I woke up around 9 AM local time on the day of the contest and found John, K1AR, already at the rig. He was warming up by running guys. He'd been up for an hour. We had some coffee and cereal and then spent a half-hour or so making sure everything in the station was working properly.

Our "run" radio was an ICOM IC-781. The spotting radio was an IC-706MKIIG—chosen for its small size and light weight (the only other rig readily available was another bulky '781). Many of the other competitors raised eyebrows or even chuckled when they heard we were using a '706.

Each rig was connected to Top Ten band decoders driving Dunestar 505 band-pass filters. We tested this setup at my house during Field Day and it worked pretty well.

Around noon, John; me; Referee Oms, PY5EG; and our hostesses Sasha and Mateja walked down the hill to a local restaurant and had lunch. During lunch, the rain started. We hoped that it wouldn't result in QRN or other ill effects.

After lunch we headed back to the station. We had about an hour left to finish setting up and shaking things out.

A few minutes into our testing, the SWR suddenly went haywire on 15 meters. It turned out that we had managed to burn out the 15-meter section of the Dunestar. When they say "100 Watts", they mean 100 Watts! We disconnected that position on the filter box, and got ready to rock.

It was time to break out our "carefully prepared" operating aids. First—some maps showing the sunrise-sunset areas for each hour of the contest. These certainly are handy to have, but we didn't end up paying enough attention to them.

Next—our beam-heading chart. We downloaded it from a Web site. Looking it over, we soon noticed that most of the headings weren't consistent with what we had been told by the locals and what we had observed in the pre-contest warm-up. Sure enough, we had forgotten to enter the longitude as a negative number. (If anyone is planning a boat trip in the Atlantic somewhere northwest of Spain and needs a beam-heading chart, give me a call.)

Finally—the Official ITU Zone map—also downloaded from the Web. We discovered that most of East Asia was chopped off at the right edge of the page! We still don't know which countries are in which zones over there. So much for our operating aids!

At 1:55 PM (1155Z), Oms opened the



The WRTC2000 awards ceremony. K1TO and N5TJ, on the high riser, finished in first place. To their right, RA3AUU and RV1AW, the team that earned second place honors. K1AR and K1DG—to their left—captured third.

official envelope with our call sign... we had drawn S582A. Not bad... "A" suffixes are good on phone or CW.

We then flipped a coin to see who would operate first. It came up heads... I think. Although the coin-toss ceremony has always been a tradition whenever John and I operate together, since John gets us off to a great start, he always "wins," regardless of the results of the toss.

As the clock turned 1200Z we were off and running on 15 CW—and I do mean running. John turned to me and said "I have a huge pileup!!" He was *loving* it.

I decided to try a trick we'd used before and use the spotting radio to pull additional calls out of the pileup. When I attempted to listen to the 15-meter signals though, the '706 suddenly went deaf

The good news is that I had installed a fuse in series with the '706's antenna input, and it had blown, protecting the receiver as it was intended to do. There was way too much coupling going on between the tribander and the Windom (the feedpoints were only about 2 feet apart) to allow us to use the spotting radio on the same band as the run radio. Phooey!

John however, was doing fine without my help. He turned to me with a big grin and said, "I bet nobody's doing this well!" The first 30 minutes netted 90 Qs with about an even split between US and

European stations.

He decided to try SSB for a while. By 1250Z he had only managed 40 Qs on SSB—a slower rate than CW—so he returned to CW and finished the hour with 20 additional Qs in the remaining 10 minutes.

At 1300Z I took control of the run station. I kept up an okay rate on CW for awhile. At 1315 I decided to try SSB again—it took me 4 minutes to work my first Q. The rate picked up but it dried up occasionally. Moving a few kHz got it back, so I figured there was someone else I couldn't hear covering me up. I had to remind myself that I was operating barefoot with a tribander at 12 meters, and would have to keep moving!

At 1340Z we knew that we should go back to CW. It took me 2 minutes to work someone. The rate came up however, and as I completed the last Q of my hour, the "last 10"-Q meter showed a rate of 213.

John took the chair at 1400Z and ran Ws, EUs and some JAs. I went into the spotting mode and tuned 10 meters.

I found YB1AQS booming in, and heard a few other stations on. John switched to 10 meters at 1420Z. 'AQS was first in the log, then we CQed and got a small run going. The volume wasn't there however. I swept 15 for mults and scribbled them down on a piece of paper.

