



Squelch Tales



Newsletter from the Merrymeeting Amateur Radio Assoc. for July 2005



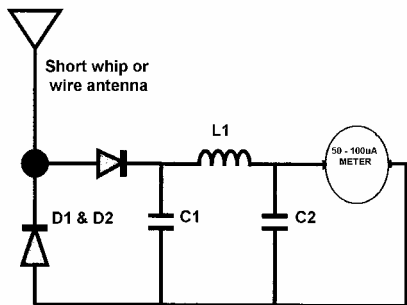
A sniffer for all seasons

By Bruce Randall

One of the easiest pieces of test equipment to build for the Ham shack or work bench is the Field Strength meter. This device can be used to check the field intensity of radiated RF, sniff out leaking RF and as a simple RF indicator.

With a field strength meter you can check antenna performance. Say your HT has a rubber-ducky antenna and you don't think it is all that good compared to other antennas. Sit a field strength meter several feet from the HT, key the transceiver and note the meter indication. Without moving the HT, replace the rubber-ducky with a full-size 1/4-wave whip and key again. Most likely you will see a higher meter reading on your FS-meter.

The following circuit is for an effective general purpose field strength meter. All the parts are available at Radio Shack except for the meter movement which you can find at flea markets or take the S-meter out of an old busted Good Buddy CB transceiver, they tend to be 50 to 100uA movements..

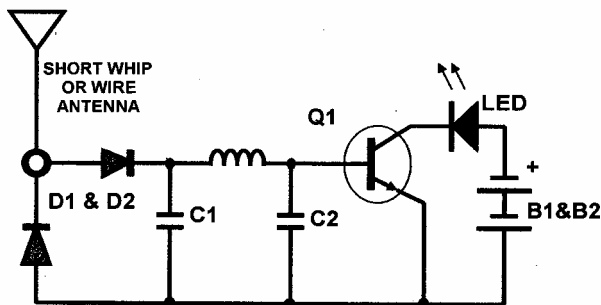


The whole circuit will fit into a small metal or plastic box depending on the size of the meter.

I wanted to use a FS meter to help in quick tuning the screwdriver antenna in my pick-up

truck. Tuning my antenna while looking at a meter to see a peek reading, and going 40+ miles per hour down the highway is not a good thing to do. My little FS meter worked fine but if I had something that would indicate peak RF radiation without close attention that would be a plus.

I decided to replace the meter movement with a light emitting diode (LED) and drive it with a simple NPN transistor. See the following drawing:



The change was a success and very sensitive. The antenna is just an 18 inch length of wire, enough to sample local RF. In the tune position on my IC-706 I get a brightly lit LED when I hit max radiation from my screwdriver antenna. It even lights up when I key up on 50,146 or 440 MHz bands.

All the parts for the above RF sniffer are available at Radio Shack and you can build it in a half hour.

D1 & D2 = 1N34 signal diodes RS# 276-1123

C1 & C2 = .01uF ceramic disc caps #272-131

L1 = 100uH RF choke RS# 273-102

Q1 = 2N2222 or 2N3904 NPN transistor

LED = large red or green for easy viewing

B1 & B2 = 1.5V AAA batteries and associated battery holder. **Have fun, build one!** 73, WIZE



Bangor Hamfest has light turn-out

The first ham event of the summer season, the Bangor Hamfest couldn't have had a better weather day. Sun was out with just a few cotton ball clouds in the sky. This year the event moved from the Herman High School to the Herman Grammar School, just another mile down the road. Even with the good weather the Bangor club folks said attendance was down about 100 from last year.

Bruce reports that he pulled into the event just a few minutes after 8 AM and by the time he had his tail gate down and sat out the few items he had to sell, folks were stopping by to say, "How much for this?" Within 15 minutes after arrival Bruce reports he sold everything. He further added that the fellow next to him had a nice vintage (circa 1955) National NC-88 in very condition and within 30 minutes of arriving it was in the back of his pick-up truck for the trip back to Phippsburg that afternoon.

There were several forms ongoing throughout the event such as APRS, ECHO-Link Good Sam Hams and a talk by ARRL New England Director, Tom Frenaye, K1KI on the BPL issue.

The event closed up promptly at noon so the event organizers could go to lunch in Bangor and the QCWA folks could head to

Captain Nicks in Bangor for their lunch-meeting.

Editorial note: *Hams in Maine need to start attending these ham Hamfests or the organizers may start thinking they are not worth the effort. They are a good place to visit ham friends, catch up with what is going on around the state and of course swapping and trading ham related treasures. Support your local ham events.*

NEWS FROM NEWINGTON



TEXAS BPL INITIATIVE DEAD; ANTENNA BILL EXEMPTS AMATEUR RADIO

Despite some eleventh-hour political wrangling, Texas legislation that would have encouraged the deployment of BPL by electric utilities has failed to pass. After the original measure, Texas Senate Bill 1748, got stalled in the Texas House of Representatives, its language was grafted onto two other bills in an effort to ease it through the legislative session that wrapped up May 31. The various measures died when House and Senate leaders were unable to resolve their differing versions.

Meanwhile, wording to exempt

Amateur Radio has been restored to a potentially restrictive antenna bill, HB 843. North Texas ARRL Section Manager Tom Blackwell, N5GAR, says time simply ran out for the supporters of the BPL measure, which was to have served as a model for bills in other states.

"The Texas BPL bill is dead," Blackwell commented on his Texas BPL Web site <<http://www.n5gar.info/>>. "The winners are the Texas Constitution and the people of Texas, who have imposed strict time limits on actions by the Texas Legislature." By law, legislative sessions run 140 days.

