

# telstar



THE NEWSLETTER OF STARS (SOUTHTOWNS AMATEUR RADIO SOCIETY)

DECEMBER 2007

VOL 41 Issue 4

## 2008 CLUB ELECTIONS

Elections were held at the November meeting. Congratulations to the 2008 STARS Officers and Directors!

|                       |                        |
|-----------------------|------------------------|
| President:            | Keith Patterson KC2DGC |
| Vice President:       | Scott Barto KB2KOL     |
| Treasurer:            | Jack Cullum KB2ESM     |
| Secretary:            | Wayne Carpus W2ZDP     |
| Financial Secretary:  | Judy Levan N2TEZ       |
| Director (2-yr term): | Ken Pokigo KC2AYK      |

They will be sworn in at the December meeting.

## DECEMBER MEETING

This month's club meeting will begin at 7:00 PM on Thursday December 6 at the Hamburg Youth Center (corner of Prospect and Hawkins Avenues). All interested in amateur radio are invited to attend. Neither club membership nor an amateur radio license is required.

In addition to inducting the Club Officers for 2007, we'll be enjoying our annual Holiday Party. The club will be providing pizza and pop. Members are invited to bring finger foods to share. (Desserts are always a favorite!)

Also remember to bring donations of non-perishable foods for our annual food drive.



We look forward to seeing you there!

## IT'S TIME TO RENEW

Don't forget to renew your membership. STARS continues to be one of the largest amateur radio clubs in the Buffalo/Niagara Falls area, but we need each of you to continue to help keep us great.

STARS dues continue at the rate of \$21 for individual members, \$27 for a family, and \$8 for student members.

A renewal application was included in last month's Telstar. The application is also available for download on our website at [www.wb2elw.com](http://www.wb2elw.com)

Send the completed application along with your dues check made payable to STARS to:

Judy Levan N2TEZ  
120 University Blvd.

## NIKE BASE OPEN THURSDAY EVENINGS

NIKE Base Chairman Don Niles K2PMC cordially invites you to come on out to the NIKE Base.

Don will be opening the NIKE Base every Thursday evening between 7 and 10 PM (exceptions are the Thursday after Christmas and the Thursdays that our general membership meetings are at the NIKE Base.

Remember, it's YOUR clubhouse and YOUR club equipment to use and enjoy. Why not stop out and spend a bit of time with your fellow club members. Maybe you'll pick up a tip or two. See what a great job Don has done with the place!

## WHERE WE'VE BEEN...

### 10 years ago

#### ...from the Telstar December 1997

The new welcoming committee was a big success with their coffee and donuts. We will be having coffee and donuts at all the monthly meetings.

A committee was established to review the STARS Constitution and Bylaws. The committee consisted of: Rick Doherty KD2QV (Chair), Dave Baco WA2TVT, Tony Balas KB2OUT, Ron Canazzi AA2VM, Leo Karr KB2TIY, Terry Rockhold K2OO, and Gary Zanghi KB2YJ.

### 20 years ago

#### ...from the December 1987 Telstar

At the December 3rd meeting there will be very little business transacted, it will be a social gathering of all the members and their families, as well as their friends.

- Guz's Gossip Column

### 40 years ago

#### ...from the December 1967 Telstar

At this time of year when stars are so significant, we would like to pause and reflect on the accomplishments of the past year and also to dedicate ourselves to the advancement of amateur radio and the S.T.A.R.S. in the coming year.

- Hap WB2YNR

## STARS Board of Directors

|                 |                           |
|-----------------|---------------------------|
| President       | Bob Koster KA2WYE         |
| Vice President  | Keith Patterson KC2DGC    |
| Treasurer       | Jack Cullum KB2ESM        |
| Finc. Secretary | Judy Levan N2TEZ          |
| Secretary       | Wayne Carpus W2ZDP        |
| Director        | John Crawford, Sr. KB2VWC |
| Director        | Scott Barto KB2KOL        |

## AMATEUR RADIO EXAMINATIONS

STARS will be holding test sessions in 2008 on: 1/12, 3/8, 5/10, 7/12, 9/13, and 11/8. For information or to pre-register for STARS tests, contact John Crawford KB2VWC at 649-5933.



