

The SKCC Centurion

The official newsletter of the Straight Key Century Club

VOLUME 1, ISSUE 4

MAY 2007

Are The Bands Dead?

Don Keith, N4KC

Well, of course not! At least not necessarily. As we suffer through the doldrums of the rock bottom of the sunspot cycle, we cannot really expect the prime DX bands to be hopping 24 hours a day, or for even the occasional openings to last long enough for many of us to discover them. We have all sat and twisted the dial and heard nothing but sizzle on 20, 17, 15, 12 and 10 meters. And we are all quick to give up and assume there is no propagation there as we switch bands and contemplate lots of wire in the sky for 160 and 75 meters for the next several years.

It has been my opinion, though, that those bands actually offer some possibilities at times we least suspect. Since we make the assumption that our RF is shooting right out into space, never to be detected and heard by human ears, we allow those opportunities to go right on by. I know from experience that it is frustrating to call CQ for hours with no reply. Or to tune to a favorite beacon station and hear nothing but “swish!” No answer, no beacon, no propagation! What's on TV tonight?

Inside This Issue	
Feature Columns	
Getting It Just Right	2
A-1 Operators	3
First Tribune Awarded	4
British Sailors Use Morse In Iran Prison	5
Orphan QSL Cards	5
SKCC Member Club	5
Key of The Month	6
TL8DV—Central Africa	6
Sun's Next Cycle of Furry Delayed	7
Sunspot 953	7
SKCC Cluster	8
Junkbox Sprint	8
New Members	9
Awards	9

Then, along comes a contest, and the bands magically open up. Do CQ Magazine or the ARRL have the ability to turn on and off the actions of the ionosphere? Do they somehow have influence over the sun gods? The point was brought home once again during the ARRL CW DX contest. When I flipped on the rig on Saturday morning, the DX packet cluster was buzzing with 15-meter spots yelling about all kinds of exotic call signs. And when I listened across the CW portion of the band, I was stunned. Europe, Africa, the Caribbean, Central and South America...even Hawaii! And most with solid signals. And they heard me, too, often on the first call with my 100 watts and a skywire horizontal loop.

But how? I had listened on 15

meters several times the week leading up to the contest, hoping we might see the first signs of improving conditions. Nothing! Absolutely nothing! And none of the bulletins mentioned any kind of unusual solar event that might explain the band suddenly coming to life, just because the contest had started.

About the same time, I discovered a wonderful piece of software written by Julian Moss, G4ILO. And to make it even more wonderful, Julian makes the program available free to radio amateurs. It seems Julian had the same needs most of us have—not a lot of time to tune across the ten HF bands to see what is open for DXing or ragchewing at any given time, and also a yearning to see if there really could be propagation if somebody just hit the key or microphone button.

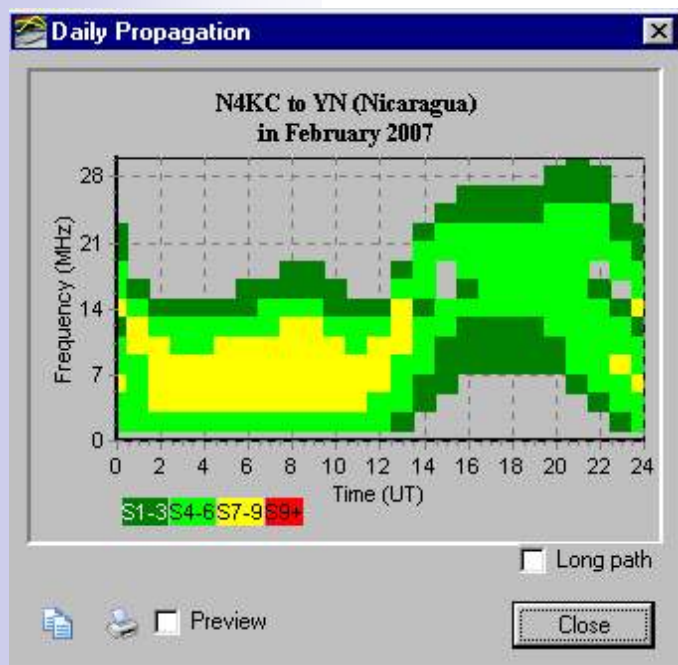
Called VOAProp, the system features a very simple and impressive user interface to allow us to easily access the VOACAP propagation model, developed by the U.S. Navy Research Laboratory and the Institute of Telecommunication Sciences under the sponsorship of the Voice of America (thus the “VOA” in VOACAP). It can be set up to automatically check for sunspot data (solar indexes, smoothed sunspot numbers) and propagation updates from WWV. In the spirit of full disclosure, Julian points out in his documentation that his system (and the data on which it relies) is highly accurate for historical data but it can only make a best-guess prediction about current and future propagation paths. And it obviously cannot predict short-term events like solar storms. But VOAProp does the best job of about anything there is when it comes to making its prophecy. And it can be interesting to go back to previous years, maybe when you were first licensed, and see what kind of DX you missed out on way back when!



The system gives you the capability of setting your QTH by

latitude and longitude (I picked a pre-set for Montgomery, Alabama, 60 miles away, instead of my actual lat/long because I was too lazy to look it up). Then you can pick the timeframe you want to study (including the current month), and instruct the software to track your computer clock, converting to GMT, so it will update as the earth rotates. You can also choose from three different levels of station setups—QRO with a beam, 100 watts with a wire antenna, and QRP. The primary display is a map of the world that clearly shows the gray line and propagation paths in real time. You can see approximate estimated signal strengths that might be encountered to and from parts of the globe at the time the user selected. You can also choose to have the map display actual call areas that it might be possible for you to reach, based on the VOACAP model and the latest available solar data. That option made the map a bit busy for my taste so I left it off.