When John returned 15, he ran up the



"Team New Hampshire"—(left to right), Referee Oms, PY5EG; John, K1AR; station hostess Sasha; and Doug, K1DG.



Referee Oms listens in as John racks up the Qs.

band and nailed each of the stations I had spotted. While he did that, I tuned 20. The local European HQ stations were all pounding in, but not getting many answers. Again I put them on paper and John moved to 20 for a quick mult sweep, collecting 15 of them in 15 minutes to close out his shift.

By 1500Z we had 353 Qs in the log. Not bad for three hours' work, but we had a long way to go.

I switched back to 15 CW. The rate meter climbed back up and hung between 120 and 150. When it dropped below 100 at about 1530Z, we decided to try 10 again—this time on SSB.

I had heard some good zones and some HQ stations when I was spotting on that band earlier, so I decided to try working them. I fell into DXing mode, and the rate slowly sank into the 70s. A short burst on 10 CW yielded a quick 5 mults. I finished with a slow 88 hour. It was John's turn—we QSYed to 15 SSB.

From 1600 to 1630Z was tough sledding; John struggled to keep the rate meter over 100. In fact, at 1609Z, he went looking for a clear frequency to use, and tried several different spots. Finally, at around 1630Z, things clicked—the rate meter peaked at 393! John was nearly hyperventilating—I tuned 20 SSB and located more HQ multipliers.

When things cooled down a bit on 15, he ran through my list of 5 spots on 20 and worked a few stations in between. After that we QSYed back to 15 CW. We closed out with a nice 110 hour.

As I took the chair at 1700Z, we both wondered if 15 would continue to produce or whether we should think about going to 20. After about 10 minutes, it was clear that 15 was sagging, so I went to 20 CW.

Boom! The rate meter climbed as high as 250—and they just kept on calling. John tuned 15 for multipliers, since we hadn't done much mult-hunting on that

band. I jumped there and grabbed a few mults, but went right back to 20. John said he thought 15 CW was getting good again, so I went there, and after a slow 5 or 6 minutes getting established, I found out he was right... the rate meter climbed back over 200.

At 1800Z it was John's turn again. Fifteen was slowing down, so he took a short spin through the band for multipliers and netted a few more European HQ stations and V63X for a good zone. I was tuning 10 for mults, and as I found 9V9HQ, John had just gone to 20! I encouraged him to go get the 9V, and one call put him in the log. Then it was back to 20 CW, which was okay, but not inspiring. After a short time, he went to 20 SSB, working nearly all Europeans—no Ws yet.

After spending a few minutes finding a clear frequency, the rate picked up a bit—but again, nothing inspiring. I spotted a bunch of mults on 10, so John finished the hour putting them in log.

By 1900Z we had 752 Qs, with 15-meter CW being our best producer. We took a minute to discuss tactics, since it was getting dark and we knew that we would have to come up with a low-band strategy soon. We decided to remain on 20 for awhile longer, and then move to 40 at the first sign that 20 was slowing down.

When I took the chair at 1900Z, it was on 20 SSB. After about 20 minutes at a 120 rate, I switched to CW. It took a few minutes to get rolling and then the rate meter stalled out at about 80.

John was listening on 40 and reported that one of the WRTC teams was running their brains out on 40 CW and we should be there. The instant he said that, the gang on 20 CW found me. The rate meter soared to 250 again. I couldn't very well leave this action and go to 40! I decided that we wouldn't lose much on 40 if we stayed on 20 until the end of the

hour. I put 82 Qs in the log in 30 minutes.

At 2000Z we had 892 in the log. John took the keyboard and QSYed to 40. The rate was initially good—around 130 per hour—but it started to slip after about 15 minutes. At this point, we had no idea what the best band was, so we studied our CW/SSB breakdown.

We figured that our CW QSO total was okay, but SSB needed work. A quick trip to 15 was unproductive, with only 3 Qs in 5 minutes. We went back to 20 and collected 18 Qs in 10 minutes. During those bursts, I was tuning 40 SSB—wondering how it would play for a 100 W station with a low antenna. I wrote down the frequencies of all the loud CQing HQ stations and other mults and handed the list to John. He "ran the table," logging all 13 in 8 minutes. Then he went back to 20 CW, and ran off 32 Qs in 20 minutes while I tuned through 80 searching for mults.

At 2100Z it was my turn again, and I ran through all the stations I had spotted on 80: 12 mults in 11 minutes on CW, then 11 more in 14 minutes on SSB. Running did not seem reasonable, and John said that he was hearing a lot of action on 15. I QSYed to 15 SSB.

