

# The Contest JUG



NEWSLETTER OF THE  
NORTHERN CALIFORNIA CONTEST CLUB  
44 TOYON TERRACE  
DANVILLE, CA 94526  
NOVEMBER 1986

NO. 173

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MEMBERSHIP: W6REC, DUANE	W6REC, DUANE, KA6ING, LOUESE
NCCC REPEATER, W6RGG, 147.24 Mhz	

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## XMAS DINNER DEC 13, 1986

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### COMING EVENTS

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NOVEMBER 24 NCCC MEETING- HAYWARD  
NOVEMBER 29-30 CQWW DX CW CONTEST  
DECEMBER 5-7 ARRL 160 METER CW CONTEST  
DECEMBER 13-14 ARRL 10 METER CONTEST  
DECEMBER 13 XMAS DINNER  
JANUARY 23-25 CQWW 160 METER CW CONTEST

### FROM THE PREZ

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Just around the corner is the last weekend of CQWW CW and one of the advantages of being a NCCC member is that stations are available for single, multi-single, and multi-multi. Please contact W7MAP, Chuck, and he can steer you to a station if you need one to operate from. 10 and 15 meters were wide open on the phone contest so CQWW promises to be fun.

Due to band conditions on 75 meters, the Wednesday night net at 8:00 PM is moving back to 147.24 Mhz. The skip is just too long these winter nights for local contacts.

As discussed at the last general and BOD meeting, the NCCC will sponsor a plaque in the 1987 CQWW for the highest DX CLUB SSB/CW SCORE. Since we are the finest contest club in the world, and CQWW brings out contest activity worldwide, it was determined the NCCC should also be recognized as giving out awards as well as winning them!

Since contest scores take so long to get printed after the contest, many times members with big scores get forgotten. Well hats off to the following in the 1985 ARRL DX CONTEST:

K6SIK-1ST PLACE PHONE EAST BAY	K6X0- 1ST PLACE PHONE /CW SCV
KA6BIM-1ST PLACE PHONE/CW SJV	N6QR-1ST PLACE PHONE(?) SAC
W6WB -1ST PLACE CW SAN FRANCISCO	W6BIP(+WA6DJI) -2ND PLACE
MULTI-SINGLE PHONE	

In the 1985 CQWW the following congratulations to :

N6HR-1ST PLACE PHONE 14Mhz CA	K6HNZ-1ST PLACE PHONE 7 Mhz CA
W6RJ-1ST PLACE PHONE/CW 3.5Mhz CA	N6RO-1ST PLACE PHONE MULTI-
A16V (WA6VEF) -1ST PLACE CW CA	MULTI CA
N6GG-1ST PLACE CW 14 Mhz CA	N6QR-1ST PLACE CW 7 Mhz
N6KT ( PJ2FR)- 1ST PLACE PHONE FOR THE WORLD	

Although it seems like a long way off Visalia is the first weekend in April and Dayton is the last weekend in April. Do not get caught off guard with out Hotel reservations( they can always be used by someone else).

As mentioned last month, please take a slide of your station, operator, and antenna in CQWW and mail them along with a short description to KA6ING that will be shown at the XMAS dinner on December 13, 1986.

Hope everyone had fun in SS and is getting ready for the last weekend of CQWW and CU at the next meeting in Hayward, November 24, 1986 at 7:30PM.

**NCCC Annual  
Christmas Dinner  
December 13, 1986  
at Mac's of Los Altos  
325 Main Street,  
Los Altos, Ca, 941-0234**

The NCCC again invites all OM's and XYL's to Join host N6BT, Tom, to celebrate the holiday season with the NCCC! The price is only \$15.00 and the entrees are Roast Sirloin of Beef or Pacific Snapper/Vera Cruz with Rice. All entrees include a mixed green salad with house dressing, potato or rice, vegetable du jour, sherbert, coffee, tea, or milk.

The dinner is at 7:00 PM. Cocktails at 6:00 PM and hors d'oeuvres will be served at the no host bar.

Please R.S.V.P. with KA6ING, (415) 583-5333, with the number in your party and selection of entree. The deadline is December 5 1986. Louese will also donate a bottle of Mum's Champagne and a pair of 400-A to be raffled off at the dinner as well as goodies N6BT will also be giving out.

Come early and chat with the members of the club that cannot make it to the meetings during the week but show up for the social event of the NCCC! Again, please send 3 slides of your station to KA6ING along with a short description that can be read at the dinner- we want everyone to show off.

