

## COUNTING DOWN TO DAYTON

—ARRL News

The ARRL is making all the final plans and preparations to bring its "show and tell" exposition -- known as [ARRL EXPO](#) -- to the [Dayton Hamvention](#)® next month. Hamvention, sponsored by Dayton Amateur Radio Association ([DARA](#)) since 1952, will be held May 20-22 at the Hara Arena Conference and Exhibition Center in Trotwood, Ohio.

"ARRL EXPO has been the centerpiece of the ARRL's participation at Hamvention since 2005," said ARRL Marketing Manager Bob Inderbitzen, NQ1R. "Our goal is to provide opportunities that inspire a high level of peer-to-peer interaction among ARRL members and prospective members -- so that following Hamvention, attendees will return home with new ideas to get involved and get on the air!"

A new feature to ARRL EXPO this year -- a large QSL Card Wall -- will be located near the international exhibits. "We're encouraging all attendees to bring a QSL card to affix to the wall," Inderbitzen said. "Together, we'll have fun eye-balling QSLs from around the country -- and around the world!"

The kit-building booth returns to ARRL EXPO this year. The booth will be supported by a team of instructors and ARRL Lab personnel who will mentor participants through the activity. Those who sign up to participate in the kit building event can choose to build one of the two affordable kits: the Ten-Tec 1054 4-band regenerative shortwave receiver or a Morse code oscillator produced exclusively for ARRL by MFJ Enterprises. "The oscillator is a great kit for newcomers, clubs, instructors and teachers seeking a classroom kit-building experience," Inderbitzen said. "The kit-building fun is sure to beckon do-it-yourselfers of all skill levels."

Drop by the Emergency Communications exhibit area to

## MAY MEETING

This month's club meeting will begin at 7:00 PM on Thursday May 5 at the NIKE Base Clubhouse.

We'll start the meeting with a presentation from John Gullo KC2WSB, Town of West Seneca Disaster Coordinator. John will tell us about CERT (Community Emergency Response Team)—how to get involved and how amateur radio can partner with CERT.

All interested in amateur radio and/or CERT are invited to attend. Neither club membership nor an amateur radio license is required.

Hope to see you there!

## HAPPY MAY BIRTHDAY!

W2IV John Czuba  
KF2JY Jay Clark



learn about opportunities to volunteer and explore resources and training. Meet with program representatives for the Amateur Radio Emergency Service (ARES®) and the National Traffic System (NTS) and network with other public service volunteers.

At the ARRL Radiosport exhibit, you can immerse yourself in the world of on-air competitions and award-hunting. Representatives will share information about ARRL award programs including DXCC, ARRL-

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## 2011 CLUB OFFICERS

President: Wayne Carpus W2ZDP  
 Vice President: Scott Barto KB2KOL  
 Treasurer: Don Niles K2PMC  
 Secretary: Keith Patterson KC2DGC  
 Financial Secretary: Judy Levan N2TEZ  
 Director: Ken Pokigo KC2AYK  
 Director: Jon Hall KC2QKB

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 Clubhouse Chair: Don Niles K2PMC  
 Telstar Editor: Judy Levan N2TEZ  
 Webmaster: Marc Fruth N2UBT

## CLUB MEETINGS

Club meetings are held on the first Thursday of the month at 7:00PM at either the Hamburg Youth Center (Prospect and Hawkins Avenues) or the NIKE Base Clubhouse. 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 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 Sunday morning RagChew Net at 9:30AM on 28.380 Mhz.

STARS 2m Sunday morning Net at 10:30AM on the STARS Repeater 147.090

sponsored contests and Logbook of The World ([LoTW](#)). Personnel from the ARRL DXCC Desk will also be on hand to check applications for all [ARRL Award Programs](#). All cards will be eligible for checking, including old cards, cards for deleted countries and cards for 160 meters.

Other ARRL program representatives and volunteers will staff exhibits for the ARRL Development Office and the ARRL Foundation, the ARRL Legislative Action and Regulatory Information, *TravelPlus for Repeaters*<sup>™</sup> software demonstration, the ARRL VEC, ARRL Education Services and the ARRL Media and Public Relations Office, as well as Amateur Radio and Scouting. And don't forget to visit the huge ARRL store to browse and purchase popular ARRL publications, join or renew your ARRL membership (and get a free gift) and to pick up official ARRL merchandise -- including 2011 ARRL Field Day shirts and other gear. This is also the place to get your free, commemorative ARRL Dayton 2011 button.

