• Active contester for 37 years (calls used: K8ND, W8LT, FG7AR/FS7, VP2E, VP2EV, VP2EEV, PJ2T, PJ2/K8ND).

- Active contester for 37 years (calls used: K8ND, W8LT, FG7AR/FS7, VP2E, VP2EV, VP2EEV, PJ2T, PJ2/K8ND).
- Currently, Station Manager of the Caribbean Contesting Consortium (CCC), which built, owns, and operates the Signal Point Station, PJ2T.





- Founded in 1997, after contest DXpeditions to VP5VW, VP5FOC. Bag-drag contest CCC DXpeditions then were done to VP5FXB, VP5CW, PJ2C, and KP2F.
- In 2000, John Thompson, W1BIH/PJ9JT was attempting to sell his house on Curacao, site of the many contest successes of PJ9JT and the record-setting CQWW Multi-Multi operations of Team Finland PJ9W in the '90s.





PJ9JT - CQWW CW 1974 K4GKD, W1TX(sk), W3LPL, WA1STO (K1STO), WA1STN (K1TN), PJ9JT /W1BIH, W1GNC (K0IO)

The Signal Point house was purchased in 2000. CCC began the process of fixing up the house and planning the contest station.







Major tower and station work took place in 2001. 6000 pounds of antennas, feedlines and towers were shipped in a cargo container in April 2001 and installed over the Summer.

















- CCC is an ARRL Affiliated Club.
- Membership is currently 21 members.
- New members are added by invitation. To be considered, a potential member must operate one of the major contests with us.
- Club calls are PJ2T, KP2F, and W0DX.
- "Dedicated to fun, international friendship, and advancement of the contesting art through superior operating technique and maximum application of technology."



Most CCC members also opt to support the local Curacao Amateur Radio community by joining VERONA, the national Amateur Radio organization of the Netherlands Antilles.



CCC Annual Meeting is held at Crowne Plaza during Dayton Hamvention.

CCC Members (September 2010)

President	NOYY	Rick Heinrich
Vice President	K8LEE	Wayne McKenzie
Sec/Treas	*W8TK	Tom Kravec
Director	W8AV	Goose Steingass
Director	*W0CG/	PJ2DX Geoff Howard
Director	*WA9S	Keith Wishmeier
Honorary Director	WODX	Bob Denniston (sk)

(Founding Members*)

N1ZZ	Dan Gravereaux
NP2L	Mal Preston
K2PLF	Marty Green
N4QQ	John Shew
N4RV	Jack Reichart
DL6LAU	Carsten Esch
K8ND	Jeff Maass
N8NR	Bob Kuhnle
W8WTS	Jim Galm
W9JUV	Joe Schroeder
K9SG	Gary Stouder
*W9VA	Bill Smith
*WI9WI	Jim Fitzpatrick
WB9Z	Jerry Rosalius
*WONB	Jim Livengood

CURACAO Netherlands Antilles





Curacao, Netherlands Antilles

- Part of the "ABC Islands":
 Aruba (P4)
 Bonaire (PJ4)
 Curacao (PJ2)
- Size: 37 Miles by 9 Miles
- Population 170,000
- Languages: Papiamento,
 Dutch, English
- Hato Airport has 11,000 foot long runway
- Has one of the largest ports in the Caribbean, with ship repair facilities



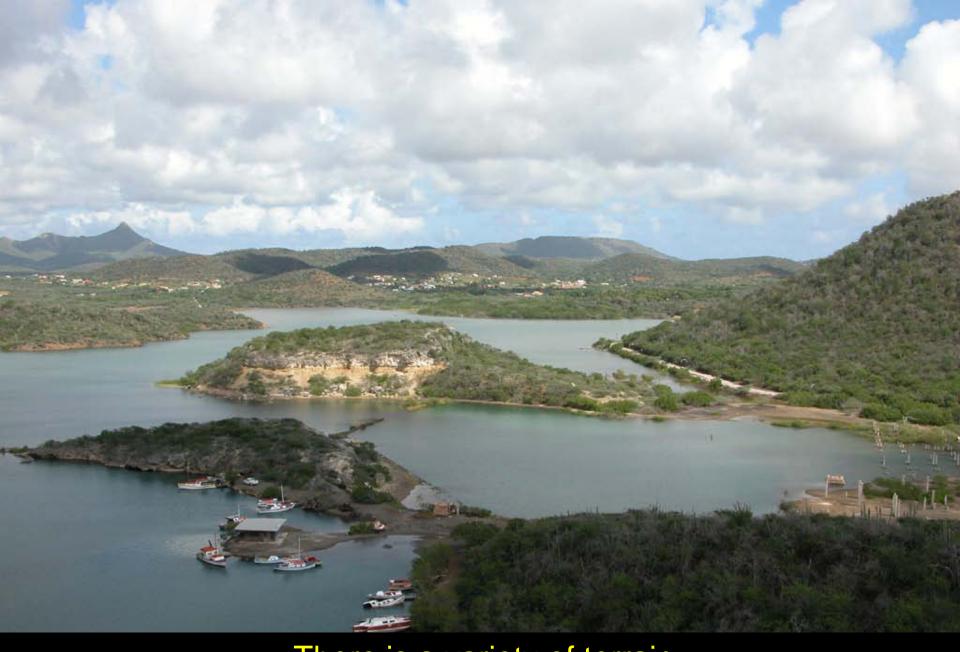








Willemstad is a regular stop for cruise ships.



There is a variety of terrain Sheltered inlet (Santa Marta Bay, near to PJ2T)...



Rocky shore...



Coral plain...



Beaches...



Beaches...



Beaches...



Some wildlife...Iguana (4-feet long)



Troupiale...



Caribbean Parakeet...



Blue-tailed Emerald Hummingbird



If it's a green plant, it wants to make you bleed!



If it's a green plant, it wants to make you bleed!



If it's a green plant, it wants to make you bleed!



If it's a green plant, it wants to make you bleed!

SIGNAL POINT



Signal Point viewed from the former Sunset Waters Beach Resort restaurant. Towers are (L-R): 100-foot European tower, 54-foot WARC tower, and 80-foot USA/JA tower.