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Results of February 1986 Phone North American Sprint:

Team Scores: 1. Society of Midwest Contesters- 49,668

2. Texas Dx Society #1-45,429

3. Popguns #1 -40,434

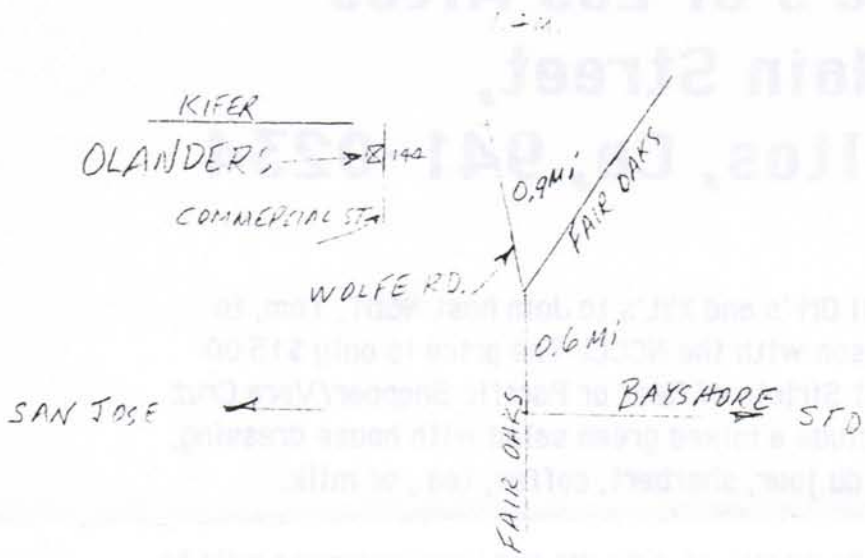
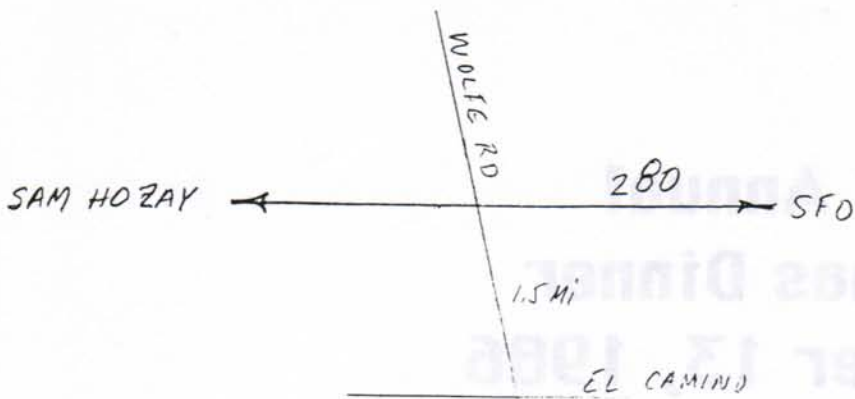
4. NCCC #1-34,807( N6RO, N6BT, W6SZN, K6XO, WB6FCR)

5. NCCC#4-21,075( K6ANP, W6RGG, W6OAT, N6BLN,  
K16T,K6TMB

6. TDXS #2-14,891

7. NCCC#2 -12,960 (K6GSS, K6KLY,WE6G)

8. NCCC#3- 9,023 (K67M, NV67)



There has been a lot of concern and chatter about putting antennas up to stay--without a shower of nuts and pieces. K6ZM and others have modified KLM mechanical design to include replacing stainless steel lockwashers and nuts with Nylok inserts. But there was a problem in finding stainless steel Nylock inserts. Dave Leeson, W6QHS, who knows where you can anything and everything, said go to OLANDER Co. in Sunnyvale Telephone 408 735-1850. It is on 144 Commercial St. as shown on not-to-scale map above.

Here are some prices I paid for stainless steel Nylok:

8/32"	\$14.64 per 100
10/32	\$16.33 per 100
1/4" x 20	\$0.26 each
5/16 x 18	\$0.34 each
6 x 14" self tapping	\$3.20 per 100

## **SHOULD I BUY A TS-940S BY BILL MEYERS K1GQ**

(COPYRIGHT : BILL MEYERS, K1GQ, for the YCCC  
SCUTTLEBUTT AND NATIONAL CONTEST JOURNAL

In a word NO. John (W1FV) and I have just finished comparing the phase noise performance of his TS 940S with my TS-930S, and we determined that the 940 is significantly inferior to the 930. The rumors are true- the noise generated inside the 940 is roughly 10 dB larger than for the 930. Now, you may decide that some other features of the the TS-940S are more important to you than receiver performance, but I still don't want you to buy one, because the 940 transmitter is just as much inferior as the receiver. As a result, you will be trashing all your neighbors on the band- and I'm am one of them. There is nothing I can do to reject the noise that you transmit in my passband, so please don't!