As part of the Hamvention's full slate of forums, the ARRL will sponsor presentations covering a variety of topics, including talks by ARRL Lab Manager and EMI/RFI expert Ed Hare, W1RFI, a Public Relations Forum highlighting resources for radio clubs and public information officers, an update on ARRL's efforts to promote Amateur Radio on Capitol Hill and ARRL Field Day advice and tips, as well as suggestions for radio amateurs who are interested in developing meaningful partnerships with schools and educators.

Besides the full ARRL program, Hamvention attendees will enjoy the sprawling exhibit areas that cover the Hara Complex, including hundreds of manufacturer exhibits, radio club booths and flea market spaces. Dayton draws dozens of affiliated events --some beginning even before Hamvention's three days -- including interest groups with operating specialties such as contesting, low-power operating and amateur satellites.

Visit [www.arrl.org/2011-dayton-hamvention](http://www.arrl.org/2011-dayton-hamvention) for links to official Hamvention program details, a guide to ARRL activities and for more information including lodging options and travel information.



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

## STARS TECH PROJECT — PART 2

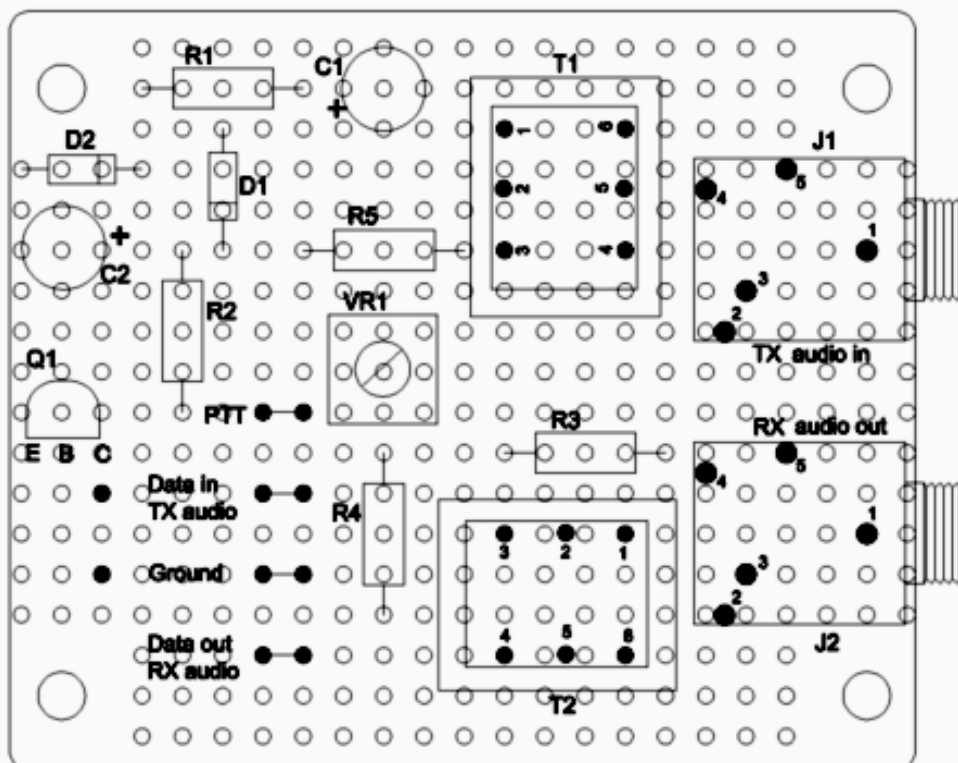
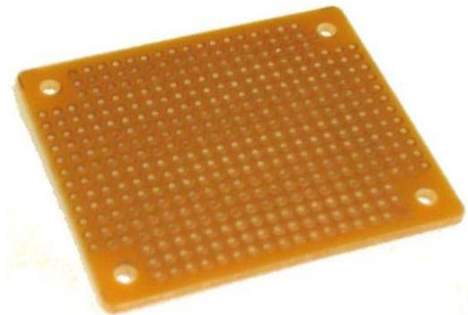
### PC sound card interface

by Ken Pokigo, KC2AYK

Last month I introduced the 1<sup>st</sup> stars tech project, "A VOX controlled PC sound card interface". Since the introduction last month, we have had some interest generated and are planning group sessions to begin this project this month. I have ordered all the materials and we have now received all the parts needed for us to begin the project. At the next regular club meeting, we will choose a date to get together and begin the project. The location for the project meetings will be at the Nike base.