Signal Point is the house in the foreground left. It sits on a ½-acre lot (200x100 feet) on a bluff 37 feet above the water. This photo looks toward far northern Europe.



Another view, looking roughly in the direction of Central Africa.

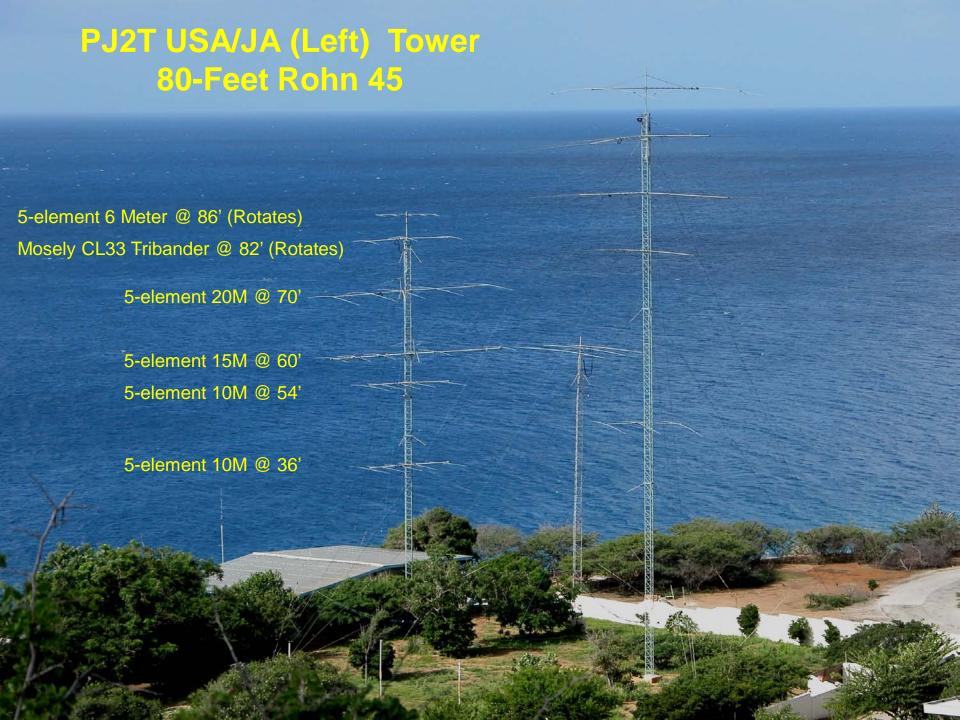


A recent photo, looking roughly South towards Venezuela.

