

The SKCC Centurion

The official newsletter of the Straight Key Century Club

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Greg Molyneaux, N5CLM



ARRL Member Greg Molyneaux, N5CLM, of Roswell, New Mexico, fell to his death Saturday, October 20, as he was climbing his tower, according to the Office of the Medical Investigator for the State of New Mexico. Friends said that Molyneaux was climbing up the tower to make antenna adjustments and had just passed the guy wires at 90 feet when he fell; according to reports, his climbing belt was not hooked properly. Molyneaux was a member of the Pecos Valley Amateur Radio Club, F.I.S.T.S., ARRL, Straight Key Century Club, Roadrunner Amateur Radio Club, Public Service Net and the Southwest Traffic Net. The family will be holding a private service at a later date.

Friends may pay their respects online
<http://www.lagronefuneralchapels.com>

Editors Note: As of this writing, this above line was active. From some of the messages, it is apparent that ham radio has truly lost a friend.

Yaesu Buyout

Motorola USA has announced its intention to "launch a tender offer to acquire a controlling interest in Vertex Standard Co., Ltd." Vertex Standard is the parent company of Yaesu. Upon successful completion of the tender offer and subsequent restructuring process, Motorola will own 80 percent of Vertex Standard; Tokogiken, a privately held Japanese company, controlled by current president and CEO of Vertex Standard Jun

Hasegawa, will retain 20 percent, forming a joint venture. The total purchase price for 80 percent of the outstanding shares on a fully diluted basis will be approximately ¥12.3 billion (approximately US \$108 million). The bid will start November 6 and end on December 26. If the bid succeeds, shares of Vertex would be delisted from the Jasdq Securities Exchange in Japan.

According to Dennis Motschenbacher, K7BV, Yaesu's Executive Vice President for Amateur Radio Sales in North America, "I thought that the happiest and proudest day of my 45-plus years in Amateur Radio was when I was offered the opportunity to lead the Yaesu North American sales effort; however, being able to now announce this news to my fellow Amateur Radio operators takes over as the top life thrill for me! I am certain the good fortune that put me in this leadership chair at Yaesu now promises opportunities for me to do more for the technological future of Amateur Radio than I ever dreamed possible. I do not pretend to know the full extent of the positive impact this Motorola/Vertex Standard business arrangement will have on Amateur Radio -- I just know it is going to be terrific for all of us who love Amateur Radio for its public service and entertainment value, as well as its potential for us to make lifelong friendships in our neighborhoods and around the world."

Saying that hams should not expect to see a line of Motorola Amateur Radio products, Motschenbacher said he sees the joint venture between Motorola and Vertex Standard "as a very good thing for Amateur Radio in general and Yaesu customers in particular. I hope our loyal customers will readily see this business venture for what it is, an opportunity to make a solid 50-plus year old Yaesu company even stronger and more formable than is already the case. There is absolutely no reason to have the slightest concern about equipment warranties and the continuation of support for our products. I am really excited to see what the joint engineering capabilities of these two huge communications companies will bring in the way of new technology advancement for the Amateur Radio service."

Motorola said that the joint venture "will develop and sell Vertex Standard branded products and develop select Motorola branded products. The Motorola brand will continue to focus on higher featured, higher tier products and continue to utilize existing Motorola distribution channels. Vertex Standard's strength in the Amateur, Marine and Airband (Avionics) segments will also provide Motorola with access to new business opportunities. In addition, Vertex Standard's solutions are highly complementary with Motorola's products and will add greater depth and breadth to Motorola's Government and Public Safety business."

According to Hasegawa, "The joint venture will give Vertex Standard access to Motorola's global distribution channels, presenting considerable opportunities for Vertex Standard to drive growth. We also expect to reduce costs, as we will benefit from Motorola's global scale and resources. With Motorola, Vertex Standard will be stronger and better positioned to deliver new and innovative 2-way radio solutions for profession-

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als and consumers around the world."