I don't think there are any adjustments or simple component changes which can improve this state of affairs. The only hope is to convince Kenwood (and all other radio manufactures) that the problem is important enough to redesign their synthesizers . Unfortunately, recent discussions with the Kenwood service people indicate that they will not even admit the problem exists - never mind that their latest and greatest radio is a step backward. ( note that I'm not claiming that the TS-930s has adequate phase noise performance- it doesn't. But as far as I have been able to determine, the 930 has the lowest phase noise of any radio currently in production that is suitable for CW contesting.)

None of the manufactures of amateur gear supply data on phase noise characteristics, yet it is the dominant factor limiting HF and VHF radio performance today. I tend to politely harass Kenwood , and I hope you will do the same.

Here's how John and I measured the phase noise performance - non technical types can stop reading now. Both radios were tested in the CW mode, with the narrow filter position selected and the VBT set at NORMAL. The AGC was position turned off. First, we set the two receivers to show the same audio output level with no signal input, at 14.2 MHz ( using a true RMS voltmeter). Next, I set up a crystal oscillator (which has very low noise sidebands ) to generate a 30 dB over S9 signal at 14.2 MHz (the same signal signal level produced the same S meter reading in both radios).

Then we measured the audio output levels relative to the reference level, every 50 Hz from 5 KHz below the signal to 5 KHz above the signal.

The measurements are surprisingly consistent: they were repeatable within 1 dB and appear to fit smooth curves quite nicely except within 1.5 KHz from the signal. I suspect that apparent compression of the interference level near the signal is caused by nonlinearity - remember that the AGC is OFF, so stages downstream from the filters get whacked with a huge voltage when the signal isn't suppressed by the filter stopband selectivity. The transition to this region is probably established by the response of the first IF filter. My radio has a stock Kenwood filter, while John's has the IRI filter.

The difference in transmitted phase noise will be the same as shown in the figure if the receiver noise floors are the same. I failed to acquire a reliable measurement for the 940, but W2VJN's results suggest that the 940S is a few dB more sensitive than the 930S. This would reduce the difference; however, a quick qualitative test with a 75S-3C monitoring watch transmitter confirmed that the 940 transmits significantly more noise than the 930.

The important point to remember is that because the same noisy oscillators are used in the transmit stage, it is reasonable to assume that the transmitted noise performance is just as bad. If so, it is not enough that I don't use a 940 myself, it is just as important that no one louder than 20 dB over S9 uses one either, or I will hear their transmitter's garbage. It's not easy to separate receiver-generated garbage from transmitted junk, but I'm sure that all of you have experienced problems with stations that aren't unnaturally loud yet do sound unusually trashy.

(Editor's note: Since this article appeared, Kenwood has acknowledged that a problem does exist, and they are taking steps to correct the problem. Even so, the TS-940 is still the finest overall amateur rig on the market at the present time).

1986 CQWW SCORES-Phone

K6KLY - 20 Meters- 640 X 31  
KI6CG - 20 Meters- 1150 X 32 X 76  
W6QHS - 20 Meters- 1173 X 39 X 125  
WC6H (M/S) - 1526 X 121 X 262  
K6XO (M/S) - 800 X 91 X 156  
K6CSL AB - 116 X 44 X 48  
AG6D (M/S) - 500 X? X ?  
WX6M- AB - 800 X 100 X 171  
WB6MZQ - (AB) 220 X 46 X 67  
W6BSY - AB- 619 X 74 X 164  
N6CCL - 354 X 82 X 130  
NB6L (M/S) - 1051 X 107 X 210  
W6BIP (M/S) - 845 X 110 X 243  
K6SIK AB - 316 X 72 X 141  
K6HIH AB - 334 X 71 X 111

N6RO (N6RO, NV6Z, K6TMB, N6BV, NU6S, WA6VEF, N6KT)

160 X 75 X 11 X 17  
80 X 271 X 23 X 49  
40 X 480 X 27 X 66  
20 X 1266 X 37 X 118  
15 X 1824 X 34 X 127  
10 X 619 X 23 X 60