PJ2T TOWERS & ANTENNAS



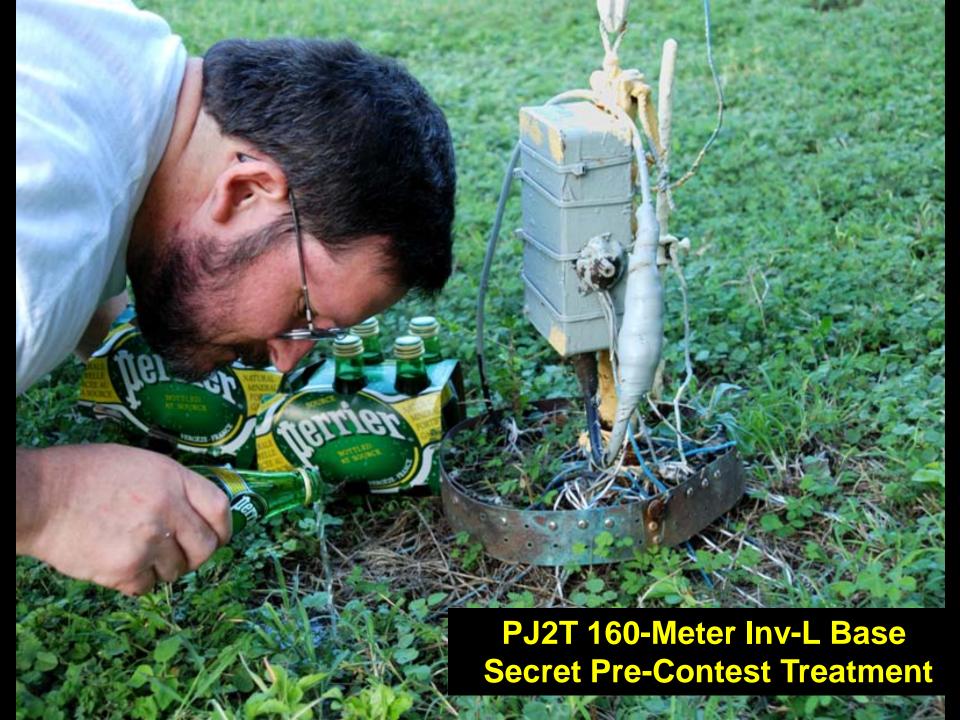


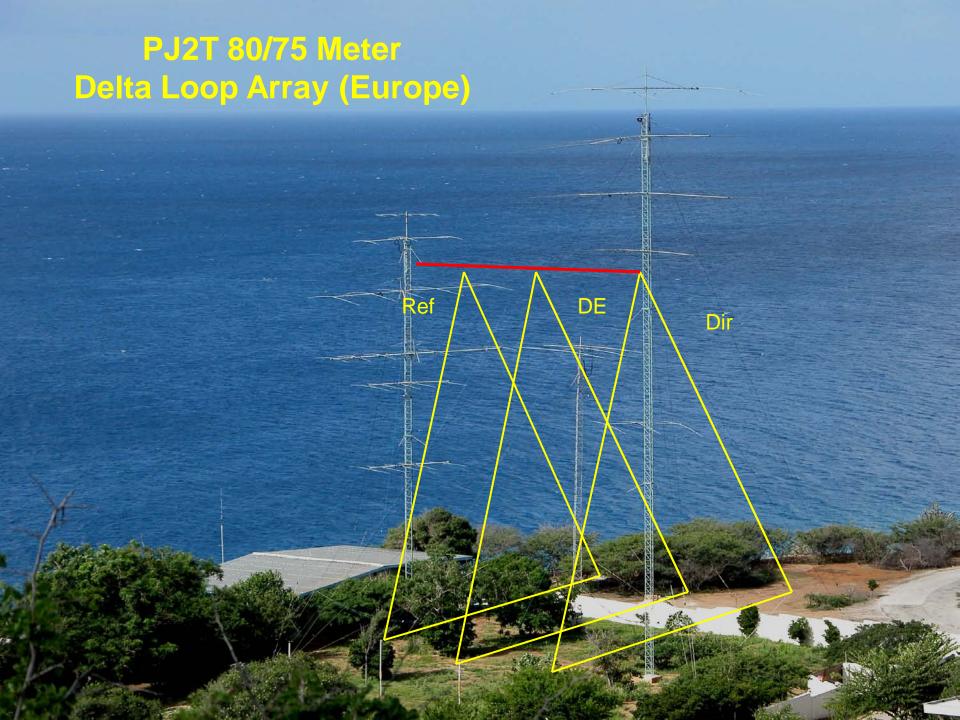






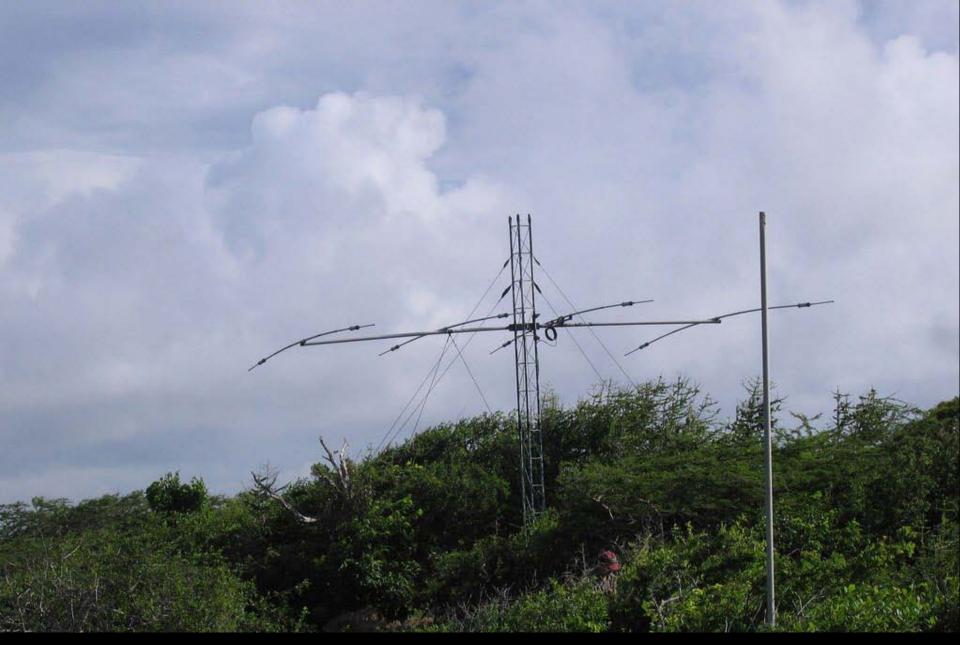








Remember the obstruction between PJ2T and Europe?



PJ2T Ridge Tower – On Top of 230-Foot Ridgeline



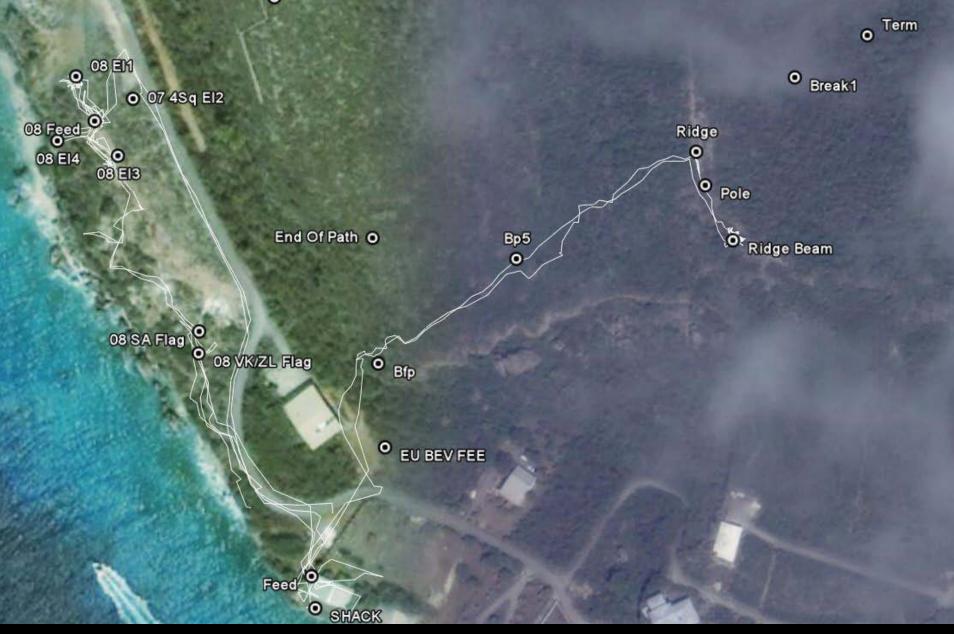
PJ2T Ridge Tribander – Fixed Toward Europe Fed with 7/8-inch heliax