Motschenbacher said, "There is a unique aspect of business that comes with Amateur Radio. It's not just about a radio. It's the relationship between the ham, the radio itself and the company that makes that radio. This relationship in Amateur Radio is far different than it is, say, between a buyer of a HDTV, the TV and the TV manufacturer. The relationship in Amateur Radio is far more personal and "bonding", per se. I am certain that we will do our utmost to ensure that Motorola understands this delicate bond. Since Motorola is leaving the day-to-day management of Yaesu in the hands of my boss, Jun Hasegawa, President of Vertex Standard, we can expect our longtime relationship with hams to remain intact."

Calling the joint venture "a good thing," Motschenbacher said, "Before working in the business side of Amateur Radio, my old business partner and I purchased a number of small companies in our line of business. More often than not, we found that bringing these new acquisitions into our existing family of companies added more to the overall success of the total group than expected. Therefore, I believe that this joint venture is not just a $1 + 1 = 2$ equation -- I am positive that the outcome for our Amateur Radio customers is going to feel more like $1 + 1 = 3$ and that's a good thing!"

The W5GI Mystery Antenna

W5GI, John Basilotto, W5GI—www.w5gi.com

A multi-band wire antenna that performs exceptionally well even though it confounds antenna modeling software

The design of the Mystery antenna was inspired by an article written by James E. Taylor, W2OZH, in which he described a low profile collinear coaxial array. This antenna covers 80 to 6 meters with low feed point impedance and will work with most radios, with or without an antenna tuner. It is approximately 100 feet long, can handle the legal limit, and is easy and inexpensive to build. It's similar to a G5RV but a much better performer especially on 20 meters.

The W5GI Mystery antenna, erected at various heights and configurations, is currently being used by thousands of amateurs throughout the world. Feedback from users indicates that the antenna has met or exceeded all performance criteria. The "mystery" part of the antenna comes from the fact that it is difficult, if not impossible, to model and explain why the antenna works as well as it does. The antenna is especially well suited to hams who are unable to erect towers and rotating arrays. All that's needed is two vertical supports (trees work well) about 130 feet apart to permit installation of wire antennas at about 25 feet above ground.

The W5GI Multi-band Mystery Antenna is a fundamentally a collinear antenna comprising three half waves *in-phase* on 20 meters with a half-wave 20 meter line transformer. It may

sound and look like a G5RV but it is a substantially different antenna on 20 meters. Louis Varney's antenna, although three half waves long, was an out-of-phase aerial. Mr. Varney had two specific reasons for selecting a 3 half waves on 20... he wanted a four-lobe radiation pattern, at least unity gain and a low feed point impedance. The Mystery antenna, on the other hand, presents a six-lobe pattern on 20 meters, gain broadside to the antenna, and also low feed point impedance to simplify matching the antenna to the rig. Additionally, the Mystery antenna is designed to work at least as well, on the other HF bands as a G5RV. In short, the Mystery antenna is a sky wire that incorporates the advantages of a 3 element collinear and the G5RV antenna.

In its standard configuration, a collinear antenna uses phase reversing stubs added at the ends of a center fed dipole. These stubs put the instantaneous RF current in the end elements in phase with that in the center element. You can make these phase reversing stubs from open wire line or coaxial cable. Normally, a shorted quarter-wave stub is used, but an open-ended half wave stub would also work. The problem is that the dangling stubs are unwieldy and or unsightly.

An article written by James E. Taylor, "COCOA-A Collinear Coaxial Array," published in 73 Amateur Radio, August 1989, describes a low profile collinear coaxial array. According to Taylor, when you apply a RF voltage to the center conductor at the open end, the stub causes a voltage phase lag of 180 degrees at the adjacent coax shield. This happens because the RF is delayed by one quarter-cycle as it passes from left to right, inside the coax to the shorted (opposite) end. There's another quarter-cycle delay as the wave passes back from right to left inside the coax and emerges on the shield at the open end. Add up the delays and you get a total time delay of one-half cycle, or 180 degrees. In essence, the coax section serves two purposes: it provides the necessary delay and provides part of the radiating element in a collinear array.

The first prototypes of the Mystery antenna used the Taylor formulas, which called for cutting the wires to a quarter wave length using the formula $234/f(\text{Mhz})$ and the coax, using the same formula, but applying an appropriate velocity factor. The first version of my antenna worked well on 20 meters but failed as a multi-band antenna.