LARC Holds it's VE tests on the last Tuesday of selected months (usually every other month). Test sessions are held at 7:00 PM, at the Lancaster Office of Emergency Management at 525 Pavement Rd, Lancaster. Pre-registration is requested for all sessions, but not required. Contact John Maxwell W2JM at maxwell@buffalo.edu / OR - Joseph Gearhart WV2NY at : 894-2407 / wv2ny@roadrunner.com.

ARATS will be hold test sessions on the first Saturday of the month (except when falling on a holiday weekend, when they will be on the second Saturday) starting promptly at 10AM at the North Tonawanda Fire Headquarters at 495 Zimmerman Street. Walk-ins accepted, pre-registration is highly recommended. For information on or to pre-register for ARATS exams, call Vic Godzik K2YW at 694-9738 or email k2yw@hotmail.com.

PROS holds test sessions as needed at 585 North Star Road, East Aurora. For information, contact Pat Murray NW2I at 652-8178.

## TELSTAR BY EMAIL

Are you still receiving a paper copy of the Telstar? Why not consider getting it by email. Why get the Telstar by email?

1. You'll receive all the latest news about STARS faster. The Telstar is posted to the web, emailed, and dropped in the mailbox the same day.
2. You'll be helping out the club by saving us costs of printing and postage.

If you would rather get your Telstar my email, send me (Judy) a note at n2tez@msn.com.

## IT SEEMS TO US: ABSOLUTE ZERO

By David Sumner, K1ZZ

From [www.arrl.org](http://www.arrl.org) December 1, 2007

"Sunspot-wise, we seem to be stuck in a trough between Solar Cycles 23 and 24. Lately the W1AW propagation bulletins have been reporting zero sunspots, day after day. The level of solar activity was low throughout 2006 and 2007 and is not expected to begin to pick up until around March 2008 -- months later than earlier predictions."

Many ARRL members are new to HF this year. If you are among them you may be a bit disappointed that the reality you have experienced has not met your expectations. We boast that radio amateurs can communicate anywhere in the world, but it's not an easy game for beginners when Old Sol refuses to lend a helping hand.

The good news is that for ionospheric surfers, things can only get better. While we speak of the "11-year cycle," sunspot numbers go up faster than they come down. Starting next fall, conditions should improve steadily until late 2011 or 2012.

If you're a hardcore DXer with a good antenna farm you've found plenty to hold your interest during the solar minimum. "Top Band" -- 160 meters -- has come into its own as a DX band, though it's mainly a CW game. Phone DXers spend the hours of darkness on 75 meters, although the 40-meter situation has improved a lot since amateurs in many other countries have been able to move into the 7100-7200 kHz segment. The problem is, competitive antennas for these bands aren't easy to engineer into a typical backyard. The competition eases a bit on 30 meters, but by definition this is CW/digital territory.

It's not that DX isn't possible without sunspots. It just isn't as much fun if you have a marginal antenna, especially if your operating time is limited to evenings and weekends. The workhorse band, year in and year out, regardless of sunspots, is 20 meters. At the solar minimum it's a daytime band; at the maximum it's mainly a nighttime band. And while the 17-meter regulars will

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## SKYWARN RECOGNITION DAY

The 9th annual SKYWARN Recognition Day was held on December 1st. Over 100 National Weather Service Offices participated in this annual event that celebrates the contributions the amateur radio operators make to the National Weather Service.

Throughout the 24-hour event, amateur radio operators contact as many Weather Service Offices as they can. By contacting just one NWS office, the hams are eligible for a SKYWARN Recognition Day Certificate. The endorsement of the certificate is based upon the number of offices contacted.

Working on 2-, 10-, 20-, 40-, and 80 meters, the Buffalo Office of the NWS made over 400 contacts in the 24 hour period.

STARS members John Leitten KA2RFT, Jay Clark KF2JY, and Mark Barnack N2LAB worked as base stations operators for the event. Great job John, Jay and Mark!

## VE SESSION RESULTS

STARS held a VE Test Session on Saturday November 10th. The session was held at the Hamburg Youth Center (corner of Prospect and Hawkins Aves.)

The STARS VE Team consisted of John KB2VWC, Scott KB2KOL, and Judy N2TEZ.

STARS member Eugene Donahue took the Technician test and passed with flying colors.

Congratulations to Gene KC2SLN!



STARS has been designated a Special Service Club by the ARRL.

hate me for revealing their secret, even now their favorite band offers a great respite when 20 is a bit too busy for comfort.