#### How will we build the device?

During the first session we will be following the schematic diagram and assembly information that I have generated in order to guide us through the assembly process. We will take our time to learn how to identify the electronic components and properly place them. For those who are not very skilled at soldering, we will take time to train you how to do this and how to identify a good solder joint. We will not be using a custom fabricated bare PCB. Instead we will be using a perfboard layout. For those of you not familiar with it, perfboard is used quite often for doing quick prototype board layouts. It typically has an equally spaced matrix of holes with copper clad solder pads. I have created a layout for us to follow using the perfboard. This will be a good exercise to learn how to identify components and make circuit connections according the schematic diagram.



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### Description of the circuit:

Let's take a look at how the circuit works. The schematic diagram on page 4 is shown for reference. On the left you see J1 and J2. These are the jacks where the interface cables to the computer get connected. Here's a brief description of the TXRX signal paths through the interface.

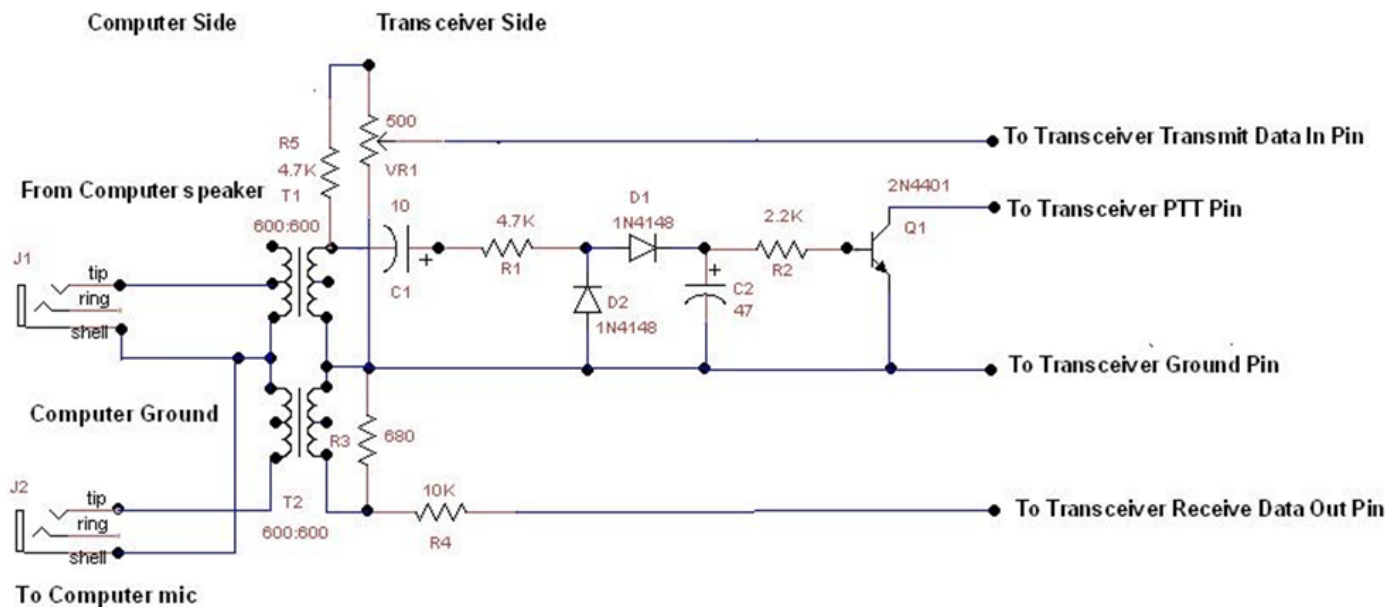
#### Transmit path

Transmit audio from the computer speaker output come into J1 and is isolated from the transceiver and stepped up by transformer T1. On the secondary side of the transformer the signal goes through the voltage doublers network comprised of D1, D2, C1 and C2. This voltage is used to bias transistor Q1. This transistor acts as a switch and when turned on will switch the transceiver PTT pin to ground. We will use this to automatically key our transmitter when audio is present. In order to use this interface without an external power supply, we will need to use voltage available from the radio's microphone connector.

The audio data information signal level can be adjusted by the voltage divider through R5 and VR1. This will need to be adjusted so that we do not overdrive audio into the transmitter.

#### Receive path

Receive audio from the radio aux speaker jack is connected to the computer microphone input through an isolated path passing through R4 and T2. When we use the interface we can adjust the microphone input level on the computer. This may be necessary to achieve the correct signal level required by the software



I hope this information provides a better understanding of how the sound card interface works. Maybe you can join us to build this project and learn how to use it to begin to enjoy some of the digital modes available to us as amateurs. We will be able to provide the parts needed to build the interface. We can discuss this as well as choose a start date during the next club regular meeting in May.



## STARS SURVEY SOAPBOX RESULTS

By Scott Barto KB2KOL

Question #10 of the STARS survey was your chance to get on the soapbox. Here are YOUR comments...