The second antenna was built with constructed with the coax cut to the same length as the wire. This was done with the belief that perhaps the coax didn't behave like coax and therefore the velocity factor wasn't applicable. Surprisingly, the new antenna performed exceptionally well on 20 meters, had low SWR and performed just as well on the other HF bands and 6 meters as my G5RV reference antenna.



Figure 1 - Schematic drawing of the W5GI Multi-band Mystery Antenna. See text for details on connection of coax sections in center of antenna legs and on length of twin lead stub.

Step-by-Step Construction

The W5GI Multi-band Mystery Antenna looks like a plain dipole (see **figure1** and **photo A** below) and is very simple to build.



Photo A - Full view of the W5GI multi-band Mystery Antenna with all sections shortened considerably for illustration purposes.

Builders of the Mystery antenna will need the following materials:

- 3 wish bone insulators
- About 70 feet of wire (14 gauge household electrical wire works well,)
- Sufficient twin lead or open wire to make a half wave section on 20 meters. Window-type 18 gauge 300 ohm ribbon works best. The [Wireman](#) is an excellent source for antenna wire and 300 ohm line.
- 34 feet of RG8X mini-coax
- An electrical connector, available from most electrical parts stores, to connect the twin lead and coax
- Shrink tubing to cover the exposed coax joints

The antenna can be built in less than an hour when you have the above materials. When you're ready to proceed, perform the following steps:

1. Cut the electrical wire into four equal lengths of 17 feet.
2. Cut the two lengths of coax to 16'6" each.
3. Cut a 20 meter half-wave section of twin lead. This piece needs to be adjusted by its velocity factor. If 300 ohm window type line is used with a VF of .91, the total length will be 30 ft. Alternatively, 450 ohm, solid 300 ohm or homemade open-wire line can be used provided the electrical length is on-half wave on 20 meters. Actual length will vary, typically between 27 and 35 ft., depending on type and velocity factor.
4. Trim two inches of braid from one end of both lengths of

coax (Item A).

5. Trim one inch of braid and center insulator from the opposite end of both coax sections (Item B).

6. Build a 20-meter dipole without end insulators.

Note: The next two steps 7 and 8 of the construction process involve connecting only the "inner" end section of the coax section to one end of the dipole; the shield is not connected to anything here. At the other end of the coax section both the coax shield and second wire section are connected to the coax center conductor.

7. Connect one end of the dipole to the center conductor of the coax (Item A) and cover with shrink tubing as shown in **photo B** below.
8. Connect the opposite end of the coax (Item B) to braid AND quarter wave wire section, cover with shrink tubing, and connect to end insulator as shown in **Photo C** below.
9. Install the twin lead through the holes of the center insulator (you may have to enlarge the holes) and solder to antenna wire as shown in **photo D** below.
10. Connect the opposite side of the twin lead to the coax as shown in **photo E** below. Almost any type of connection will work provided the connection is stable and sealed properly.

Install the antenna with the center conductor at least 25 feet high. Mine is installed in a horizontal plane; however, others have installed the 'GI antenna as an inverted-vee and are getting excellent results.



Photo B - Connection of inner end of coax section (closer to center). Note that only the center conductor is connected to the wire.



Photo C - Connection of outer end of coax section (further from center). Note that both center conductor and shield are connected to the wire.



Photo D - Connection of twin lead to inner antenna wires at center of antenna.



Photo E - Connection of twin lead to coax. Short length of coax section is for illustration purposes only. All connections should be weatherproofed with shrink-tubing, CoaxSeal, or similar.

Table 1 below depicts the typical SWR results for the W5GI multi-band antenna:

Installation data				
wire	14 AWG			
coax	JSC wire Mini 8in			
ladderline	10 gauge 300 ohm stranded			
Performance				
	measurements taken with MFJ 259 Analyzer			
SWR	R	X		
1830	NA	NA	1830	connect both leads of twin lead together
1900	NA	NA	1900	and connect to center of coax feedline for Marconi operation
3550	3.6	22	34	3550
3650	3	98	61	3650
3850	3.5	48	61	3850
3950	4	22	36	3950
7000	1.9	95	12	7000
7200	3	22	25	7200
10.1	5.2	22	50	10.1
14	1.7	37	19	14 A electrical quarter wave length of 75 ohm
14.2	1.5	42	18	14.2 cable will reduce SWR to 1:1 and will not
14.3	1.6	43	22	14.3 have any affect on other bands
18.15	1.9	93	13	18.15
21.3	2.9	120	46	21.3
24.9	1.8	35	23	24.9
27.8	2.1	26	16	27.8
28.35	1.8	33	20	28.35
29.5	2.6	53	55	29.5
50.11	2.3	51	37	50.11
52.5	1.2	57	7	52.5
144.2	1.4	37	8	144.2
145.3	1	48	1	145.3
146.5	1.4	69	13	146.5
147.5	2.3	79	45	147.5