But there is more. You can also click on a spot on the map, defining a path from your QTH to a desired part of the world. (See the yellow line in the screen shot showing the path from my shack to Italy)



You can make it long path, too, simply by checking a box. Then you can call up a chart that shows expected propagation from your location to that spot in the world by frequency and time of the day. Interested in trying to work one of the J20s after work next Monday? Set the time you want and then click once and choose the “Show Chart” button to see what your best options might be. The chart below is for the model propagation from my QTH to Nicaragua for February 2007, based on my station setup. I have a decent chance of maintaining a schedule with a YN friend on 40 meters most anytime in the evening but it would likely be a rough go on a Saturday or Sunday morning.

And finally, VOAProp allows the user to see the location and status of recognized IARU beacon stations on every HF band from 20 meters up, including beam headings from your QTH and a neat little S-meter that predicts how well you should be

able to hear the station based on propagation predictions.

Of course, anything close to current time or into the future is subject to modeling and estimates since much of the information is based on the smoothed sunspot number. But in the short time I have been using the program, I've found it works impressively on those bands where there is activity that I can hear. All bets are off if we have a solar storm or other propagation buster.

Not only is this a valuable tool for finding DX on “dead” bands, but I also see this software as a fantastic way to learn more about HF propagation. And if enough of us use it, we might actually begin getting answers to our CQs on 15 and 12! At the very least, it is fun to play with, and, with its attractive interface, it might even get some interest from others in the household if you show it to them.

To learn more about the software or to download the system, go to: <http://www.g4ilo.com/voaprop.html>

You can also simply Google “G4ILO” and see more about VOAProp. There are other systems available. KU5S has a software system that also uses VOACAP, and offers a free-ware version at <http://www.taborsoft.com/>. I have not had an opportunity to review it but maybe someone can and report to us.

Editor's Note: I have been using VOAProp for a while and I find it a very helpful tool. The author does not mention, but VOAProp requires VOACap be installed on your system, too, but not running. Understanding some of the parameters requires a bit of concentration, but it is not bad.

Getting It Just Right

Part three of a four part series describing how to set up your keying devices. Parts four will follow next month and will address *Bencher paddles*.

Reprinted with permission from Marshall Emm, N1FN. Morse Express <http://www.mtechnologies.com/index.html>

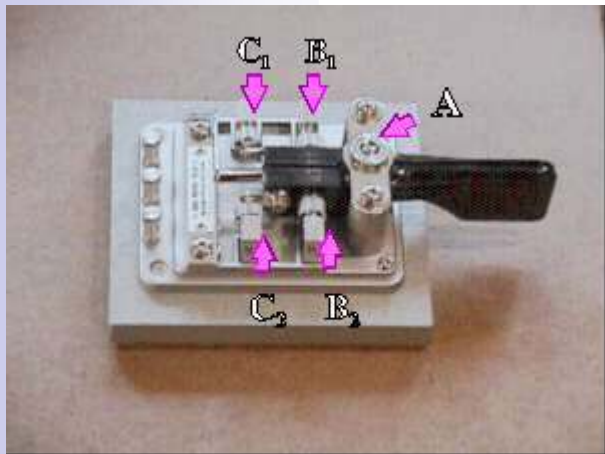
These instructions use simple, generally familiar examples of equipment types and are designed to help you find the adjustment that suits you best. What you are looking for ultimately is a particular feel, and that will vary from person to person. Not all keys and paddles offer the same adjustments, or even use the same terminology, but hopefully this will be enough to get you started and to illustrate the general principles.

Paddles

A dual paddle is a little more complex than a straight key, but it can be thought of as two straight keys side by side and operating horizontally rather than vertically. There are also single paddles, but there is very little difference in the way they are adjusted.

The example shown is a Hi-Mound Model MK-706, which is typical of a great number of dual paddles. Click picture for lar-

ger view. The available adjustments are:



Lever Tension, the force needed to move either of the two levers from side to side. It's usually exerted by a coil spring between the paddle lever and the adjusting screw, and is adjusted at **B** in the drawing. Some paddles will have separate adjustments for each lever. Note that paddles like the "Bencher" have the tension controlled by a single long spring running around a post at the back of the unit. The two screws to which the spring is attached control the tension by changing the angle at which the spring pulls.

Bearing Tension, the setting of the pivot bearings on which the paddles rotate. It is controlled by the pressure on the bearing surfaces. In the paddle shown, there is a single adjustment at the center of the bearing frame, shown at **A** in the drawing. Some paddles will have separate adjustments for the two arm pivot bearings, and some paddles will even have separate adjustments for the upper and lower bearing surfaces.

Contact Spacing, the space between the two pairs of electrical contacts when the levers are at rest (unkeyed). The contacts on the 706 are located at the rear end of the lever. The adjustments for the two arms are shown as **C** in the drawing.

Here are the steps you will need to "set up" your paddle

1. **Un-adjust the paddle.** That's right- we need to loosen everything up and get to a common starting point, because each of the adjustments has some impact on the others. Loosen the spring tension on the paddle levers (**B**) until no resistance is felt when move the levers. Open the contact spacing on each side (**C**) as far as you can without removing the adjustment screw from the arm. Loosen the bearing tension screw (**A**) until the arms wobble loosely.