PJ2T Beverages

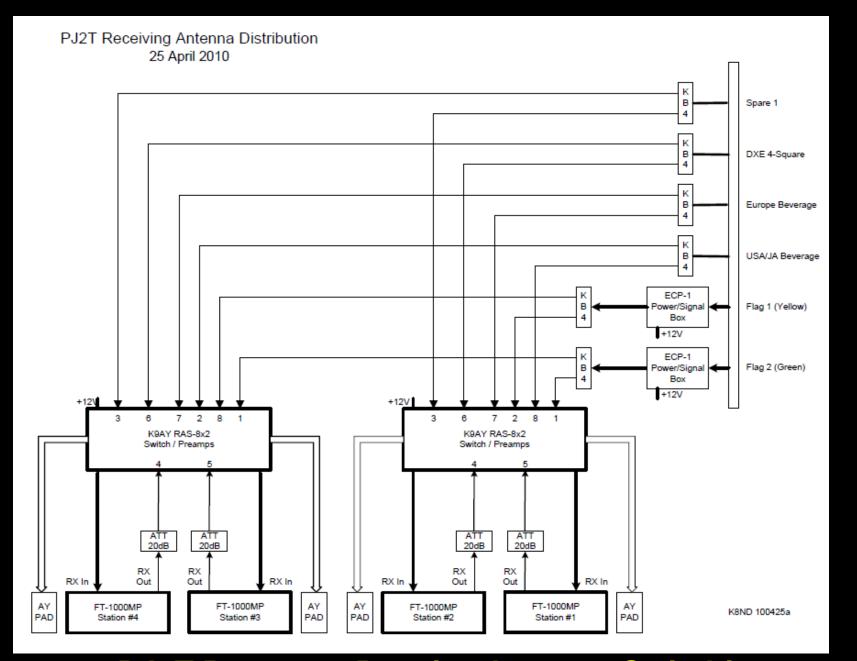
Black + US/JA Pink = Europe



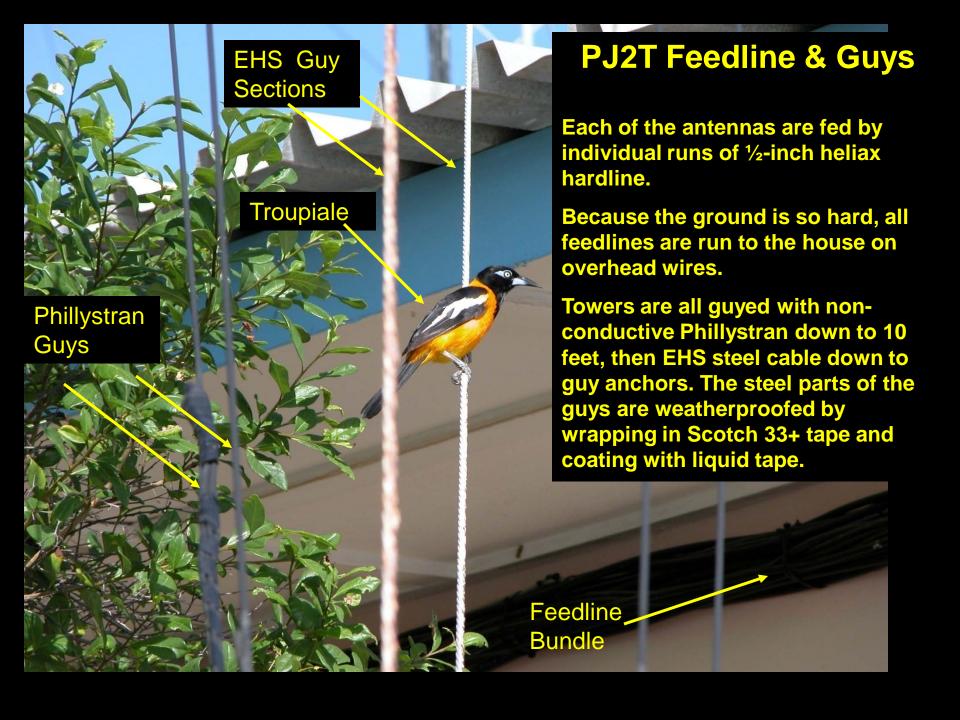
PJ2T Beverage Receiving Antennas



PJ2T Receive Antenna Locations



PJ2T Beverage Receive Antenna Switching





PJ2T Feedline Entry

All of the antenna feedlines pass through the wall under cover of the porch area.

The greenish fat strap at the lower right is a ground strap, which is tied into the house ground.



PJ2T Feedline Bulkhead

Each antenna is passed through the wall to this connector bulkhead.



PJ2T Antenna Routing

Each antenna is switched from this panel (or the supplementary switches shown on the bulkhead) to Station 1, 2, or 3, where they may be switched again to another station. Antennas can be routed to any station without re-cabling station.



PJ2T Antenna Selection / Routing, Station 2

Shown in "contest configuration", with WARC antennas replaced by additional HF monobanders. Multiple antennas on a band are selected with WX0B StackMaster boxes on the desk.



PJ2T Antenna Selection / Routing, Station 3



PJ2T Cables Dressed, Station 1

This shows how the many, many feedlines are not laying on the floor, but are affixed under the back of the operating tables, safe from feet and mops. Computer at each station is on the floor.

SIGNAL POINT HOUSE



PJ2T Common Room

The house consists of a large common room (which includes the kitchen, station, and a sitting area), and two bedrooms. This is looking towards the stations.



PJ2T Kitchen

Station is to the left, bedrooms on either side of kitchen. This is a very old photo of the kitchen!







PJ2T Bedrooms & Sitting Area

Two double beds, two queen. The bedrooms are air conditions, the station is <u>not!</u> Using the sitting area during CQWW CW is John K4BAI (left) and Leo S50R (right).



This pavilion / porch area was built in 2003-04. It sits on the edge of the 37-foot cliff.



The pavilion / porch area is a popular spot for meals, conversation, reading, and shipwatching.



The pavilion / porch area is a popular spot for enjoying the Caribbean views (looking West)!



Here is Dan PJ2/N1ZZ (West Mountain founder and former owner) operating the Ten Tec Omni VI in the pavilion. Feedline and power for low-power operation are available.



Added in 2006 is the East Sunroom, it's rooftop observation deck, and two porches. The Sunroom contains cable TV, DVD player, and a computer connected to the Internet via ADSL link. Outside, steps lead to the rooftop deck, and a telescope that can be used to stargaze.



Also added during 2006, this new cliff-side "Captain's Deck" (shown still under construction) provides another sitting area. The pavilion is shown in the background, and the tan structure to the right is a planter that also serves as a wall between our house and the neighbor.



Looking from the Captain's Deck. There are community steps a couple of houses East of ours (top center) to allow access to the water for swimming and snorkeling.