*"The way I work I'm not sure what shift I will be on usually until Friday of the week before. I do keep track of the club through my Telstar and by talking with members. Keep Up The Good Work."*

*"We need to find ways to encourage interest in Ham Radio by the younger set."*

*"It is difficult to make meetings or attend social functions when working a full-time job and having many other things that require my time."*

*"I just wish my schedule allowed me to be more active."*

*"I'd attend more meetings, but it's a long trip for me (especially in winter)."*

*"The most important aspect is to have a choice of decaf coffee at meetings. Not supposed to drink the real stuff."*

*"Club is getting too far a distance to travel. I would much prefer a club closer to my residence."*

*"Hard accessing meetings. I still enjoy being part of what was a great ham club of WNY."*

*"Had a long conflict with a class. I'm comfortable with computers, but want to use them in ham radio."*

*Like to see more group projects.*

*"What about occasionally switching the regular meeting to a different night, for example Saturday? There just aren't any good weekend nights at least for those of us with busy kids."*

## FREE E-BOOK AVAILABLE ON THE WEB

There's a free e-book available for download that's a good "how to" for Dxers. It's intended for people new to the hunt, but it's a good review for all of us. It introduces the whole DX game and gives references for deeper explanations.

The publication titled "THE NEW DXER'S HANDBOOK" by K7AU is online at <http://dx-code.org/newdxe.pdf>

## SPACE WEATHER PREDICTION CENTER TO DISCONTINUE BROADCASTS ON WWV AND WWVH

Beginning Tuesday, September 6, the Space Weather Prediction Center (SWPC) will cease broadcasting its [geo-physical alert message](#) on [WWV](#) and [WWVH](#). These messages inform listeners of



the solar flux, the mid-latitude A and K indices and space weather storms, both current and predicted. Currently, the message is heard on minute 18 from WWV and minute 45 from WWVH. The [information](#) will still be available on the SWPC website.

If you care to comment on this, or if you have any questions, the SPWC -- part of the National Weather Service -- would like to hear from you send an email to [swpc.wwv@noaa.gov](mailto:swpc.wwv@noaa.gov)

Don't forget...Field Day is next month. Come on out to this month's meeting to find out how you can get involved.

## TRANSATLANTIC AMATEUR RADIO BAL- LOON FLIGHT ABORTED

According to reports, the Project Blue Horizon 5 high-altitude transatlantic balloon flight has been aborted. The flight began Thursday, April 28 from Owego, New York, but the balloon envelope apparently ruptured above 100,000 feet late Friday morning. The payload descended for landing in an area approximately 10 miles northeast of Warsaw, New York.

The Project Blue Horizon team was attempting to break current Amateur Radio high-altitude balloon records for distance (3361.81 miles) and duration (49 hours, 45 minutes). The payload was carried beneath a 54,000 cubic foot capacity helium-filled balloon designed to cruise between 85,000 and 100,000 feet.

During the flight amateurs worldwide were encouraged to monitor the N2XE CW telemetry beacons on 40 and 30 meters.



Project Blue Horizon is a multi-year project to design, construct, and launch an amateur balloon with the aim of surpassing distance, duration, and altitude records. Each year, a new group of Cornell graduate students follows a rigorous schedule and standardized system engineering process to propose, develop, and successfully achieve increasingly ambitious objectives. More information about the program is at the [Project Blue Horizon website](#).

## VE SESSIONS

STARS will be holding a VE Test Session on Saturday May 21st. The session will be held at the Hamburg Youth Center (corner of Prospect and Hawkins Aves.)



All candidates should arrive by 9AM. Walk-ins will be allowed, but pre-registering will help speed up the processing the day of the test.

Bring the following to the test session:

1. An original photo ID or two other original forms of ID, plus a photocopy of the ID(s) to be turned in to the examiners for their records.
2. Your current amateur radio license (if any) plus a photocopy of it.
3. The original copies of any applicable Certificate of Successful Completion of Examination (CSCE) plus a photocopy of each.
4. A test fee of \$15.00 (Note price increase)
5. Your Social Security Number (SSN) or your FCC Federal Registration Number (FRN). Your application for a new or upgraded amateur radio license will be rejected by the FCC if you do not provide one of these numbers.

For more information, or to register for the test, contact John Crawford KB2VWC 649-5933.

LARC will be holding a VE session at the Buffalo Hamfest on Saturday March 12th.

ARATS holds test sessions on the first Saturday of the month 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 Bill Klepser WB2AIV at 839-3525 or email [wb2aiv@arrl.net](mailto:wb2aiv@arrl.net).

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