2. **Adjust the bearing tension.** Tighten the bearing tension adjustment screw (**A**) until you can just barely feel a bit of friction as you move the levers back and forth. Now back the screw off until *just* the point at which the arms move freely again- usually it's just a fraction of a degree of screw rotation, or about as fine an adjustment as you can make. If the arms have separate bearing adjustments, perform this adjustment for each arm individually. At this point the two levers should move from side to side freely, with no vertical play or "slop"

3. **Adjust the contact spacing.** The contact spacing determines the amount of horizontal movement when you depress the arm. It's entirely a matter of taste, but if you haven't used a paddle before and haven't developed your own preferences, start with about the thickness of a dime or a bit less. Adjust screws (**C**) until you have the desired spacing between the contacts on each side. The spacing does not have to be identical, and in fact many "bug" operators prefer a greater gap on the dash paddle.

4. **Adjust the arm tension.** Tighten the arm tension adjustment screws (**B**) to a comfortable level of tension on the arm. Again, this is a matter of preference, but the general rule is to set it for the minimum amount of tension that will allow you to feel that you are in control of the paddle. There is no reason the tension should be the same if you don't want it that way. For example, if you have never used a paddle before you may find it easier to learn if tension is set slightly greater on one side or the other.

A-1 Operators

Two of our own were recently inducted into the A-1 operator club, Kevin Kenderen, K4VD, 605C and Milt Coleman, K4OSO, 180C. This is indeed an honor for unlike the ARRL paper awards like WAS, DXCC, WAC, etc. where all one has to do is show enough qualifying contacts, the A-1 operator club is a recognition of ones peers. Congratulations Kevin and Milt.

A-1 Operator Club

First organized in May 1933, the ARRL A-1 Operator Club has a proud history and occupies an important place in Amateur Radio tradition. Communications Manager Ed Handy, W1BDI, announced its formation with these words in July 1933 QST:

Are you an A-1 Operator? Excellence in stations has often been emphasized. Yet, station performance, equipment, adjustment, etc., are but part of the story. The operation of the equipment, knowledge of procedure, and general communications technique are of very great importance in determining the results of any station. To bring attention to good operating as a paramount issue, and to give it something of the importance it deserves we are this month announcing in these columns the launching of a club for A-1 operators.

By early 1934, the roster of recognized A-1 operators had swelled to more than 400; by the end of 1938, to 1,000. Then, as now, nominations were not made lightly; through the years, recognition as an A-1 Operator has represented an unsolicited acknowledgment of one's high standing among one's peers.

Membership comes after nomination by two Club members who find the nominee qualified to be a member of this elite group. Nominations should be based on the following:

1. **General considerations:** Transmissions stable, well filtered, and occupying the minimum required bandwidth. On voice, clarity of speech, brevity, uses appropriate words and good grammar. On digital modes, clean tones and ap-

propriate operating-frequency selection. On CW, proper character formation and spacing with appropriate speeds (high-speed ability is not a consideration).

2. **Procedure:** Always listens before transmitting. Appropriately short CQs, avoidance of unnecessary repetition, use of proper procedures and abbreviations recommended by ARRL, avoidance of common inanities in making contacts. When operating a message forwarding system, make sure that traffic is routed to its destination.
3. **Judgment and courtesy:** Courteous, and considerate of the other operator's point of view. Takes every opportunity to assist others, especially beginners. Patient and helpful at all times, and never knowingly operates in such a way as to lessen the pleasure of others.
4. **Copying ability:** This applies to all modes, for there is a knack to passing information through such difficulties as interference from other stations (QRM), atmospheric noises (QRN), fading (QSB), etc.

Only the best operators can qualify for the A-1 Operator Club, amateurs who have met the highest operating standards. Who knows? Fine-tune your operating skills, and one of these days you may be pleasantly surprised when the mailman delivers an A-1 Operator Club certificate.

The Honorees

Milt Coleman, K4OSO -I am a 64 yr old native Virginian, and have been retired from a large manufacturing company since 1998. Maria, my wife, and I have a four year old, soon to be five, so I am kept somewhat busy with my share of the child rearing duties. Couple that with gardening 10 acres and there's always something to do.

I developed a fascination for radio communications in general, and Morse code in particular while working communications intercept in the Air Force during the cold war in the 60's. Although trained as a Russian linguist, my first assignment was as a Radioprinter analyst. In order to copy the printer schedules which were sent in Morse code, I learned by recording my own sending on tape (remember reel to reel?) and then listening to it. The skeds were sent at fairly slow speed and with repeats, so the challenge was not that great. At any rate, the bug had bitten and I would remain smitten for many years. In the intervening years, my interest continued, but the pressures of raising a family and maintaining a career always seemed to push Ham Radio to the back burner

A few years following retirement, I finally got around to dedicating myself to the dream of Ham Radio. I never had the intention of becoming anything but a Morse code operator. I envisioned getting involved in Morse code traffic handling and to generally just enjoying the mode. I passed the Tech-Plus in December of 2004 and the General ticket in January, 2005. I set up a modest station and soon thereafter became involved with FISTS, and ultimately joined the Maryland Slow Net (MSN) and enrolled in their traffic handling course. Learning traffic handling proved to be one of my most enjoyable Morse code experiences. Ultimately, I took the MSN Liaison, Instruc-

tor, and Net Control courses. I am now Monday night NCS on MSN, and check into traffic nets from Wisconsin to Georgia. I enjoy meeting and chatting with folks I would otherwise meet, in places I will probably never see. What could be more fun than a nice ragchew using a well-tuned bug?

My other hobbies include woodworking, carpentry, gardening, masonry, and occasional target shooting.