SIGNAL POINT - PJ2T STATIONS

PJ2T Stations

- Four (4) full-power Stations are always available.
- Additional station(s) can be installed for contests (up to six full-power stations) and operated simultaneously.
- Networked computers at each station location run Writelog for contest logging.





PJ2T Station 1

Station 1 has access to all antenna switching within arms reach.

Currently, FT-2000 and either AL-1200 or Ten Tec Titan III amplifier are the normal equipment.



PJ2T Station 2 (KU8E Shown Operating)

Station 2 is left of Station 1, looking directly out the front picture window out to sea. During non-contest periods, this is the preferred WARC-band station. Currently FT-2000MP and AL-1200 amplifier.



PJ2T Station 3 – Lowband and Spotting (N8BJQ Shown Operating)

Station 3 is to the left of Station 2, facing the sitting area. The radio is usually an FT-1000MP with a Cary LK-800 amplifier (the amplifier is behind Steve on the Station 2 table). (Station #4 transceiver is shown to the left).



PJ2T Station 4 – Spotting

Station 4 is left of Station 3, facing the sitting area. This station is used infrequently, but it is used for spotting during CQWW Multi-2 operations, and used in Multi-multi operations. Shown are an TS-930 and Alpha 76PA amplifier. Normal for contests are an FT-1000MP and Ten Tec Titan I amplifier.



PJ2T Stations in "Full Contest Mode"!

This photo was taken in the last few minutes of the 2003 CQWW CW Contest. Ops (L-R): W0CG (Station #2), K4BAI (Station #1, obstructed), N8BJQ (observing), K8ND (Station #3 on 160 Meters), K8MFO (observing), and W8WTS (listening to Station #3).

PJ2T CONTEST RESULTS

Signal Point PJ2T Contest Results

ARRL CW DX Contest 8 Times #1 (2002-2009)

ARRL SSB DX Contest 7 Times #1 (2002-2007, 2009)

CQWW CW DX Contest:

1 Time #1

2 Times #2

2 Times #3

CQWW SSB DX Contest

2 Times #1

2 Times #2

2 Times #3

ARRL 160 Meter Contest
3 Times #1 DX (World & South America Records Single-Op K8ND)

CQWW 160 CW Contest
1 Time #2 World Single-Op (K8ND)
2 Times #2 World Multi-Op (K8ND & W8WTS)
1 Time #3 World Multi-Op (K8ND & W8WTS)

Signal Point PJ2T Contest Results

PJ2T is the most-logged callsign in Amateur Radio each year (According to Super Check Partial database creation process)

PJ2T Callsign is used *only* in contests

Currently 421,218 QSOs in Logbook of the World (LotW)

PJ2T EQUIPMENT

PJ2T Radios

Main concerns for equipment are reliability and performance in a contest environment. We've found that the Yaesu FT-1000MP is a great choice, and have recently started switching over to the Yaesu FT-2000.

We currently have the following radios at Signal Point:

- 3 Yaesu FT-2000 Transceivers
- 3 Yaesu FT-1000MP Transceivers, INRAD filters
- 3 Yaesu FT-1000MP Field Transceiver, INRAD filters
- 1 Ten Tec Omni VI, INRAD Filters
- 2 **Icom IC-765**
- 1 Kenwood TS-930
- 1 Kenwood TS-940
- 1 Icom IC-706MK2
- 1 Yaesu FT-211RH 2-Meter FM radio
- 1 Kenwood TS-60 6-Meter Transceiver

PJ2T Amplifiers

Main concerns are reliability in a contest environment. We are migrating towards AL-1200 amplifiers as our *de facto* standard, and the Alphas are now backups.

We currently have the following amplifiers at Signal Point:

```
3 AL-1200 (1 \times 3CX1200A7)
```

- 1 Cary LK-800A (2 x 3CPX800A7)
- 1 Ten Tec Titan I (2 x 3CPX800A7)
- 1 Ten Tec Titan III (2 x 4CX800A)
- 1 Alpha 78 (3 x 8874)
- 1 Alpha 76PA (3 x 8874)
- 1 Alpha 76CA (3 x 8874)

PJ2T Interstation Interference Reduction

- W3NQN bandpass filters are automatically selected by the radio on two stations and inserted manually by the operator on the others two.
- A full set of coaxial stubs are also on-site, and are applied when needed (seldom).
- Proper grounding.
- Ferrite is used for troublesome signal incursions on power, audio and control cables.
- Quality cable and connector installation are used throughout.
- Bencher YA-1 low-pass filters are used at the output of each amplifier.

PJ2T Spares

A serious contest station must prepare for any sort of failure, to allow recovery within the contest period and and continuing while remaining competitive.

We have spares for all the main equipment, including tubes for all amplifiers, replacement rotors (all rebuilt by CATS Rotor Doc), rotor control boxes, computers, computer displays, and W3NQN bandpass filters. We have enough keyers, paddles, and headphones for three stations our

size!



PJ2T Failures

Any station located near to the ocean and in the subtropics must expect and deal with the problems of corrosion from salt and sun. This 2-meter Ringo Ranger finally fell down! We have learned how to prevent this.



PJ2T Failures

Another photo of the 2-meter Ringo Ranger's corrosion. It's since been replaced and properly coated.





PJ2T Rust - Everything rusts.



PJ2T Rust - Everything rusts.



PJ2T Tower Painting

Here's Jerry WB9Z painting the USA/JA tower. It's dirty, hot work in the Caribbean sun! Two-part marine epoxy paint is used on all towers.