W6GO

80 X 45 X 16 X 27  
40 X 160 X 22 X 45  
20 X 241 X 31 X 70  
15 X 483 X 32 X 78  
10 X 137 X 20 X 46

VP2MU (W7MAP)

20 X 3200 X 36 X 115

SWEEPSTAKES - CW

K6CSL 242 X 63  
N6BT ( WA6VEF) 1095 X 74  
K6XO 150 X 50  
W6SZN 120 X ?  
W6REC 200 X ?  
N6AUV 522 X 71



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# Tales of a First DXpedition

Bob Fabry, N6EK

Mode	Call	Score	160	80	40	20	15	10
CW	N6EK/C6A	1,335,510	114/34	264/45	715/51	808/52	189/31	0/0
Phone	VP5Y	1,852,128	59/26	311/41	374/45	768/49	1299/50	21/7

## CW

Second low-power single-operator DX station worldwide.  
Fifth single-operator DX station worldwide.

## Phone

First single-operator DX station in North America.  
First low-power single-operator DX station worldwide.  
Seventh single-operator DX station worldwide.

In February and March 1986 I made my first DXpedition. I went to the Caribbean where I was one of the top ten single-operator DX stations worldwide in each mode in the ARRL DX Contest. I used low power and only a vertical for an antenna. My success provided quite an experience for a "tiny pistol" like me. I had never before handled pile-ups since my home station runs only 100 watts to a two-element tribander at forty-five feet and a vertical at twenty-five feet. I hope that my story will encourage a few hams to try their first DXpeditions and that it will provide a few laughs for those who already have.

## Picking a Destination

This DXpedition came about because my wife Susan and I had plans to visit my mother in Florida, and thought we might tack on a combination Caribbean vacation and radio operation if we could keep the cost reasonable. The choice of location was based on cost, rarity, ease of becoming licensed and the vacation aspects. Actually, it was based on our perception of what these things would be, which, of course, is another story.

I liked the country of Turks and Caicos as a destination from the beginning. My interest came from its being one of the few countries in that part of the world that I had never worked. I was pleased when the licensing information from the ARRL indicated that licensing was easy. With proper documentation and fees, one could become licensed in a few minutes at an office on the island of Grand Turk.

In picking our destination, we relied heavily on information from previous operators. I looked through the ARRL and CQ WW DX contest results to identify calls from previous operations, obtained names and addresses from the call book, and called information for the phone numbers. I didn't run into a single unlisted number - what does that say about hams? I spent several Saturdays (lowest phone rates!) trying to sort things out. The hams I called were universally friendly and helpful.

My first call was to Kip Edwards, W6SZN, to find out what it was like in Turks and Caicos. Kip operated from Grand Turk in the 1982 CQ WW Phone Contest. I was sorry to hear Kip say he regarded the island of Grand Turk as "the armpit of the Caribbean" and "probably the only place he had ever operated from that he would not go back to."

Subsequent conversations with Gary Ernst, KØGVB, indicated that he and his wife found Providenciales, one of the Caicos Islands, to be a good vacation spot with several resorts and a Club Med. Unfortunately, "Provo," as the island is known, was expensive, and our budget would not support the sixteen or more day stay required if I were to operate both contests from Provo.

Ultimately, we reconciled *my* interest in Turks and Caicos with *our* interest in having a nice vacation by deciding that *we* would go somewhere "nice" first and then *I* would go on to Grand Turk by myself.

For our nice vacation spot, the Bahamas seemed a clear choice. Transportation costs would be minimal and the out islands were relatively inexpensive. We live too close to Nevada for the casinos of Nassau, the capital, to be an attraction.

We chose to stay in Marsh Harbor on the island of Abaco. Marsh Harbor was reported to be a picturesque sleepy little place with no night life. It is the third largest town in the Bahamas, after Nassau and Bimini.

### Local Support

I wanted to establish friendly relations with local hams and also wanted advice from someone who understood both the local situation and the requirements of ham radio as to where to stay. We were uneasy about arriving in a small tourist town without reservations, but reservations seemed to require substantial deposits which might not be refunded should the accommodations prove inappropriate for radio operations.