Kevin Kinderen, K4VD -I'm a network engineer working on firewall implementation projects. I was licensed in 1978 while in high school. My Dad (ex-WN1OID) got me started but strangely, he never got on the air himself. Every time I call him on the phone he asks me how the "radio" is doing and if the sunspot cycle is heading up yet. My one failure is I've never been able to convince him to get re-licensed.

I was off the air for about 10 years while in the Navy and working overseas for the government along with other life events. In 2004 I decided to get back into the hobby and purchased an FT-817ND and Buddipole along with Bencher paddles and a CMOS-4 keyer. I quickly gravitated to PSK-31 and the other digital modes. Then SKN 2005 came about and I decided to give it a go. I put my Bencher on its side and painfully cranked out a couple of contacts. That is when I made the promise to myself to get a straight key and a bug and learn them both well. During the 2006 SKN event I had a great time swapping between the bug and straight key but I found the bug more to my liking. Within a few days of the 2006 SKN I started hearing about the Straight Key Century Club. After a few QSOs with members I decided to join in February 2006.

Truly, SKCC has been the best Amateur Radio experience I've had since my first QSO on an HW-8.

First Tribune Awarded

Frank N. Haas KB4T

I am pleased and honored to announce that David Burk W8III, SKCC 270C is the first SKCC member to achieve the coveted 2nd generation SKCC Number achievement now known as the Tribune Award.

The Tribune Award was approved in mid-February 2007 with an effective starting date of 1 March 2007. David submitted his log to Tribune Administrator KB4T on 7 April 2007. KB4T performed a detailed analysis of David's log. The process confirmed that all of the 50 required contacts had indeed been made with established SKCC Centurions starting no earlier than 1 March 2007.

Having submitted his log and sworn statement, both of which have survived the intense scrutiny of the Tribune Administrator, David W8III is duly proclaimed to be SKCC Tribune #1.

David W8III shall, from this day forward, proclaim to all that his SKCC Number is 270T. He shall enjoy all of the honor and privileges that appertain thereto and he shall bask in the esteem of his peers and the respect of his colleagues.

In recognition of this high achievement, the Master Tribune List has been duly scribed, the SKCC Centurion & Tribune Database Lists in the Yahoo group and Forum reflect this momentous occasion.

Congratulations to David Burk W8III, SKCC 270T, our FIRST Tribune.

Duly approved, recorded and published, I set forth my hand and key.

British Sailors Use Morse In Iranian Prison

An article in the Daily Mail online newspaper originating in London reports the British sailors captured by the Iranian patrol used Morse code to communicate with each other while imprisoned.

Able Seaman Simon Massey revealed they developed a system of "knocking in and knocking out" during their first week of solitary confinement.

He said: "It was like keeping a mental register - checking off the voices of comrades whenever one of them asked for a toilet break or a cigarette."

"Leading Seaman Chris Coe was next door to my cell. We would just sit there tapping out code. We'd check up on each other, say goodnight, and if we went out of the cell, we would give a little knock when we got back to let each other know we were OK. "Just knocking with knuckles. Little things like that got us through."

The use of Morse code by prisoners was made famous in the 1962 classic film Birdman Of Alcatraz. It was also used by American POWs in Vietnam.

Orphan QSL Cards

Do you have QSL cards at the SKCC QSL bureau? Below is a list of callsigns for which there are not SASE, self addressed stamped envelopes, on file in the bureau. Your cards will not be delivered without sending an SASE to Dan, KA3CTQ.

AA0RQ	KA2BKG	N2SLB	W4DFP
AB8KS	KA3AKC	N3FCS	W4DLZ
AC5AM	KA4JQZ	N3HJQ	W4HAY
AC7AF	KA8MP	N3JIT	W4NTI
AD4EV	KB1JHG	N4AK	W5ALL
AI4BX	KB3MQN	N4FI	W5DEC
K1GDX	KB7ZMK	N7KRT	W5GXV
K1GUP	KB8DID	N7OC	W5SG
K1MBF	KB8KIK	N8XMS	W5WAX
K1YRW	KB9UWR	N9AS	W6SGJ

K2RFP	KC0JKD	N9CYF	W6UT
K2SQS	KD0V	NB9D	W6VFA
K3JA	KD1E	NI9Y	W7GET
K3KYR	KD1NZ	NU3I	W7LPV
K4BAI	KD2MX	VA3NR	W8FHF
K4BKD	KD5MM	VA7RME	W8TY
K4JPN	KD5RSS	VE3HUR	W9AJR
K4KWM	KD5TLC	VE3JKM	W9BMW
K4NVJ	KE5AKL	VE5XF	W9BRE
K4OSO	KE5FRF	VE7GDS	W9UT
K4RAY	KE7BAW	VE7HRG	WA0KZL
K4WOP	KE7JOG	W0CH	WA0RSE
K4YDN	KG4BQQ	W0CI	WA0WNV
K5BZH	KG4CNZ	W0CML	WA3SCM
K5MU	KG4LDD	W0IIT	WA5HDL
K5PSH	KH6ZM	W0JFR	WA8TZG
K6VIN	KI4NZU	W0NBP	WA9QNN
K7FD	KM0Y	W0SJS	WB0UFF
K7OVW	KM6OR	W1GUE	WB1EDI
K7UQ	KP4DX	W1WTG	WB1LOS
K8CV	KT8N	W2SH	WB9DLC
K8OMO	KU1R	W2USF	WD0CXB
K9PL	N1AS	W3CEI	WF2U
K9UT	N1MS	W3CUV	WF5W
K9VSO	N1WPU	W3FAF	WI0S
K9WZB	N2DKB	W3MWR	WQ9Z

If you would like to use the bureau, send SASE's, with at least one unit of postage each, to the bureau. You may want to send in more than one SASE to start.