Among casual DXers the favorite band by far is 10 meters. The band provides enough elbow room that it's possible to enjoy long, interference-free chats with stations in other countries. An amplifier is rarely a necessity, especially if you can manage a Yagi or quad on a modest tower. Sure, the guys with amplifiers and stacked Yagis on tall towers will get through first -- but when 10 is wide open, everyone gets a chance.

The problem, of course, is that it takes quite a few sunspots to push the maximum usable frequency (MUF) up to 28 MHz -- sunspots that we don't have right now. But they will come, and the higher bands -- 15, 12 and 10 meters -- will begin to get interesting long before the peak. Solar cycles are measured by what are called "smoothed" sunspot numbers, which obscure the day-to-day variations that make DXing such a fascinating pastime. Every day is different, and potentially better -- much better -- than the one before.

Will we get enough of a peak to make 6 meters a DX band again? The experts are divided. One group predicts a peak in October 2011 exceeding the level that brought exciting, sustained DX opportunities in late 2001 and early 2002. Another group predicts a much lower peak in August 2012. It doesn't pay to get too excited about such predictions; the Sun has been in business for billions of years, yet the data on which predictions are based only cover the most recent 400 years.

So, what's a frustrated DXer to do until the Sun develops a decent pox?

First, put up the best antennas you can. If you can't manage that at home, head for the wide open spaces and operate portable. There's simply no substitute for a good antenna. Good doesn't have to mean expensive; a piece of "educated wire" can work wonders. If the new, 21st edition of The ARRL Antenna Book doesn't give you enough inspiration, there are more than two dozen other antenna books in the ARRL catalog.

Second, if you've limited yourself to SSB get equipped for RTTY and other digital modes. Develop CW operat-

ing skills -- there's a reason why the major DXpeditions make most of their QSOs on CW.

Third, try to get on the air at different times of day. If you can't break through the pileups in the evening, try getting on early in the morning. Conditions change very quickly at dawn; with good timing and a bit of luck you can get the contact in the log before the "big gun" across town is out of bed.

## DECEMBER SPECIAL EVENTS

### REMEMBERING PEARL HARBOR

**Dec 7, 1500Z-2230Z**, Baton Rouge, LA. USS Kidd Amateur Radio Club, W5KID. SSB 14.250 to 14.320 CW 28.060 21.060 14.060 10.106 7.040. QSL. W5KID, c/o USS Kidd Museum, 305 South River Rd, Baton Rouge, LA 70802. [www.lsu.edu/brarc/USS\\_Kidd.htm](http://www.lsu.edu/brarc/USS_Kidd.htm)

**Dec 7, 1800Z-2200Z**, Interlachen, FL. USS Essex CVS-9 the oldest and the boldest, WA2SEI. 14.250 50.145. QSL. Raymond Czyzewski, 224 Louise Ave, Interlachen, FL 32148. [wa2sei@yahoo.com](mailto:wa2sei@yahoo.com) or [www.qrz.com/wa2sei](http://www.qrz.com/wa2sei)

**Dec 7-Dec 9, 0700Z-2359Z**, San Angelo, TX. AB5BG, AB5BG. 28.360 21.220 14.260 7.235. Certificate. Donald R. Goff, 1210 Ardmore, San Angelo, TX 76905.

**Dec 8, 1600Z-2300Z**, San Diego, CA. USS Midway CV-41 COMEDTRA, NI6IW. 14.325 7.260. QSL. USS Midway CV-41 Museum, 910 North Harbor Dr, San Diego, CA 92101. [w9bq@aol.com](mailto:w9bq@aol.com)

### HOLIDAY EVENTS

**Dec 8-Dec 10, 1400Z-0200Z**, Nazareth-Bethlehem, PA. Christmas City and Delaware-Lehigh AR Clubs, WX3MAS. Annual Christmas greetings from the Twin Christmas Cities. 28.465 21.365 14.265 7.270 3.970. Certificate. CCARC/DLARC WX3MAS, Greystone Building Gracedale Complex, RR 2, Nazareth, PA 18064. *Time are daily.* [www.dlarc.org](http://www.dlarc.org)