Fifteen was wide open. I pointed the beam to Asia and the JAs called (along with BY4CSR and DU1DX just to spice things up). When things slowed down, I turned the beam towards the USA and the Ws called. We sure wished we had some way to beam both directions at once! The rate was good—around 130—and by 2200Z, we had 1073 Qs in the log.

We knew that the rates on the high bands were still good, but we knew we needed to make use of the low bands during the darkness hours—before those bands went too long for our modest station. After 10 minutes on 15 SSB, John returned to 40 CW. Good move... we netted 55 QSOs in the next 22 minutes.

At 2215Z Oms smiled as PT7BZ went

in the log—but by then the rate was starting to slow down. I handed John a list of 5 mults that I had spotted on 20 SSB. Five minutes later he had 'em all and was setting up shop there for a run. It started off fast, with 25 mostly-W Qs in 11 minutes, but it wouldn't stay that way for long.

At 2300Z I took over and decided to stick with 20 SSB. The rate was bursty, with the last 10-Q meter peaking close to 300 but drooping under 70 at times. The first 30 minutes of the hour yielded 73 Qs, mostly Ws. P43ARC called in, and I successfully passed him to 15. This was the only multiplier we moved during the entire contest, which would eventually cost us. We decided to concentrate mostly on rate and the multipliers we found on the spotting rig instead of taking time from the rate to pass stations to other bands.

At 2335Z John handed me a list of 8 mults he had spotted on 80 CW. Five minutes later I'd worked them all and was calling stations on 80. When I decided to go back to 20 CW, John handed me a list of 3 mults there, and they went into the log quickly.

At 0000Z John took the chair with a list of 40-meter SSB stations he'd spotted. Ten minutes there yielded another 6 multipliers. He went to 15 and worked the mults he'd spotted there. Five minutes later, he had all of them, and decided to try running on 15 SSB. Remember... this was 2 AM local time!

The next 15 minutes netted 42 QSOs, but John thought it was slowing down, and 20 CW would probably be better since the USA would be peaking soon and we hadn't spent much time there. I argued that we needed to pump up the multipliers on the low bands, since we would be running out of darkness soon (sunrise in S5 was 0321). We compromised—John would go to 20, and I would get a multiplier band-map ready for 40 and 80.

Boom! Twenty-one Qs in 8 minutes on 20. I then handed him a list of 13 multipliers on 40, and he worked them all in 8 minutes. When I passed him the 80-meter list, he seemed to take it as a challenge to work them even faster. He ran through that list of 9 in 5 minutes flat. Amazing.

At 0100Z, we had a discussion about off-times. The rules stated that we needed to take 4 hours of off-time in a maximum of 3 periods. The activity had been strong and showed no sign of letting up, considering that we had 1400 QSOs in the log in the first 12 hours. We contemplated operating straight through the first 20 hours and taking the last 4 hours off. The logs from previous contests given to us by the S5s showed 0900-1200Z to be common off-times.



Ali, A61AJ, congratulates "Team New Hampshire" on their third-place finish.

While we were discussing this, the power went off.

We wondered if we were going to be forced to take an off-time just for having the nerve to talk about it! Luckily, the power came back on 2 minutes later. We decided to keep going for awhile. It seemed like 20 CW was the right place to be so I remained there for the entire hour.

John came back on at 0200Z, and by that time we had decided that we would take off-time the hour before sunrise. His half-hour produced 60 QSOs on 20—some CW, some SSB—and our only two North American stations on 80 (NU1AW and VE1ZJ). Other W1s and W4s were very readable, but they could not hear our 35-foot-high Windom and 100 W. At 0234Z we walked away from the rigs.

At 0334Z, we were back on, with a short flurry on 80, then 40, working Europe and the US as John finished out his hour.

At 0400Z I took over and switched to 20 SSB for 50 fast Qs in 20 minutes, mostly with the US, and these included a dozen or so W6s. It was clear that we had been spotted on packet. When that slowed down, I tried CW, but it was even slower.

John handed me a note at 0430Z that HS0AC and DU1MHX were on 10 CW, so I went there. 'AC was loud, and after I worked him, two UA6s called me. I moved up a bit and called a few CQs with no luck. I worked the DU and decided to change bands.

I went to 15 CW. It was good for 8 Qs in 5 minutes, and then *nothing*. Argh! A quick switch to 20 CW brought the rate meter back up to 120 or so. I finished the hour with 98.