When I talked to Harry Perrine, KC2RS, about his operation from Turks and Caicos, he mentioned that Robin Laing, VP5GT, was the head of the local radio club. I dialed Robin direct and a short conversation confirmed the ease of licensing and started Robin thinking about where I might stay. Robin also mentioned the intriguing possibility of a one letter contest call such as VP5A instead of the unwieldy N6EK/VP5 call which I would normally use. (Regular VP5 calls are no longer issued to visitors.) The radio club had proposed contest calls to the Minister some time ago, but it was anyone's guess whether or when they would be approved.

I called the telephone company in Nassau where ham licenses are issued to confirm that it was possible to become licensed for the Bahamas in time for the contest. It was arranged that I would send documentation and money right away and my license would be waiting for me in Marsh Harbor in the care of the head of the local telephone office, Mr. Ed Cash.

Ed Cash was also the name of the only ham on the island of Abaco listed in the Callbook. A quick call to Mr. Cash (I tried to keep all the international calls quick!) uncovered the fact that he had given up ham radio many years earlier and was quite amazed that he was still listed in the Callbook. However, he gave me the name and phone number for David Caskey, C6APJ, who was a ham in Marsh Harbor. David and his wife Becky were from the States and were very helpful. They provided information about the Running Light Inn which was only \$30.00 per night and was right on the water. The price was about half of any listed in our guide book. Becky graciously agreed to make the arrangements.

### Equipment

The equipment I took with me was compact enough so that I could travel with only carry-on luggage when I needed to. I carried a Yaesu FT-757 transceiver in a daypack which never left me. The contents of the daypack were arranged so that if my other luggage were lost, I could still operate. I could live without a toothbrush, but I couldn't miss the contest.

The antenna was the "export model" Butternut vertical with their 160 meter coil and radial kit. The "export model" has shorter aluminum tubing which simplifies carrying it. Susan gave me the Butternut for a Christmas present. I spent many hours assembling, tuning, marking, and figuring out how to pack the Butternut. I also arranged to turn the radials into dipoles in case I was unable to mount the vertical. RG-8X coax was cut into three

### The Station Setup.

Stainless steel hose clamps attached the Butternut vertical to a wooden piling at the water's edge. Based on information from Al Crespo, WR6R, I decided to try using no radials at all, just dropping a couple of ten foot long copper wires into the salt water and weighting them down with rocks. I made a few tests and the antenna seemed to get out well, so it was left that way. A small octopus lived in a hole near one of these wires. He seemed to become more active when I operated. We watched him glide gracefully over the empty conch shells on the bottom looking for food.

In order to operate much of the night during the contest without keeping Susan awake, we set up the station in the bathroom. This also allowed certain efficiencies in my operating technique! Our room did not come with a table. I borrowed an old coffee table and propped it up on a couple of drawers from the bureau. It was reasonably stable as long as it was jammed into a corner.

I made only 400 contacts outside the contest from Marsh Harbor. I was spending most of my time playing tourist with Susan. Throughout the trip I had regular schedules with my friend Mike Young, K6MBV. While we were in the Bahamas, he reassured us that our house hadn't been damaged in the big storms that were then battering California, and while I was on Grand Turk, he passed messages back and forth to Susan. It is always fun to hear a familiar fist or voice when away from home.

### The CW Contest

The contest itself is sort of a blur. I slept five hours each night and it took two hours for each breakfast and dinner at the slow restaurant. My best CW rate was 118 QSO's on forty meters during the second hour of the contest. The best bands were forty meters and twenty meters; fifteen meters opened weakly. I checked ten meters many times but never heard a Stateside station. I was frustrated to hear South Americans working the States like mad, however.

Operating on 160 meters was interesting! I had never had a single 160 meter contact before this trip. I started out in awe that I was making any contacts at all. I turned the speed way down on the keyer and sent everything twice in the beginning. After a while I discovered that normal operating was just fine on 160. I laughed at myself when I realized what I had done. Conditions on 160 were good. There was no line noise on the island. The limiting factor was static from distant thundershowers.

The second night I went to 160 for an hour at 0500Z and worked seventy-four stations, including two west coasters, K6DDO and AI7B. The beginning was intense. People had been asking me when I would be on 160 meters and I had told them that hour. When I arrived, everyone descended on me at once and exactly on my frequency. I had a hard time figuring out any calls at all until I had knocked off the ten or so loudest stations. I have a little better idea now how to spread people out in such situations. It will be interesting to see what happens next time!

The low point of the contest also occurred that second night. Susan awoke to find the cute little mouse who lived behind the bureau sharing the bed with her. Susan isn't normally spooked by critters, but it was the final straw at the Running Light Inn. If we could have moved, we would have. Somehow, though, she went back to sleep and I continued to operate.