**Dec 13-Dec 24, 1600Z-2200Z**, Bakersfield, CA. Santa's Workshop/WO6T, W6S. Santa's Workshop 36<sup>th</sup> Year.

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18.135 14.270. QSL. Mark Slater, WI6J ( QSL Mgr ), 9416 Spokane Ave, Bakersfield, CA 93312. [santa@wo6t.com](mailto:santa@wo6t.com)

**Dec 15-Dec 22, 1300Z-2200Z**, Wheeling, WV. Northern Panhandle Radio Club, W8ZQ. Festival of Lights. 14.250 7.240 3.865 145.52. Certificate. Joe McCready, WB8CTC, PO Box 192, Blaine, OH 43912. [fishcrick@aol.com](mailto:fishcrick@aol.com)

**Dec 24-Dec 31, 0500Z-0459Z**, Newington, CT. Siesta Wireless Society, N1C. New England Christmas 2007. 7.218 7.026 3.818 3.526. QSL. Siesta Wireless Society, c/o Matt Cassarino, WV1K, PO Box 310384, Newington, CT 06131-0384. [www.qrz.com/winap](http://www.qrz.com/winap)

**Dec 30-Jan 3, 0500Z-0459Z**, Newington, CT. Siesta Wireless Society, N1Y. New England New Year's Eve 2007 and New Year's Day 2008. 7.218 7.026 3.818 3.526. QSL. Siesta Wireless Society, c/o Matt Cassarino, WV1K, PO Box 310384, Newington, CT 06131-0384. [www.qrz.com/winap](http://www.qrz.com/winap)

**Dec 31-Jan 2, 0500Z-0459Z**, Newington, CT. Siesta Wireless Society, N1N. New England New Year's Eve and Straight Key Night 2007-8. 7.218 7.026 3.818 3.526. QSL. Siesta Wireless Society, c/o Matt Cassarino, WV1K, PO Box 310384, Newington, CT 06131-0384. [www.qrz.com/winap](http://www.qrz.com/winap)

## DECEMBER CONTESTS

**ARRL 10 Meter Contest** -- 0000Z Dec 8-2400Z Dec 9. (See Nov QST p 102 or [www.arrl.org/contests](http://www.arrl.org/contests).)

**28 MHz SWL Contest** -- runs at the same time as the ARRL 10 Meter Contest. Categories: SO-SSB, SO-CW, SO-Mixed (separate logs). Log stations making contest QSOs. For more information and logging software: [www.veron.nl/cie/nl/swlcontest](http://www.veron.nl/cie/nl/swlcontest). Logs due Jan 31.

**North American Meteor Scatter Contest** -- sponsored by the WSJTGROU from 0000Z Dec 13 to 0700Z Dec 17 during the Geminids meteor shower. Frequencies (MHz): 50, 144, 222, 432, via meteor scatter. For more information: [www.sportscliche.com/wb2fko/w07/rules\\_w07.html](http://www.sportscliche.com/wb2fko/w07/rules_w07.html). Logs due Jan 17 to [mph@swcp.com](mailto:mph@swcp.com).

**Holiday Spirits Homebrew CW Sprint** -- sponsored by the QRP ARCI, from 2000Z-2400Z Dec 16. Frequencies (MHz) - 1.810, 3.560, 7.040, 14.060, 21.060, 28.060 kHz. Categories: SOAB, SOSB, SO20-10, SO160-40, MOAB, DX stations are SOAB only. For more information: [www.qrparci.org](http://www.qrparci.org). Logs due 30 days after contest.

**Lighthouse Christmas Lights QSO Party** -- all modes, spon-

sored by the Amateur Radio Lighthouse Society, 0001Z Dec 15-2359Z Dec 31. Frequencies (MHz): CW -- 1.830, 3.530, 7.030, 14.030, 21.030, 28.030, SSB -- 1.970, 3.970, 7.270, 14.270, 21.370, 28.370, plus VHF and repeaters. Special logging requirements apply. For more information: [arlhs.com](http://arlhs.com).

**RAC Winter Contest** -- CW/Phone, sponsored by the Radio Amateurs of Canada, 0000Z-2359Z Dec 29. Frequencies (MHz): CW -- 25 kHz up from the band edge (check on the half hour), Phone -- 1.850, 3.775, 7.075, 7.225, 14.175, 21.250, 28.500, 50 and 144 MHz. For information: [www.rac.ca/service/infocont.htm](http://www.rac.ca/service/infocont.htm). Logs due Jan 31.