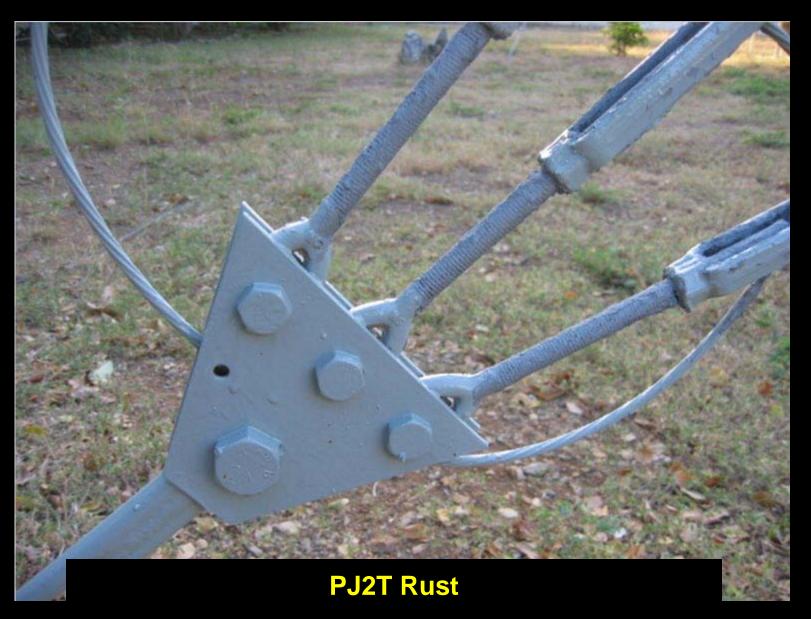
PJ2T Rust

All towers are painted on a 6-8 month cycle. It's getting thick, but the rust "blooms" are getting fewer and smaller!



PJ2T Rust

Fight it with lots and lots of epoxy paint...



Fight it with lots and lots of epoxy paint...



PJ2T Rust

Not initially painting all the guys was a major error, and all steel guys at PJ2T were inspected and replaced in 2006 as a preventive measure. Here are some of the removed pieces. Non-Phillystran guys were painted, hardware replaced, then it was all sealed in Scotch 33+ electrical tape to limit access to the constant salt breeze.



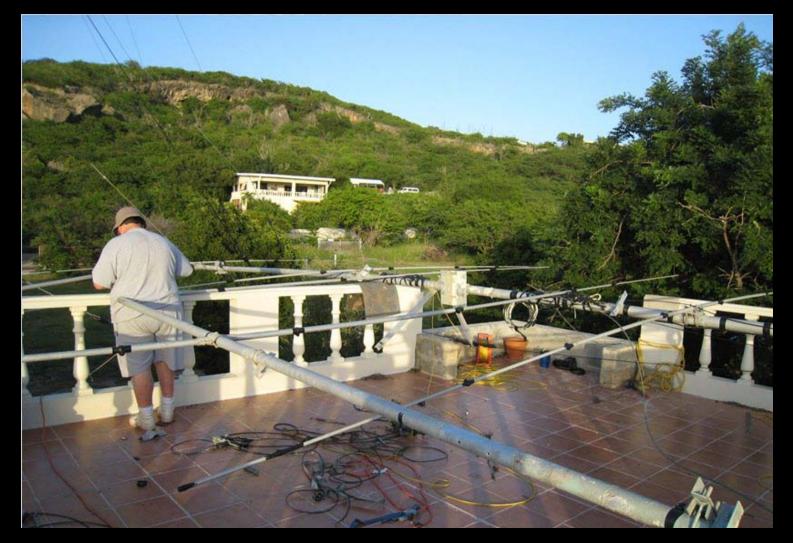
PJ2T Rust

Here I am taking a wire brush to the steel portion of one of the guys. It was later painted with the same 2-part marine paint used on the towers.



2006-2007 Antenna Rebuild

In June 2006, the reflector of the Europe 15m yagi was found on the ground after the 3-inch boom failed!



2006-2007 Antenna Rebuild

A program of rebuilding all antennas started in 2006 and ended in 2007. All yagis (except the 2-element 40) were removed from their tower, cleaned, had all hardware replaced and sealed in electrical tape and liquid sealant. Here are two yagis on the roof patio for work.



2006-2007 Antenna Rebuild

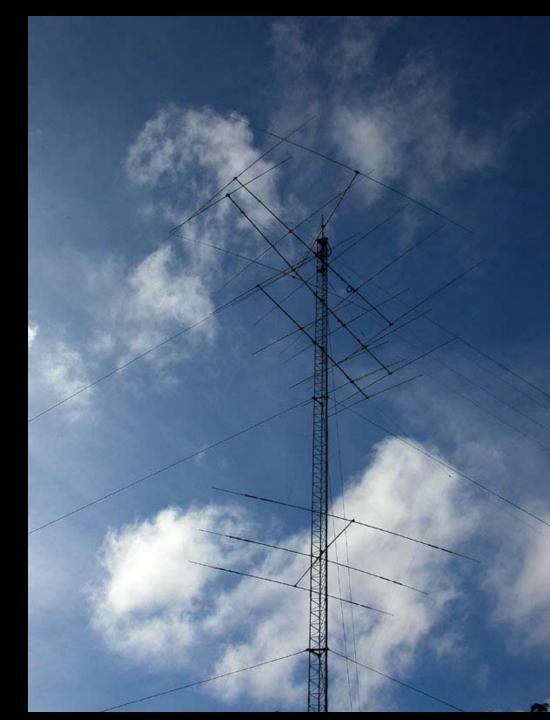
Every joint on each yagi was cleaned and hardware inspected and replaced if corroded. Each joint on elements and boom were wrapped, and the wrap sealed with IR stabilized "liquid tape".

SIGNAL POINT / PJ2T RENTAL

The Signal Point Station is available for rent by licensed Amateurs only.

Non-members can rent the station for periods that don't include the 9 major contests weekends.

Details are on the web site at: www.pj2t.org.







The obligatory Curacao Sunset Photo! On non-contest days, everything stops when sunset happens so everyone can watch!



(Intermission)

PJ2T: Application of New Technology

CW Skimmer

• Developments in Software-Defined Radio (SDR) have led to the exciting *CW Skimmer* application.