A collateral benefit of the legislative battle, Blackwell says, is that the BPL bill motivated people not normally engaged in the political process to get involved--some for the first time. Many members of the Amateur Radio community in the Lone Star State contacted their lawmakers to voice their opposition to the original bill and its various successors, he said. "Potential investors in BPL should be reminded that because of the conduct of the lobbyists they hired and the elected officials they influenced, we were energized," he said. "Because of them we are now better organized and prepared to address interference complaints to the FCC and respond to any

other attempt to effectively convert any of our amateur bands to commercial use."

Blackwell suggests it's not too soon to start thinking about the 2007 legislative session. "We expect to see the same kinds of bills filed again," he said.

Blackwell, Bill Lawless, W5WRL (now West Texas SM-elect), Gene Preston, K5GP, and Skip Cameron, W5GAI, testified in opposition to the original BPL bill--SB 1748--while it was under consideration by the House Regulated Industries Committee. Blackwell says a representative of the Texas Coalition of Cities for Utility Issues who also testified against the measure called it unconstitutional.

Radio amateurs in Texas also contacted their lawmakers regarding antenna-related legislation--HB 843--giving certain Texas counties the authority to regulate "communication facility structures." The House version included an exemption for Amateur Radio antenna support structures, but the Senate version stripped that provision. South Texas State Government Liaison Jim Robinson, K5PNV, said, however, that he got assurances from House and Senate sponsors of the bill that the language would be reinstated when the measure went to conference.

The bill now includes wording exempting "a communications antenna, antenna facility, or antenna tower or support structure located in a residential area

that is used by an Amateur Radio operator exclusively for Ham Radio communications or public safety services."

"Looks like our work is done, insofar as the 79th Legislature is concerned," Robinson told ARRL West Gulf Director Coy Day, N5OK, and Texas ARRL section leadership this week. "Thanks to all of you for the excellent job you collectively did in getting contacts made with key legislators. This reflects a great team effort."

NEBRASKA BILL WOULD EFFECTIVELY PROHIBIT BPL

Nebraska's unicameral legislature has passed a bill supported by telecomm interests to ban "agencies, political subdivisions and public power suppliers" from providing any broadband, Internet, telecommunications or video services. This would include broadband over power line (BPL). The "Unicam," as it's called, approved the measure, LB 645, by a vote of 37-8-4.

"So it's time for rejoicing, ARRL Nebraska State Government Liaison Bob Mitchell, WB0RJJ," said. "BPL is dead in Nebraska for this year!"

ARRL Nebraska Section Manager Matthew Anderson, KA0BOJ, hailed the bill's passage as "great news." He also extended congratulations to the Nebraska Section team for its work in securing passage for the measure. "All of our contacts, letters, e-mails, phone calls and personal visits have paid off," he said.

"This is indeed a great day for ham radio in Nebraska."

Mitchell said even if LB 645 is overturned next year, he believes BPL by then "will have been superseded by superior technology that will not pollute the RF environment." The measure now goes to Gov David Heineman for his signature. Mitchell said it's unlikely that the governor would veto the bill.

The legislation also creates a Broadband Services Task Force to study--among other things--"The need and necessity for the provision of wholesale broadband services, Internet services, telecommunications services or video services by agencies or political subdivisions of the state and public power suppliers." The task force will report to the legislature, the governor and the Unicam's Natural Resources and Transportation and Telecomm. committees by Dec. 1, 2006.



Hams volunteer for duty during WMD drill

Brunswick: On Monday June 6th, Hams from the mid-coast area and as far away as Kennebec County and the Portland area gathered at the Red Cross headquarters in Topsham to provide a skilled communications team to help in their efforts to

support the Town of Brunswick's Weapons of Mass Destruction (WMD) drill.

Ham communicators were assigned to various locations around Brunswick to pass Red Cross primary radio communications.

During the exercise the MARA's KS1R call sign was used by Red Cross headquarters Net Control.

The scenario of the event was that the Police Department noted a van of suspicious looking individuals in the vicinity of Bowdoin College. When a traffic stop was attempted the suspects ran into the campus and were hold up in the ice arena. Aerosol containers were discovered in the van that contained Phosgene gas that was expelled into the arena affecting a large group of people. The college had to be evacuated along with the surrounding residential area. Where the Red Cross came in was to set up shelter areas around town along with other personal services.

After the exercise was finished all the ham communicators mustered back at RC headquarters to debrief and find areas of the communications service that need correction or improvement, etc. Overall assessment was for a first test of the system all went very well.

The Topsham Chapter of the Red Cross wants to thank all the hams that participated and hopes they will continue to assist when needed.

Weather Spotter course has good attendance

Brunswick: The evening of June 14th had members of the MARA and local ARES attending a weather spotter's course offered by the Gray office of the National Weather Service at Brunswick High School. The course was sponsored by Sagadahoc County EMA. At least two dozen folks from around the Mid Coast and southern Maine area attended the session.

The presentation was excellent with graphics and photographs of the results of extreme weather conditions experienced here in Maine. Radar presentations were shown to highlight how the weather service makes their forecasts. As a result of this course, a majority of attendees signed up to be weather spotters.

JUNE 18th BALLOON LAUNCH POSPONED

Lisbon: With the National Weather Service predicting precipitation and heavy cloud cover for the Saturday, June 18th EOC-1 balloon launch, Lee/W1LWT made the decision to postpone the launch until July.

Bill Messier, K1MNW has a navigational RADAR set-up on his two story garage platform so that when the launch

takes place he hopes to track its journey across Maine.

Stay tuned for updates and a reschedule date for EOC-1 launch.

If you are not now a member of the ARRL, Please consider joining. The League needs the support of as many hams as possible to help maintain our amateur bands. Plus, there is a lot of support for the individual ham, making it well worth the investment

www.arrl.org