Table 1 - Measured performance of the W5GI Mystery Antenna at various frequencies. Columns list frequency, SWR (all as a ratio to 1), Resistance (R) in ohms, and Reactance (X) in ohms.

On-the-Air Performance

On 20 meters, you should expect 3-6 dB gain over a dipole and a 6-lobe radiation pattern with an elongated figure 8 pattern perpendicular to the plane of the antenna. This is typical of a 3 element collinear array. For a simple explanation of collinear arrays read "Troubleshooting Antennas and Feed lines" by Ralph Tyrrell, W1TF. On all other bands the antenna performs like a G5RV, which is really a random length dipole on all but 20 meters. M. Walter Maxwell, in "Reflections II, Transmission Lines and Antennas", aptly describes this phenomenon. Several users report it is possible to use the antenna on 160 meters but you will need to connect the twin lead together at the point where it connects to the coax. On 160, the antenna performs like a Marconi. Those who have used the antenna on 160 say the "GI Mystery" antenna is a quieter receiving aerial compared to other 160-meter antennas.

As for the theory of operation, it remains a mystery. At least three "experts" tried computer modeling the antenna. All three

rendered completely different findings.

You will enjoy *building a W5GI Multi-band Mystery Antenna!* Many hams has done so and find it to have been a fun project and an excellent performer.

Notes:

More information on the Mystery Antenna found at <http://www.w5gi.com>

(1) Information on this page has been taken from an article published in the July, 2003 issue of CQ magazine. You can download a copy of the article in Adobe Acrobat format by clicking [HERE](#).

(2) W5GI will build an antenna for a nominal fee. Discount prices start at \$65.00, plus shipping, for the W5Gi multi-bander. Mono band antennas cost more because a 4:1 balun is used.

(3) For additional information, or to order an antenna, please call or send an mail.

(4) Dimensions for the mono-band antenna:

BAND	Inside wire	Coax	Outside wire	Overall length
10.1	23' 10"	23' 4"	23' 6"	141 ft 4 inches
14.18	17' 2"	16' 8"	16' 10"	101 ft 4 inches
18.13	13' 7"	13' 1"	13' 3"	79 ft 10 inches
21.25	11' 9"	11' 3"	11' 5"	68 ft 10 inches
24.9	10' 1"	9' 7"	9' 9"	58 ft 10 inches
28.5	8' 11"	8' 5"	8' 7"	51 ft 10 inches
50.125	7' 10 "	7' 4"	7' 6"	45 ft 4 inches

- The above dimensions are for a dipole hung in the horizontal plane. They were calculated by using the formula $234/\text{freq (MHz)}$ plus additional length for attaching to connectors/insulators.
- If the antenna is to be installed an Inverted V, increase all lengths by 5%.
- Any of the above antennas can easily be used as multi band antennas by eliminating the 4:1 balun and using open wire/twin lead directly to an antenna tuner

(4) Dimensions for the multi-band antenna:

Inside wire	Coax	Outside wire	Overall length
17' 2"	16' 8"	16' 10"	101 ft 4"

This antenna uses a twin lead matching stub instead of a 4:1 balun. Use only 300 ribbon line for the matching stub. Start with 34 ft 7", trim as necessary to obtain lowest SWR. Mono-banders with either a voltage or current (preferred) 4:1 balun. This antenna exhibit significant gain only on 20 meters. On all other bands the antenna performs like a G5RV.