It is highly suggested to use only #10 business sized envelopes (4-1/8" x 9-1/2") when sending SASE's to the bureau. This helps with organization, and 99.9% of all cards fit in them without the need for folding.

For easier sorting, we require the following format for addressing your return envelopes.

When there are enough cards coming to you to fill an envelope, the bureau will send them out. This may be 6 to 10 cards depending on weight.

SKCC Member Club

The orange radio amateur club (ORAC) was started in the mid 90's, is located in the orange senior center near Disneyland and Angel Stadium in southern CA.

The club is general interest, and its main service is to provide a

friendly atmosphere for hams in the local area to meet and share ham radio. The club has helped many people get started. Our current membership is around 15. All ages are welcome.

The club became licensed in 2005 for the first time as KG6YSX. It has earned Ten-Ten, FISTS, and SKCC numbers. We earned our club FISTS CC number in early 2006, and are currently working the SKCC centurion.

Anyone local that would be interested in visiting us is welcome. We have a large meeting room at the orange senior center that is donated to us as long as we keep it filled during the meetings. We can use a few more members. We also hold a CW meeting once a month for learning and preservation of CW.

We hope to see you sometime.



Top row from left to right.

Mike KF6PVY joined ORAC in 2001 with no previous ham radio experience. He helps out with multiple club duties. Mike is a CW enthusiast and is a member of FISTS, SKCC, Ten-Ten clubs.

Bill K6AXX is our newest member. He had a career as an electronics teacher and engineer.

Corky AC3C is a longtime member and was previously a marine radio op/gunner in 'SBJ B25' in 1944/45. He holds our weekly 2 meter net on 146.895 and helps out with multiple club duties. Corky has general interest in ham radio and is a member of Ten-Ten, FISTS, and SKCC clubs.

Lois KG6EMU is club secretary and worked the ARRL friendship award.

Ann KE6OIO is currently club president and helps out with multiple club duties. She is a Morse code enthusiast and a member of FISTS, SKCC, Ten-Ten clubs. She has most FISTS awards, and close to centurion.

Fred AD6IG is a long time member and is busy with Ten-Ten activities. We are talking him into CW.

Lloyd WB6ULU is a long time member and a VEC. He has general interests. He used Morse code while recovering from a stroke.

Key of The Month



This is the widely used Flame Proof Navy key used throughout WW-II. This key is called "flame-proof" because the contacts are within the body of the key and would not ignite any explosive vapors in the immediate area of the key. Its design was apparently copied from the German Luftwaffe Key. More often than not they have a xxx-26003A designation. The first three letters at the beginning of the number represent the manufacturer. This key is a CMI-26003A model. The CMI indicates that it was made by Moulded Insulator Co.

TL8DV—Central Africa

Dave W1DV, 1433C

Following my first career, 27 years in the nuclear submarine navy, I was ordained and my second career was as a pastor/missionary in the Philippines, Cambodia, and the Central African Republic. (Those QTHs, by the way, made for some interesting DX-operating!)



Those of you who are DX-ers may have worked me as TL8DV during 2000-2002 when we lived in Bangui, Central African Republic (CAR). During those years I was the leader of a church planting missionary team, and I had great fun on the air – especially since I was the only active ham in the country on CW. It was also near the peak of the last solar cycle, so ten meters was hopping.

My TL8DV station was pretty modest – an old TS-430S, bare-foot, to a triband beam up 25 feet. However, signing with a TL8 call gave my signal quite an effective boost – seems like everyone was copying me 599+ !! (And asking for a QSL card)

However, all good things must come to an end. In September 2002, there was a serious attempted coup and a subsequent civil war that tore the country apart. Mercenary soldiers from Chad, Congo, and Libya were involved, and it was pretty brutal. My wife and I led a team of 53 missionaries (an eleven truck convoy) over the bush and jungle roads to Cameroon. (The rebels had already seized control of the airport and the main roads, so we had to escape via back roads and trails.) During much of this time we had no communication with our headquarters in the USA other than occasional satellite phone service (when I could find the satellite), and several nights on the road I set up a portable dipole and contacted the outside world via ham radio. (Although I am a died in the wool CW operator, I must confess that during those times I used SSB! Hope this admission won't get me blackballed out of SKCC!) After 19 days on the road we arrived at the Wycliffe Bible Translator Center in Yaounde, Cameroon.

It was a harrowing experience but it turned out well. I was very glad to have ham radio along – there truly are areas of the world where cell phones just plain don't work. The CAR is one of them.

For those of you needing TL8, I will be going back this fall (Nov-Dec 2007) for a couple months. Jean and I are currently officers in a non-denominational NGO working in the CAR; you can check us out at www.icdinternational.org

See you on the air – simper CW -

Sun's Next Cycle of Fury Delayed

Tariq Malik

The Sun's next cycle of solar storms will brew up later than expected, though astronomers are split on just how strong the star's tempests will be.

Initially expected to begin last fall, the Sun's 11-year storm season is now pegged to begin in March 2008 and hit its peak near the end of 2011, according to a new forecast compiled by a panel of solar experts for the Space Weather Center at the National Oceanic and Atmospheric Administration (NOAA). The

12-member panel split into two equal camps, one predicting a weak season while the other expects a strong one, though both facets are not anticipating the Sun set any new records in coming years.