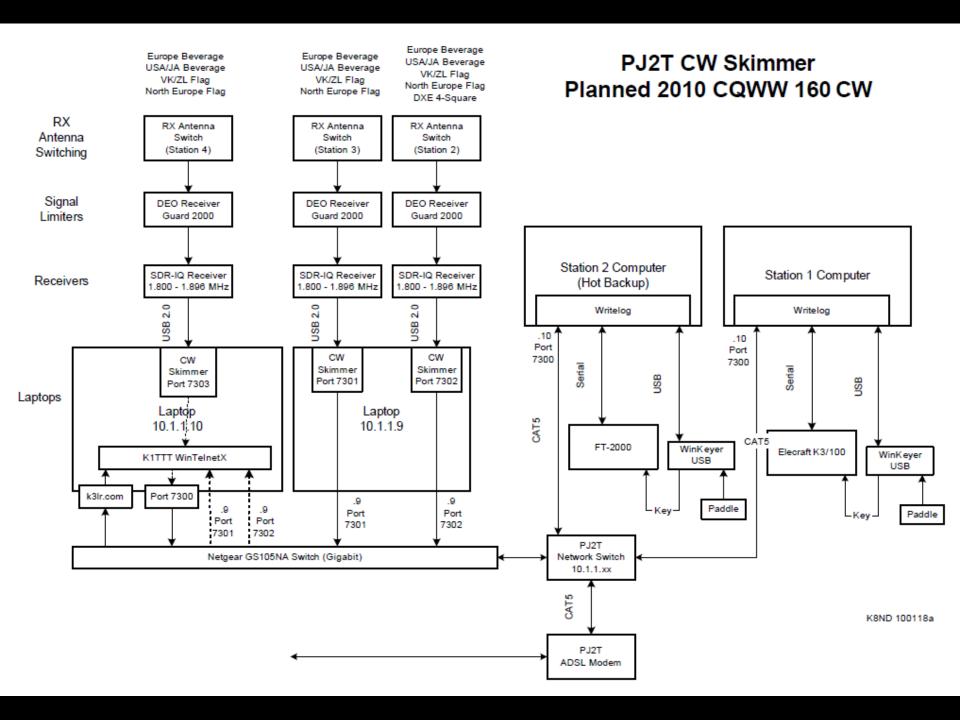
Developed by Alex VE3NEA of Afreet Software.

 Works with any of the popular SDR radios: SDR-IQ, Softrock, QS1R, Perseus, Mercury.

• CW Skimmer can monitor up to 192 kHz of a band and decode all CW signals found there.

•Each spotted callsign can be accessed using telnet, just as if it were a PacketCluster node.

• It can apply Super Check Partial (SCP) filter files to validate spotted callsigns.



2010 CQWW 160 CW Contest

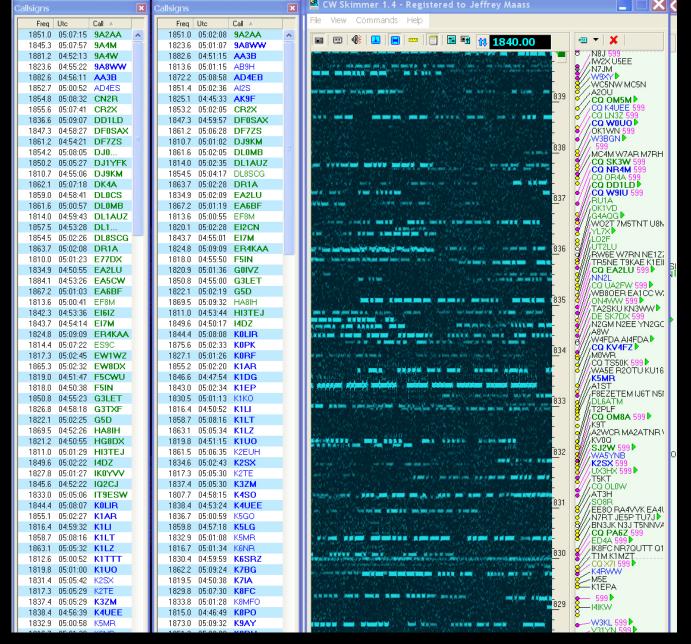


Here Jim W8WTS operates as the CW Skimmers skim

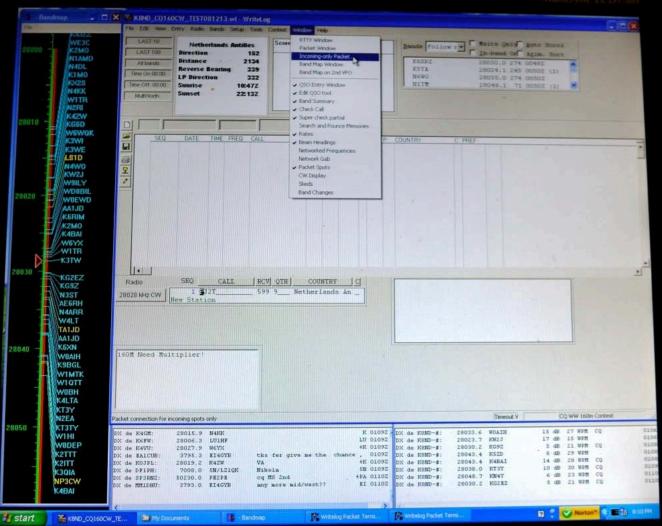
2010 CQWW 160 CW Contest



Three SDR-IQ receivers, each with a different RX antenna listening in a different direction



Two CW Skimmers on one laptop. Note that spots are different in the two bandmaps: they are listening on different Beverages!



A CW Skimmer telnet window in Writelog acts same as a PacketCluster link, adding it's spots to the bandmap.



Phil N8VB developed the SRL QS1R SDR, which can simultaneously receive on up to 192 kHz of seven bands simultaneously!

Alex VE3NEA developed a CW Skimmer Server application.

• Skimmer Server provides CW Skimmers on up to 192 kHz of up to seven bands simultaneously.

Skimmer Server lacks the graphical interface of CW Skimmer.