**Stew Perry Top Band Distance Challenge** -- CW, sponsored by the Boring Amateur Radio Club, 1500Z Dec 29-1500Z Dec 30. Frequencies: 160 meters. Categories: SO and MS. Operate 14 hours max. For more information: [jzap.com/k7rat/stew.rules.txt](http://jzap.com/k7rat/stew.rules.txt). Logs due Jan 31.

**ARRL Straight Key Night** -- from 0000Z-2359Z Jan 1, 2008. (See page 98 of this issue of QST or [www.arrl.org/contests](http://www.arrl.org/contests).)

## CLUB MEETINGS

Club meetings are held on the first Thursday of the month at the Hamburg Youth Center (Prospect and Hawkins Avenues) at 7:00PM. Everyone is welcome. Board meetings are held on the fourth Thursday of the month at the Nike Base Club Station at 7:30PM and are open to all club members.

## CLUB HF STATION

The club Nike Base HF station is located on Lakeview Road 1.75 miles east of Route 20 next to the Hamburg Town Arena.

## CLUB NETS

STARS club nets are open to all to exchange information on local amateur radio activities.

STARS WB2EZU Memorial HF net meets at 10AM local time on Saturdays on 3.925 MHz +/- QRM. Bob Lehning WA2YSJ is usually the net controller.

STARS co-sponsors, along with WB2JPQ, the Sunday morning RagChew Net at 9:30AM on 28.380 Mhz.

## HAM RADIO TRIVIA

Test your knowledge with these questions taken from the great QRZ.COM trivia website. There's thousands more on the website!

- What does the loading coil in a mobile antenna do?
  - Makes the antenna electrically longer
  - Adds inductive reactance
  - Adds capacitive reactance
  - Reduces capacitive reactance
- What is the ideal bandwidth of a PSK-31 Signal?
  - 3 KHz
  - 1.5 KHz
  - 500 Hz
  - 31 Hz
- If you were scanning the HF bands and find some strange noise around 14.070 MHz, which mode have you likely stumbled upon?
  - SSTV
  - Fax
  - PSK-31
  - RTTY
- What is the generally accepted quantity of radials deemed necessary to form a perfect ground screen for ground mounted vertical antennas on MF and HF frequencies?
  - 35
  - 50
  - 62
  - 120
- Radials laid on or in the ground are required to be cut to a resonant length?
  - True
  - False
- What do the letters CW stand for?
  - Continuous waveguide
  - Current wavelength
  - Channel width
  - Continuous wave
- What is the mathematical equation for a 1/2 wave dipole?
  - 291 times the frequency in Megahertz

- 468 divided by the frequency in Megahertz
  - 937 plus the frequency in Megahertz
  - Frequency in Megahertz divided by 2, then times 4
- When working at a special event (such as a Hamfest or parade) which of these are the best to have with you?
    - Headset for your HT
    - Extra batteries for your HT
    - Dry socks in case it starts raining
    - Both 1 and 2
  - How does the forward voltage drop of a silicon diode change with temperature?
    - It increases as temperature increases
    - It decreases as temperature decreases
    - It stays the same
    - It varies as the square of the temperature change
  - Why is it always necessary to put down radials when constructing a 1/4 wave vertical ground mounted antenna?
    - They provide RF reflection attenuation
    - They provide reverse electrical charging of the earth
    - They provide additional bandwidth
    - They provide a low loss current return path back to the vertical

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### Answers to Trivia Quiz:

1-b (Many mobile antennas are physically short (capacitive) at the operating frequency. The addition of a properly tuned loading coil adds inductive reactance that matches the capacitive reactance, thereby making the antenna resonant at the desired operating frequency. When capacitive reactance equals inductive reactance, you are at resonance.); 2-d (PSK-31 has an ideal bandwidth of 31 Hz, which enables many QSOs to be occurring simultaneously in the space that just one SSB signal would take up.); 3-c; 4-d; 5-b; 6-d; 7-b; 8-d; 9-b (Silicon diode forward voltage drop decreases as the diode junction increases in temperature.); 10-d (Without radials, the current return path would be exclusively back through the earth. The low resistance of the radial wires allows more current to be collected and returned back to the vertical without going through the lossy earth. Hence, a stronger signal is realized.)

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