"By giving a long-term outlook, we're advancing a new field - space climate - that's still in its infancy," said retired U.S. Air Force Brig. Gen. David Johnson, director of NOAA's

National Weather Service in Boulder, Colorado. "Issuing a cycle prediction of the onset this far in advance lies on the very edge of what we know about the Sun."

Sunspots, solar flares and intense explosions known as coronal mass ejections are hallmarks of the Sun's storm cycle, the latter two belching charged particles at such extreme intensities that they can interfere with satellite communications, power grids and Earth, and force astronauts in space to take shelter in reinforced areas of their vehicles such as the Russian segments of the

International Space Station (ISS). The solar storms also amplify Earth's auroras, or the northern and southern lights, when their charged particles interact with the planet's magnetic field.

The Sun's solar cycle is measured by its maximum number of sunspots, blemishes that indicate cooler regions of strong magnetic activity. More sunspots hint at the greater likelihood of more major solar storms during a given season, though most cycles tend to range between about 75 and 155 sunspots, NOAA officials said.

One half of the Solar Cycle 24 panel predicted that the upcoming season could be moderately strong, peaking out with up to 140 sunspots, give or take 20, by October 2011. The panel's other faction, however, predicted a more serene 90-sunspot maximum, plus or minus 10, for Solar Cycle 24. Those estimates are expected to be refined the first year after the Sun's closing storm season, Solar Cycle 23, NOAA officials said.

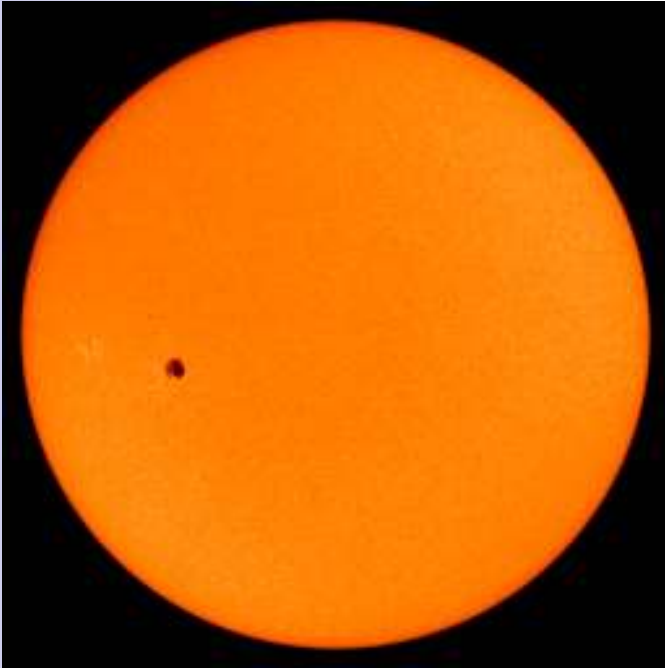
"The panelists in each camp have clear views on why they believe in their prediction, why they might be wrong and what it would take to change their minds," said NOAA Space Environment Center scientist Douglas Biesecker, who chaired the panel, in a statement.

Biesecker said that despite the panel's division on the Sun cycle's intensity, all members have a high confidence that the season will begin in March 2008. They represent the third panel to predict an upcoming solar cycle, with previous incarnations meeting in 1989 and 1996. Included in the current panel's debate was the importance of the Sun's magnetic fields near its poles during the waning years of previous solar cycles, NOAA officials said.

"We're on the verge of understanding and agreeing on which precursors are the most important in predicting future solar activity," Biesecker added.

Sunspot 953

Sunspot 953 has rotated onto the visible solar disk and it is a big one.



The sunspot made its appearance on 25 April 2007 and is four times wider than the earth. So far this spot is quiet, but any spot this large has the potential to generate a coronal mass ejection (CME) or major solar flare. Either event can cause widespread disruption in communications and power distribution systems. Should there be a CME or solar flare from spot 953, communication conditions and recovery times can quickly be assessed by visiting http://www.sec.noaa.gov/rt_plots/dregion.html for a real-time D-region absorption prediction map.

SKCC Cluster

Phil, A140F 600

I provided the SKCC DX Cluster as a tool that can help SKCC members make contact with each other. The software is DXSpider. The server is powerful and has an excellent connection to the internet. Typical uptimes are measured in months. I have no problem with any SKCC members staying connected to the cluster 24x7. Consider this to be a permanent offering.

The cluster is at skcc.matrixlist.com on port 7300. You can use a telnet client to connect to it for basic services, but I'd suggest that everyone using Windows to either download the excellent Command Line **NETTERM** client or the powerful Windows based **VE7CC DX Cluster Client**.

I have created a support web site which will contain only information, hints, tips and software links for the SKCC Cluster. It's here: <http://skcc.matrixlist.com>.

Editor's Note: There has been quite a bit of activity on this cluster since it came online. I highly recommend members try the VE7CC software. I've been using the cluster and VE7CC client since the cluster became operational and I find it very easy to use.

Junkbox Sprint

Bill, KT9K 1926C

The JunkBox sprint was a popular sprint theme and seemed to draw more participation than the other 2 sprints. With only 24 hours to build a key only from parts in your junkboxes using no power tools, and then to use the key for up to another 24 hours made for some excellent soapbox comments and photos.

Congratulations to our new Weekend Warriors:

Russ - K0LUW for 1st place in the Junkbox key category.
Tom - K4ZGB for 1st place in the regular sprint category.
Ed - KG4W 1st place for the QRP category.