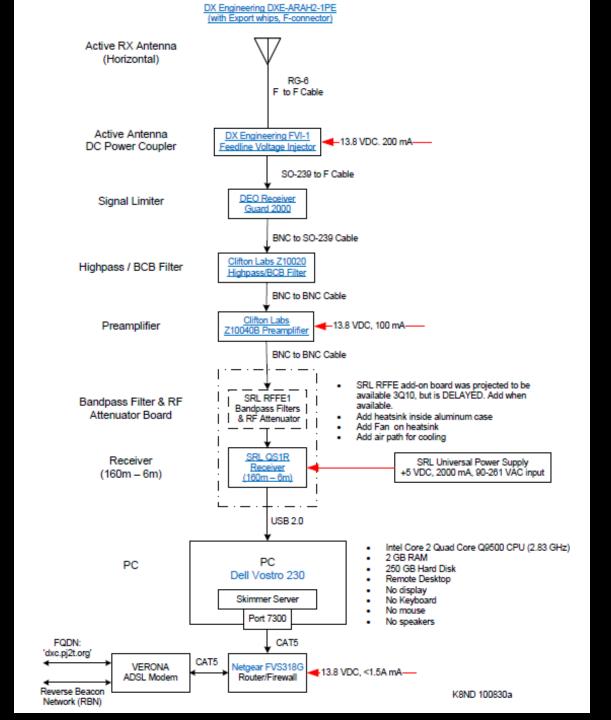
 As with CW Skimmer, spots can be accessed by a user using telnet.

 We are planning to install a PJ2T CW Skimmer Server on Curacao in November!

• It will be installed away from PJ2T, at the VERONA/Red Cross station in Willemstad.

• It will be left running 24/7/365 to spot the six contest bands and one selected WARC band.

• Spots from the PJ2T Skimmer Server will be available to all, via the Reverse Beacon Network or directly via telnet.



• The PJ2T CW Skimmer Server hardware is undergoing test from W8WTS in Shaker Heights Ohio.

Over 100,000 spots in August 2010 from 'W8/PJ2T'!

• Spots from the PJ2T Skimmer Server will be available to all, via the Reverse Beacon Network or directly via telnet.

We will use them in contests, along with the PacketCluster.

welcome main dx spots skimmers downloads about contact us



160m / 80m / 40m / 30m / 20m / 17m / 15m / 12m / 10m / 6m / 2m / world wide / zoom to US / zoom to Europe / zoom to North Atlantic

show/hide my last filters

band: 160m,80m,60m,40m,30m,20m,17m,15m,12m,10m / mode: cw cancel filter selection / search spot by callsign					rows to show: 100 ▼	
de	dx	freq	cq/dx	snr	speed	time
JA4ZRK	RA0QC	18072.2	CQ	6 dB	28 wpm	0723z 10 Sep
ES5PC	LA9LE	7018.7	CQ	35 dB	28 wpm	0723z 10 Sep
ES5PC	G3KEF	14057.0	CQ	4 dB	18 wpm	0723z 10 Sep
SM6KNL	LA9LE	7018.9	CQ	14 dB	28 wpm	0723z 10 Sep
SM6KNL	I6MAT	7028.1	CQ	26 dB	35 wpm	0723z 10 Sep
OL5Q	I6MAT	7027.9	CQ	30 dB	35 wpm	0723z 10 Sep
OE3DIA	I6MAT	7027.9	CQ	10 dB	34 wpm	0723z 10 Sep
JA4ZRK	JA8DEV	7019.1	CQ	17 dB	10 wpm	0723z 10 Sep
TF3Y	GM3HBT	7025.1	CQ	3 dB	21 wpm	0723z 10 Sep
OL5Q	G4AJA	14035.0	CQ	29 dB	19 wpm	0723z 10 Sep
ES5PC	G4AJA	14035.0	CQ	18 dB	18 wpm	0723z 10 Sep
JA4ZRK	JA5TP	7013.1	CQ	23 dB	19 wpm	0723z 10 Sep

options:

show/hide

Donate

skimmers online:

AB1HL - 40m

AB7TB - 40m

DL2CC -

ES5PC - 20m,40m

F5NBU -

GW8IZR - 20m,40m

JA4ZRK - 20m,40m,17m

K1TTT - 40m

K3MM -

K4TD - 40m

K5MQ - 40m

K8ND - 40m

KC0VKN -

N6NC - 40m

NC7J - 40m

OE3DIA - 20m,30m,40m

OL5Q - 20m,30m,40m,15m

S52X - 20m,30m,40m

SM6KNL - 40m

SM7SJR - 30m

TF3Y - 20m,30m,40m,17m

VE2WU -

VK6IA - 20m,30m

W0MOE - 40m

W0MU - 40m

W0QL -

W2MKM - 40m

WB4MAK - 40m

WZ7I - 30m,40m

the reverse beacon network is hosted by:

DXWATCH.COM

- The Reverse Beacon Network collects spots from many CW Skimmers and Skimmer Servers.
- Available at <u>www.reversebeacon.net</u>
- You can use it to test your signal: call CQ and get spotted with your Signal-to-noise measurement!
- We intend to use it, with the PJ2T Skimmer Server, to study propagation in advance of a contest.

(Intermission)

Dissolution of the Netherlands Antilles: 10-10-10!

- After 19 years of stop-and-go planning, the Netherlands Antilles will be dissolved on October 10, 2010.
- Two DXCC Entities will be deleted:

```
PJ2/PJ4 Netherlands Antilles (Curacao, Bonaire)
PJ5 – PJ7 St. Maarten, Saba, St. Eustatius
```

Three or more new DXCC Entities will be created

PJ2 Curacao PJ7 Sint Maarten

PJ4 Bonaire

PJ5 St. Eustatius ("Statia")

PJ6 Saba

Dissolution of the Netherlands Antilles 10-10-10!

 Waiting for ARRL to announce their decision on the number and effective date of the new DXCC Entities

 Major operations are planned for each of the islands starting on October 10

Dissolution of the Netherlands Antilles 10-10-10!

- Our operation from Curacao will be comparatively small 2 to 4 operators October 8 through 18.
- No "sponsorships" or donations.
- Logs will be loaded to Logbook of the World (LotW) daily.
- Major PJ2T contest operations for CQWW SSB and CW will fulfill the need for Curacao for the DXCC deserving.
- NOTE: None of any new DXCC Entities will be rare in the years following 10-10-10! No need to panic!

Dissolution of the Netherlands Antilles 10-10-10!

 All Curacao Amateurs are invited to operate from the PJ2T station

• International attendees for the GAREC emergency communications conference are invited to operate from the PJ2T station.