It didn't seem as if the pile-ups were as high at my end as they always seem when I am at the other end. I assume the low power kept the pile-ups small. Higher power would have helped a lot; my rates for most of the contest were way below my peak rate.

### Turks and Caicos

Susan and I planned to fly from the Bahamas back to Miami where she would board a plane for home and I would fly to Grand Turk. But it seems that flying in the Caribbean is always an adventure and as we arrived at the Marsh Harbor airport, we were told that our flight had been canceled. However, when the ticket agent saw how many people would have taken the flight, she fired up a short wave radio in front of us all and carried on a loud argument with Nassau until some other flight was diverted to pick us up.

There are two inhabited Turks Islands, Grand Turk and Salt Cay. Grand Turk is about five miles long and a mile or two wide; Salt Cay is much smaller. I was met at the airport on Grand Turk by Robin Laing and his wife Sheila (VP5SL). The Laings are from Scotland but have lived on Grand Turk for many years. They are retired from a variety of commercial ventures on the island.

Robin was quick to tell me that the Minister had approved the one letter contest calls just the day before and I would have the call VP5Y for the phone contest.

Sheila and Robin are quite active. They use two meters for keeping in touch during the day. I was sorry I did not bring my two meter gear. Sheila is the control station for a fifteen meter net for yachts coming across from Europe to the Americas. She wakes up at six in the morning each day so she has time to start their emergency generator if the power is off and to copy the weather broadcasts before the net starts at seven. My visit was toward the end of the time for small boats to come across because it would soon be hurricane season. There was only one sailboat checking into the net.

The Laings drove me to the Evans Inn where I was to stay and loaned me a moped for exploring the island. I found that I was the only guest at the inn for most of my stay. My room was clean and modern and the Dutch family that ran the inn was professional. I ate a good breakfast and dinner in the dining room by myself each day, and the service was always quite prompt.

The inn was about a mile and a half from town on top of a hill overlooking the interior bay. My room was on the second floor adjacent to a sun porch with a metal-pipe railing. I attached the vertical antenna to one of the posts of the railing and spread radials to the ground in three directions.

I arrived on a Friday a week before the phone contest started. I operated CW solidly for this week using the call N6EK/VP5 since the VP5Y call was valid only during the contest. I had passed my plans to two US DX bulletins and the Japanese and European bulletins picked up my plans from them. Caribbean islands are much rarer for the Japanese and Europeans than for Stateside stations. I had only weak openings to Japan due to the low sunspot numbers, but Europe was open on one band or another most of the time and there were a lot of people waiting for me both in Europe and the States. I made about 2500 contacts on CW that week, including many on 160 meters. Notable 160 meter contacts included G3SZA and DL1RK as well as west coast stations K6DDO, N6TR/7, W7AM and NJ7M.

One of the high points of the week was talking on CW to my friend Buck Buckley, ZS2RM, in South Africa. Buck and I collect postage stamps and he sends me South African stamps and I send him U. S. stamps. I am not able to work him easily from home, so we had several nice chats. He is still my only South African contact for DXCC and I was pleased to provide Turks and Caicos as a new one for him on CW.

The line voltage was unstable on Grand Turk. As in Marsh Harbor, electricity is produced by a large oil-burning generator. On weekends, they switch to a smaller generator. I measured the line voltage to be as low as 95 volts. The switching power supply for the Yaesu FT-757 didn't seem to mind.

Turks and Caicos has a population of 7000 people spread over several islands. Can you imagine what it would be like if an American town of a similar size had to adopt a complete set of radio laws, issue licenses, and police the licensees? There was a time when Turks and Caicos was known to yachters as a place to stop in and buy an amateur license good

worldwide with no tests and only a small fee. Fortunately, the strong amateur community on Turks and Caicos seems to have been able to stop this practice. Tests are now required, and the only license available to foreigners is a reciprocal license.

### A Little History

Sheila loaned me a 1981 book *Turks Islands Landfall* by H. E. Sadler, a resident of Grand Turk. I spent most of my dinner times reading from this fascinating book. I learned many things.

The two countries I visited were actually one country from 1791 to 1844. Today they each claim the footsteps of Christopher Columbus on October 12, 1492. In fact, Sheila is trying to organize a yacht race and an amateur radio event to commemorate the 500th anniversary in 1992.