New Members

- 3497, KE0CU, Hank, Aurora, CO
- 3498, KD7KFT, John, Woodinville, WA
- 3499, VA3AWA, Louis, St. Marys, ON, Canada
- 3500, IK0LZR, Raoul, Civitavecchia, Italy
- 3501, IK0PHU, Tony, Civitavecchia, Italy
- 3502, EA8AJX, Lorenzo, Santa Cruz de Tenriffe Canary Islands, Spain
- 3503, WB0TUA, Derek, Clayton, MO
- 3504, XE1CHE, Jaime, Salvatierra, Mexico
- 3505, PA3BFH, Herman, Kudelstaart, Netherlands
- 3506, KJ4UW, George, Polk City, FL
- 3507, K4CHT, John, Morristown, NJ
- 3508, KB4QQJ, Randy, Burlington, NC
- 3509, SM0PMJ, Goeran, Vallentuna, Sweden
- 3510, DF9IV, Gerd, Pleisweiler, Germany
- 3511, W9EBE, Chip, DeSoto, IL
- 3512, G0PBP, Albert, Leicester, England
- 3513, KF1O, Ken, West Warwick, RI
- 3514, OZ8A, Allan, Fejoe, Denmark
- 3515, KE5KWE, Bill, Summerdale, AL
- 3516, WA7HYD, Bob, Marysville, WA
- 3517, K6HVI, Gary, Sultan, WA
- 3518, KC7QR, Bob, Twin Falls, ID
- 3519, WA7ETH, Ed, Marysville, WA
- 3520, KF0XV, Joe, Kansas City, KS
- 3521, N4BFD, Jesse, Greensboro, NC
- 3522, KC0VNK, Scott, New Germany, MN
- 3523, N6HMR, Gary, Torrance, CA
- 3524, W0MF, Michael, Papillion, NE
- 3525, W0QL, Mark, Foxfield, CO
- 3526, VK6AV/VE6DK, Harris Floreat, Australia
- 3527, N7VOJ, John, Phoenix, AZ
- 3528, JA8MG, Hideo, Sapporo, Japan
- 3529, N4CD, Bob, Plano, TX
- 3530, K1SHR, Ken, Dover, NH
- 3531, K0SUR, Paul, Maple Grove, MN
- 3532, KC0VKN, Joe, Iowa City, IA
- 3533, W6TH, Vito, Woodsville, NH
- 3534, KD5KJ, Jim, Lakeview, AR
- 3535, N0UEP, Kenny, Biloxi, MS
- 3536, KC7JRY, Bill, Sun City, AZ
- 3537, W3/NH7C, Sid, Rockville, MD
- 3538, KE2SD, Ron, West Hurley, NY
- 3539, N1AB, Steve, Orange, CA
- 3540, AC7NA, Brian, Fresno, CA
- 3541, W3KQ, Rick, Laurel, DE
- 3542, 2E0NCB, Dave, St.Helens, England
- 3543, W6FWX, Ricardo, San Francisco, CA
- 3544, AK0B, Stan, St. Charles, MO
- 3545, VE3MHY, Rich, Tweed, Ontario, Canada
- 3546, AA0JK, Fred, Aravada, CO
- 3547, AD7MB, Mike, Ventura, CA
- 3548, N3ZBK, David, Essex, MD
- 3549, W0WGB, Bill, Apple Valley, MN
- 3550, F5TRV, Eric, Lyon, France
- 3551, KD6EDV, Ron, Torrance, CA
- 3552, W1OOO, John, Bloomington, MN