Honorable mention should go to **Don - NN8B** for homebrewing a bug.

A spin-off of the Junkbox theme will be held in October to coincide with SPAR Key Month. We are considering the name "Craftsman Special" since these will be no junkbox keys. Members will have a month to build their key using anything they want. You can start planning and collecting materials now, just hold off building until the announcement. I realize many of you don't have a machine shop or a bunch of fancy tools but I know your a creative bunch so do the best you can with what you have and let your imagination run wild.

The April 22nd sprint theme was celebrating the Birthday of Samuel F.B.

Morse and welcoming new sprinters. A few members were able to spell the name and a few new sprinters joined in. Band conditions were rough and tough again but as true "Weekend Warriors" many persevered. As of this writing, the results are not yet final but the scores are high this time with the added bonuses.

For May were working on a theme for the SKCC club keys. I hope to see more members join in for the May Weekend sprint. I'd also like to encourage you to submit an entry, even if you make an effort but don't make any contacts. We would like to have your comments in the soapbox anyway. I estimate less than 50% of the members submit an entry. I know your out there, I hear you and I see the numbers of QSO's that the top scorers post versus the number of entries I get. It isn't hard, if you need help contact me!

Check out some of the junkbox keys used at <http://ph.groups.yahoo.com/group/skcc/photos/browse/f9e6>. They are all very good, some are simple like the can and nail, while others are a more complex. Congratulations to NN8B for constructing a bug.

New Members

3020, W4GEO, George, Chesapeake, VA
 3021, K9OHI, Tom, Charleston, SC
 3022, KI4PPQ, Andrew, Wilsonville, AL
 3023, W8AJF, Dan, Columbia Station, OH
 3024, KG6MXO, John, Alhambra, CA
 3025, W4TKI, Kenn, Coffee Springs, AL
 3026, WB6MKT, Dave, Brackettville, TX
 3027, W1IMA, Bob, Swansea, MA
 3028, WA7GIL, Ron, Peoria, AZ
 3029, WB8OGK, Bruce, Tewksburg, MA
 3030, W5UM, Michael, Metairie, LA
 3031, IK8XIR-N6XIR, Alex, Napoli, Italy
 3032, AD5TF, Steven, Round Rock, TX
 3033, KD8FOP, Rory, Manchester, MI
 3034, AF3Z, Jim, Conestoga, PA
 3035, KD3VJ, Matt, Masontown, PA
 3036, AF6BR, Guillermo, Irvine, CA
 3037, K4TC, Mike, Pinson, TN
 3038, N5GMK, Clark, La Porte, TX
 3039, HL3DE, Jongmin Lee, Daejeon, South Korea
 3040, AF1E, Joe, Conover, NC
 3041, N2UM, Gary, Farmington, NY
 3042, WD6FDD, Richard, Santee, CA
 3043, KC9KOJ, William, McHenry, IL
 3044, WU8V, Kurt, Shelby Township, MI
 3045, K5ENA, John, Tulsa, OK
 3046, N4FTC, Timothy, Hendersonville, TN
 3047, N5TWY, Randall, Shawnee, OK
 3048, KB4TOX, William, Magnolia Springs, AL
 3049, KC9IOZ, Renzy, Davis, IL
 3050, VE3VVF, Scott, Kemptville, ON
 3051, N5JC, John, Garland, TX
 3052, K0WAM, Wil, Cedar Hill, MO
 3053, K5DP, Mark, McAlester, OK
 3054, VE6ADM, George, Sherwood Park, AB
 3055, N6UN, Ken, San Diego, CA
 3056, K4NE, Phil, Harrisonburg, VA
 3057, KB3JG, John, Haven Beach, NJ
 3058, N1TKO, Jerry, Lowell, MA
 3059, W8COD, USS Cod Amateur radio Club, Amherst, OH
 3060, AD7JY, Gordon, Nordland, WA
 3061, KD5AQ, Ronald, Broken Bow, OK
 3062, KC2NRQ, Jay, Rochester, NY
 3063, W8FAX, Alan, Fairborn, OH
 3064, W7JI, Lou, Arkansas, KS
 3065, KM3D, Harry, Richland, PA
 3066, KA3TKZ, Whitney, Unionville, VA
 3067, N7TOD, Matt, Sparks, NV
 3068, N5RTG, Jim, Charlotte, NC
 3069, WB9FLW, Peter, Glen Carbon, IL
 3070, K7VM, Craig, Milwaukie, OR
 3071, KC0ZNN, Richard, Merriam, KS
 3072, UU1CC, Andy, Crimea, Ukraine
 3073, KD7ZNC, Fred, Rio Rico, AZ
 3074, KD4W, Edward, Gainesville, GA
 3075, KK3Q, Floyd, Orlando, FL

3076, NW5F, Jim, Bixby, OK
 3077, N9VZ, Charles, Hilbert, WI
 3078, KB7SY, Chuck, Spokane, WA
 3079, JE3GDW, Masa, Toyonaka, Japan
 3080, VE2FSK, JG, Levis, Quebec
 3081, JA1OQG, Sumio, Matsuda, Kita, Shiobara, Mura, Japan
 3082, N0CGF, Dennis, St. Charles, MN
 3083, N8VCL, Scott, Maple Heights, OH
 3084, W3BZN, Tom, Altoona, PA
 3085, W4JOW, Bill, Knoxville, TN
 3086, JE1BQE, Hideyuki, Nebiya, Tokyo, Japan
 3087, AE6RF, Donald, Boulder Creek, CA
 3088, W5UYH, Russ, Nampa, ID
 3089, K2KN, Jerry, Niagra Falls, NY
 3090, AE4LD, Larry, Askeboro, NC
 3091, KE5NVJ, Wiley, Houston, TX
 3092, W6UJX, Jim, Littlerock, CA
 3093, W5RBN, Richard, League City, TX