The Turks Islands were originally known to the Europeans as the Salt Islands. Amerigo Vespucci stopped by to collect salt as early as 1499. In 1512, Ponce de Leon, the first governor of Puerto Rico, named the Bahamas while he was pursuing the Fountain of Youth. "Bahamas" is the Spanish word for "shallows."

Columbus brought home several articles made by the Lucayan people who inhabited these islands. The Spanish soon realized that the ornamental metal the Lucayans used was gold and sent the Spanish explorer Pinzon to discover its source. The Lucayans panned for gold in the streams of Hispanola and directed the Spanish to these streams. Before long, the Spanish were back to abduct Lucayans to be slaves in the gold extraction operation. The Lucayan culture was eventually completely wiped out, but not before the European sailors copied the Lucayan use of tobacco, snuff, and cotton which the Lucayans made into hammocks and mosquito netting.

The Turks Islands were an important source of salt for both Europe and the United States. Before refrigeration, salt was the main method of preserving food. Salt was obtained from the edge of shallow salt-water ponds by raking it up and putting it in baskets. The salt formed naturally at first, but later diked holding ponds and windmill-driven pumps were used to speed up the formation of salt, much as is done today at the southern end of San Francisco Bay. In a complex arrangement, the merchants of Salem, Massachusetts, (the most important port in the New World at the time!) used the salt from the Salt Islands to cure codfish which was then exported to feed slaves in the Caribbean sugar islands in exchange for sugar and molasses.

The life of a family devoted to raking salt on Salt Cay was the basis for a book, *Dildo Cay*. The book was made into a movie, *Bahama Passage*. I haven't managed to locate either yet.

During the War for Independence in the States, many British Loyalists left for the Bahamas where each family was given 40 acres of Bahamian land. By 1788 the population of the Bahamas was up from 4000 to 10,000 people. In 1844, the Turks Islanders petitioned the British Parliament to become separate from the Bahamas.

The economy of Turks and Caicos is currently somewhat depressed due to the closing of both of its US installations - the rocket tracking station where John Glenn first set foot on dry land after orbiting the earth three times in 1962, and a sonar monitoring site.

One suspects that the economies of both the Bahamas and the Turks and Caicos benefit from drug running at this time. Stories and jokes about drug running were common in both countries, and the American anti-drug forces were fairly obvious in the Bahamas.

Grand Turk has not been a favorite with the tourist set. I could not buy 35mm film and found only one place to buy a t-shirt that said "Turks and Caicos." This is partly because Grand Turk has no protected anchorage for the yachts which seem to be everywhere else in the Caribbean. Recently, the North River has been changed from a small stream into a deep and wide channel to the interior bay. The people of Grand Turks hope this development will increase their tourist business.

### The Phone Contest

I had always been a dyed-in-the-wool CW operator. I was a beginner at phone. I entered two phone contests the previous fall in preparation for this trip and had cornered Gary Caldwell, WA8VEF, at the Northern California Contest Club meeting just before I left and obtained some basic advice from him about frequencies and strategies. When the contest started, I had in mind exactly the rhythm I wanted to keep. Each contact was to be two short transmissions on my part - the first like "kilo six alpha alpha five nine one hundred" and the second my call, "victor papa five yankee," with maybe a "thanks" thrown in if things were slow.

When the contest started, I found that usually one signal would be louder than the rest and would be easy to read. Almost like FM! I was frustrated by stations who gave only part of their call because I then needed three transmissions for the contact. I tried to hear one complete call and come back with it even if it meant ignoring a louder station sending partial call. This strategy worked, and most stations sent full calls.

I can still feel the excitement of the phone pile-ups. I had heard DX stations talking fast during contests, and I had wondered to myself if this meant the operator was on speed to stay awake. But I can now report that it is a natural phenomenon that doesn't require even caffeine. It may be addicting, though!

It is interesting to me that phone pile-ups were more exciting than CW pile-ups. I think this is because excitement comes through better with voice than with code and tends to be reinforcing between the DX station and its callers.

My best rate was 212 QSO's at 2000Z the first day on fifteen meters. Fifteen meters was the best band. On the first day around 1900Z I had my only ten meter opening; it lasted thirty minutes and allowed me to work a band of states running from Texas to Minnesota. I had trouble "digging myself a hole" on twenty meters until the contest was well along. I was never able to work the west coast on 160 meters, although I worked a lot of stations in the rest of the country.