John took over at 0500Z. He stayed on CW for 10 minutes or so, then switched to SSB. While tuning around for a clear frequency, he called K3ZO, K5TR and found W1AW/4 for a mult. But the band didn't seem runnable, and I'd located T90HQ for a mult on 15, so he went there.

He got the mult, then blah—nothing. By then, I'd found a couple of mults on 10 CW, so we went there. After 8 QSOs (including VR2BG) in 8 minutes, we were scratching our heads trying to figure out where to find rate.

In the meantime, I found T77C on 40 SSB, and since it was broad daylight—and this was probably our only chance for the mult—we went there.

We then decided that 20 was the place to be. John managed 8 Qs in 6 minutes on CW, then switched to SSB, where the rate was much better. The rate meter hovered near 120 and peaked at 189. The hour ended up netting us 75 Qs.

At 0600Z, we were thinking that an off-time would be a good idea. After 15 Qs in 15 minutes, including two quick trips to 15 for multipliers 5I3A and OH3X, we decided to take some time off. The rules stated that we had to be off at least one hour, with only a single 5-minute listening period to "sniff" the band and decide if we wanted to get back on.

At 0715Z, we sniffed—and elected to

stay off. During that time, we were wandering around the shack, trying to keep amused, all the while frustrated that we were at a nice shack during a contest, and we weren't allowed to operate!

At 0745Z, I got back on, starting out on 15 CW. Pow—17 Qs in 6 minutes! John said 10 sounded pretty good. Since we had already worked a ton of guys on 15, we knew that we should probably get on 10 as soon as it was open.

This was a good move—the band was very much open, and the rate was good and mults were calling in. John tracked down a few HQ mults on 15, and I swooped down to grab them and returned to 10 without missing a beat.

At 0830Z, I finished out my 60 minutes and John took over. After a few minutes, the CW rate began to slow so he went to SSB. Boom—the rate meter started to climb again, hovering around 200 for a good while.

At 0908Z, I handed him a list of 6 HQ mults on 15 SSB. John said to no one in particular on the frequency "Don't any of you go away... I'll be right back!" Two minutes later, all 6 were in the log, with R3SRR/2 as QSO number 2001 at 0910. Then he returned to 10, where the frequency was still clear, and picked up right where he'd left off until 0930Z. With people still calling, John decided that we should take our last 90 minutes of offtime and save the last hour.

Again, we hung around in the shack. We received a few visitors, including W6AQ with his video camera, A61AJ, S50A and others. It was tough explaining to them that, "Yes, the bands are pretty good right now, but we're taking off-time!" Without providing details, some of the guests hinted that we seemed to have a lot of Qs compared to other stations they had visited. That was good news, but if they were operating in the 10Z hour while we were off, they could have been passing us!

At 1100Z, I took the chair for the last hour. I decided that we needed Qs on 10 SSB and went to work.

The rate meter quickly jumped to 250, and then hovered around 200. I had a nice peak at 353, with the Qs a mix of hugely-loud Europeans and a smattering of relatively weak Ws. Thirty minutes later, I had 103 Qs already in the log.

A few minutes after that I began announcing "28030 at 1145" to every QSO to ensure a good start on CW. When I went there, there weren't as many calling as I had hoped, and John had a list of 4 HQ stations we needed on 15 CW written down.

At 1155Z, I went to 15, worked all 4 in two minutes, then finished out the contest there.

The last hour netted 168 Qs (there were several dupes, bringing the actual total down to 159). That was our best hour of the contest.

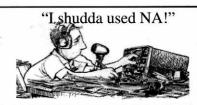
After the contest, we took everything apart, packed it up, and were on the road to Bled in a Slovenian Army jeep 45 minutes later. We felt that we had done okay in QSOs, but we knew that we had left enough multipliers on the table by not passing that we probably hadn't won. We figured we'd be happy with a Top-5 finish, since that would redeem us from our poor 13<sup>th</sup> place finish at WRTC96.

You can find out what happened after we returned to Bled, and my final feelings about the whole affair at http://www.ncjweb.com-visit the WRTC2000 Coverage section. The complete S582A log (as well as logs for all of the WRTC competitors) can be found at http://wrtc2000.bit.si along with numerous analyses and the UBN reports.

(Doug and John did indeed make the Top 5—placing third. Well done guys! Our congratulations also go out to the teams of K1TO and N5TJ; and RA3AUU and RV1AW on their first and second place finishes.—'BV)



# 6 Of the Top Ten Stations in 1996 **WRTC Contest Used NA!**



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