3553, KI4ZJV, Bill, Orlando, FL
 3554, KB4IP, John, Swannanoa, NC
 3555, W4NGZ, Doug, Paris, TN
 3556, KU0DM, Duncan, Prairie Village, KS
 3557, K9UTQ, Gene, Wisconsin Rapids, WI
 3558, WD4MSM, Barry, South Bend, IN
 3559, KG5I, Larry, Bryant, AR
 3560, KI4ZTS, Lynn, Port Orange, FL
 3561, WO0Z, Larry, Rochester, MN
 3562, K1LWI, Wendell, Hull, MA
 3563, K5CPD, Glen, Carrollton, TX
 3564, K7GSE, Frank, Everett, WA
 3565, W1HGY, Thaddeus, Taunton, MA
 3566, WB5WWO, Ray, Beaumont, TX
 3567, K2RSK, Peter, East Amherst, NY
 3568, KC3VI, Dave, Severn, MD
 3569, N1NFL, Steve, Huntington, MA
 3570, G11JHQ/EI2GVB, Joe, Ballymena, Ireland
 3571, K0LWV, Larry, Raymore, MO
 3572, K7JJP, Jim, Spokane, WA
 3573, KE5RBS, Kelvin, Heber Springs, AR
 3574, KD0E, Tim, Williamsville, NY
 3575, OH3NNZ, Asmo, Salo, Finland
 3576, KC7CCL, Heidi, College Place, WA
 3577, WA7MLD, Marvin, Vancouver, WA
 3578, TA1BB, Abdullah, Kars, Turkey
 3579, WA4CVV, Jennifer, Saint Petersburg, FL
 3580, K9AMP, Mike, Indianapolis, IN
 3581, AA4ZT, Robert, Prattville, AL
 3582, AB8EL, Don, Hilliard, OH
 3583, K1FK, Dave, Fort Kent, ME
 3584, N0TG, Randy, Waxahachie, TX
 3585, W9WE, Lee, Quincy, IL
 3586, K0LDS, Ted, Pueblo, CO
 3587, NB5M, Jim, Potomac, MD
 3588, K4VMT, Jonathan, Brewton, AL
 3589, W8JFB, Jim, Saint Ignace, MI
 3590, WS3S, John, East Stroudsburg, PA
 3591, KS4VX, Roger, Pittsboro, NC
 3592, AB0CD, Dick, Denver, CO
 3593, W5HT, Bill, Round Rock, TX
 3594, EA8BEX, Man, Telde Canary Islands, Spain
 3595, N4NSS, Kyle, St. Petersburg, FL
 3596, N5DRB, Dennis, Fort Smith, AR
 3597, WB5ISM, Jerry, Kemp, TX
 3598, K4REB, Reb, Havelock, NC
 3599, F5NLX, Jean-Marie, Chambéry, France
 3600, KH6KW, Jamie, Kaunakakai, HI
 3601, KE7FGE, Dave, Seattle, WA
 3602, WZ6O, Denton, Santa Maria, CA
 3603, KD7REM, Christopher, Ellensburg, WA
 3604, W7NBC, Dale, Green River, WY
 3605, 2E0JCY, John, St. Helens, Merseyside, UK
 3606, KC2JEM, Brad, Avenel, NJ
 3607, N0GC, Gerald, Minot, ND
 3608, VA3UMP, Mark, Ottawa, Canada
 3609, W4UCZ, Mark, Atlanta, GA
 3610, G0GCA, Mike, Woolavington, Somerset, UK
 3611, EA1YA, Ernesto, Principado de Asturias, Spain

SKCC Awards

Centurion

127, KE0QM, Dennis, Olathe, KS, 12 October 2007
 128, AC2C, Ron, Ellicott City, MD, 12 October 2007
 129, W5PEH, Pete, Kingwood, TX, 12 October 2007
 130, N1LU, Don, Center Tuftonboro, NH, 12 October 2007
 131, AE6DH, Richard, McArthur, CA, 12 October 2007

40 Meter Endorsement

W5PEH, Pete, Kingwood, TX

SKCC WAS

W0TUP, Nels, Minot, ND

Member Roundtable

No round table entries submitted this month.

This is your place to sound off about anything. Send your thoughts and comments to kj7bs@cox.net.

Shack Of The Month

No photos submitted this month

Key Of The Month



The homebrew key on the right is made from a hacksaw blade. The dowel under the blade is moveable. Moving it toward or away from the knob changes the tension. The dowel is also tapered so moving it side to side changes the contact gap. Cheap, but it works! **K2RFP**

The SKCC Centurion

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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
14.050 MHz	18.080 MHz	21.050 MHz
24.910 MHz	28.050 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 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>.

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://>

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>.



www.skccgroup.com/qs1.htm.

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@yahoo.com with Subscribe in the subject.

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.

SKCC Sked Page—Andy, K3UK (SKCC # 1325) maintains an interactive web page where SKCC members can arrange a meeting with other members to work towards SKCC awards or just to rag chew. Check it out at <http://www.obriensweb.com/skccsked/skccsked.php>.