When I arrived home I noticed that I had fewer duplicate contacts on phone than CW. The rate on phone was 3.5%; on CW it was 6.2%. Since Turks and Caicos is rarer than the Bahamas, one would have expected more "insurance contacts" on phone. Perhaps people on phone who hear their call come back phonetically feel less need for an insurance contact. Also, I gave my call less frequently on CW than on phone. I wonder how many of my CW duplicates were people who decided to work me first and then find out what my call was.

Monday after the phone contest, I met Harry, KC2RS, who had operated single-band on eighty meters from one of the Caicos Islands as VP5Z. We enjoyed trading stories. I gave out the last of over 8000 contacts and packed up.

### Home Again

The next day, I arrived home to find a two-foot pile of letters from people wanting QSL cards. Each day the mail brought several dozen more letters. Even now, seven months later, I receive about ten letters a week. I understand from more experienced DXpeditioners that I may come to think of QSLing as the major drawback of the trip. At this point, however, it is still fun to receive the letters. I know how excited I am to get a QSL card I need, and I like providing a needed card to others.

Unfortunately, I couldn't send out QSL cards for quite a while. First priority went to preparing the contest logs which were due in less than four weeks. With 5291 contest contacts, this was no small job.

I had access to a UNIX computer system with a laser printer, and I decided to enter all my contacts in the computer and use this data to prepare both the logs and stickers for the QSL cards. I wrote programs in the AWK and SED languages for converting the raw data into the required formats.

I typed in the minimum of data for each contact. For the contest contacts, I had to type at least the call and the state or province for each contact. I entered signal reports only if they were not the usual 59 or 599. Times were entered as two or four digits as often as they appeared in the original log. Even though I recorded the time at least every five minutes, there were sometimes twenty-five contacts in these five minutes, so it was nice not to have to type in a time for each contact. The processing programs used extrapolation to estimate precise contact times.

I am not a touch typist. It took forever to enter the raw data, even though the typical contact required typing only a call, a space, a two letter abbreviation and a carriage return. I could enter only 400 contacts in an hour. When Susan read the data to me, we could double that rate. An hour and a half was as long as I was able to work at one sitting, so it took many days to enter the data.

Once the data for the first contest was entered and proofread, I worked on programs to process the data. As an experienced programmer, I should have anticipated that the "data cleaning" would be the major portion of the job, but it came as a surprise. It wasn't too hard to tag duplicate contacts and to identify new multipliers as they occurred. Most of the programming effort was in checking the data: Is this time figure reasonable given the previous time figure? Does this call have a plausible pattern of letters and digits? If I worked this station before, did I record the same state? Have I used two abbreviations for the same state and thus come up with a bogus multiplier?

I just made the deadline for mailing the contest logs. I still had to enter the data for the 2900 contacts made outside the contest, design and print three different QSL cards, print the labels for the QSL cards, and sort the letters requesting QSL cards into some reasonable order for processing. It was already six weeks after the first contest, and I was nowhere near ready to start returning QSL cards. It was most of another month before the first QSL card was in the mail and about three months before QSLing was up to date.

### Final Thoughts

The DXpedition was a failure as a nice vacation for two. I don't think this is inherent in DXpeditions, but the preoccupation with the radio aspects during the planning stage didn't help. I know we are in the company of some of the world's most famous DXers when we travel cheap, but we would have been better off to have paid a little more in Marsh Harbor. Also, the fear of Grand Turk was unwarranted. Except for the distance to the beach, the Evans Inn was excellent. The hospitality of Robin and Sheila was such a positive factor that Grand Turk will always be one of my best memories.

I was amazed to realize that the preparation, execution, and paperwork for the DXpedition had consumed all my free time for six months. The next DXpedition will be easier! Next time I will farm out the data entry. This will require more care in logging so that a non-ham can understand the log, but it will be worth it.

I didn't consider it in my planning, but there is a lot of difference between the CQ WW contest and the ARRL DX contest. The ARRL DX contest is easier since a DX station can work only the States. It is more reasonable to sleep. There came a time at night when it seemed like I had worked all the Stateside stations who were still awake. In the CQ WW contest, which allows DX stations to work other DX stations, this would have been the middle of some other opening and no serious operator would have been able to sleep. Also, part of the strategy for the CQ WW contest is being sure to catch the openings to the different parts of the world on each band. This is tricky and would be made easier by experience that a first timer would not have.

What were the best parts of my first DXpedition? The adrenaline rush of the pile-ups and the new friends that I made. You can be sure there will be another.