SKCC Awards

Centurion

78, W0JFR, John ,2826C, Louisville, CO, 11 April 2007
 79, W3MWR, George, 2829C, West Chester, PA, 14 April 2007
 80, AB6TY, Richard, 2743C, Paso Robles, CA, 26 April 2007
 81, WA0WNV, Ron, 1232C, Hoyt Lakes, MN, 26 April 2007

Tribune

1, W8III, 0270T David, Delton, MI, 07 April 2007
 2, AA2XB, 1681T, Frank, Maryland, NY, 20 April 2007
 3, KG4W, 2416T, Ed, Glenn Allen, VA, 26 April 2007

20 Meter Endorsement

1702C, K0LUW, Russ, Omaha, NE, 26 April 2007

30 Meter Endorsement

2416C, KG4W, Ed, Glenn Allen, VA, 23 April 2007

40 Meter Endorsement

1681T, AA2XB, Frank, Maryland, NY, 26 April 2007
 0281C, KC9HGW, Bob, Springfield, IL, 26 April 2007

80 Meter Endorsement

0281C, KC9HGW, Bob, Springfield, IL, 26 April 2007

SKCC WAS

W8III, David, 0270C, Delton, MI, 03 April 2007

The SKCC Centurion

13226 N. 62nd Dr.
Glendale, AZ 85304
Phone: 623-606-1976
kj7bs@arrl.net

With SKCC every day is Straight Key Night!

Operating Frequencies

These are the suggested frequencies (+or - KHz) for SKCC members to congregate and look for other SKCC members. These are suggestions only, nobody owns any frequency. Be courteous and find a clear spot.

1.820 MHz	3.550 MHz	3.530 MHz
7.120 MHz	7.055 MHz	10.120 MHz
14.048 MHz	18.080 MHz	21.120 MHz
24.910 MHz	28.170 MHz	50.090 MHz
	144.070 MHz	

Operating Events

SKCC Sprint: SKCC Sprints take place each month on the second Wednesday of the month from 0100z to 0300z (Tuesday evenings 2000 Eastern Time). Rules for participation can be found at <http://www.skccgroup.com/sprint/sprint-rules.htm>. For more information, contact SKCC Sprint Manager Kevin Kinderen at kkinderen@gmail.com or check the SKCC Yahoo group Calendar.

SKCC HighER Speed Gathering: Every Wednesday at 0300z, SKCC members interested in building their sending (and receiving speed) gather around 3550 on the 80 meter band or 7055 kHz on the 40 meter band for some higher speed CW. Speeds from 23 WPM on up are typical but any speed that pushes your personal envelope is welcome. Straight keys, bugs, cooties or other sideswipers or any other mechanical key is welcome. The Gathering is NOT a Net. Pick a spot on or about 3720 or 7055 and call CQ SKCC HS at your desired higher speed.

SKCC Weekend Sprint: Every 4th Sunday of each month beginning at 0000z UTC and ending 2359z UTC. This operating event is open to all licensed amateurs. Operate as much as you can and submit your best contiguous 4-hour window for score. Periodically themes will be announced for upcoming weekend sprints. See <http://www.skccgroup.com/activities.htm> for more information and rules.

SKCC Member Resources

SKCC website—Everything you need to know about the Straight Key Century Club. Check back frequently as this site changes, <http://www.skccgroup.com>.

The Straight Key Century Club is the fastest growing CW club focusing on manual generation of Morse code. Founded in January 2006, SKCC has grown to over 2500 members in calendar 2006. Members enjoy a very active email list server, SKCC forums, monthly sprints, and a monthly 24 hour operating event. Information about the Straight Key Century Club can be found at <http://www.skccgroup.com>.



SKCC Yahoo Groups Email List—<http://groups.yahoo.com/groups/skcc/>. A moderated email list for the exchange of ideas about SKCC.

SKCC QSL Bureau—Dan Rhodes, KA3CTQ manages this free service for SKCC members. Send and receive QSL cards for QSOs between SKCC members via this service. To receive your QSL cards, you need to have SASE (self addresses stamped envelopes) on file with the SKCC QSL Bureau. Dan also says non-members can send you QSL cards through the SKCC Bureau. For more information see <http://www.skccgroup.com/qs.htm>. There are currently 127 members participating.

Award Tracker—Don Kemp, NN8B (SKCC 0036) maintains an SKCC Award Tracker spreadsheet to assist members in keeping track of their current standings with SKCC awards. Don posts updates to this valuable tool in the files section of the SKCC Yahoo Groups <http://groups.yahoo.com/group/skcc/files/>.

The SKCC Centurion—The official newsletter of the Straight Key Century Club published monthly. The SKCC Centurion is posted on the SKCC site, in the files section of the SKCC Yahoo Groups site, and distributed via email to your email inbox. To join The SKCC Centurion email list, send an email to The SKCC Centurion-subscribe@yahogroups.com with Subscribe in the subject. There are currently 170 subscriptions.

Spotting Cluster—Phil, AI4OF (SKCC # 600) has launched a spotting cluster specifically for SKCC members. Use this spotting cluster to announce your operations or to find other SKCC members to work. Point your Telnet client to [skcc.matrixlist.com:7300](telnet://skcc.matrixlist.com:7300). Login using your callsign.