

Message from the London Amateur Radio Club



Promoting Amateur Radio in London
And surrounding area since 1920

December 6, 2009

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Rob Hockin, VA3HO
William Clothier, VE3BCU

Next Meeting Topic

The **next LARC meeting** will be our annual **Christmas Pot-Luck Dinner**, on **Thursday December 10**. We'll start earlier than usual, at **7:00 PM**, because we'll all be hungry for our supper. Bring along your favourite dish (spouse and food) and join in one of the rare occasions when it's OK for all the hams to talk at the same time.

RAC Bulletin - RAC Target Of Phishing Attempt

November 16, 2009

Several messages have been received from users of the @rac.ca e-mail alias system who have received e-mails purporting to be from RAC claiming that maintenance was to be performed on the e-mail system and that certain information was requested to be sent to the sender of the message.

Please note that this message was not originated by anyone at RAC. We would not ask for such information as usernames and passwords in an e-mail. It can safely be ignored. E-mails relating to the @rac.ca e-mail alias system would come from alias-help@aliases.rac.ca or vptas@rac.ca or other identifiable RAC e-mail address.

Thanks to Earle Smith, VE6NM, who sent me the message with complete headers which made it possible to report this activity to the provider from which the messages originated as well as the provider of the e-mail address to which replies were to be sent.

James R. Hay, VE2VE

Vice President, Technical and Administrative Services Radio Amateurs of Canada

Next Meeting is Where and When?

Reminder of the next monthly Club meeting on December 10, 2009 at 7:00 pm

All meetings are normally located at St. Jude's Anglican Church, 1537 Adelaide Street North at Fanshawe Park Road East in London, Ontario.

The meetings are **normally** held on the second Thursday of the month at 7:30 pm EST during the months of September to June (no meetings July and August).

Next Meeting will be January 14, 2010. This meeting is still to be determined.

Area Repeaters

LARC Repeaters

London

VA3LON 147.060 + 114.8Hz

VE3MGI 145.390 - 114.8Hz

SORT Repeaters

London

VE3TTT 147.180 + 114.8Hz

ULR Link repeater
"SORT" System

VE3SUE 444.400 + 114.8 Hz

ULR link repeater "SORT"
System, IRLP

Ipperwash

VE3TCB 146.940 - 123.0 Hz

Linked to VE3SUE

Grand Bend

VE3RGB 146.750 + 123.0 Hz

VE3SRT 442.050 + 123.0 Hz

Linked to VE3SUE

Goderich

VE3OBC 146.910 - 123.0 Hz

Whitechurch

VE3WWD 443.075 + 123.0 Hz

Other Area Repeaters

London

VA3SIX 53.470 - 114.8 Hz

VE3OME 145.450 - 114.8 Hz

CANWARN

Stratfordville

VE3DPL 146.655 - 131.8 Hz

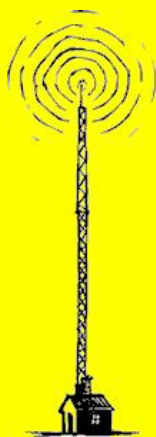
St. Thomas

VE3STR 147.330 + 114.8 Hz

Echolink Node: 72886

VE3STR 443.825 + 114.8 Hz

IRLP Node: 2482



If you have a repeater that should be listed here, please forward the information to John Visser, VA3MSV at va3msv@hotmail.com and I'll add it to the list.

Membership Certificates

The Club has created membership certificates for its current members. You can see your own certificate at the following link. <http://www.larc.ca/member-list.htm>

Simply click on your surname and it will bring up a PDF of your certificate suitable for printing.

Flaunt Your Face – Show Your Shack

In our hobby it's not always easy to put a face to all the fellow hams you talk to on the air. To help us all figure who's who, LARC invites its members to submit digital photos of yourself and/or your shack to be published on the membership page of our website. Purely voluntary of course, and if you prefer you can submit just one (depending on whether you think your face or your shack is more presentable).

How will it work? On the membership page, we'll attach your own picture where your first name appears, and the picture of your shack to your callsign. See the entry for Doug Elliott, VA3DAE for an example.

How do you submit your pictures?

Just email them to the LARC site webmaster address, which is: webmaster@larc.ca

Nets



Daily

Trans Provincial Net

7.055 MHz 7:00 am – 5:00 pm

Sunday

Swap Net

7.055 MHz LSB 12:00 pm

ARES Ontario Net

7.153 MHz 1:00 pm

7.055 MHz 3:00 pm

3.742 MHz 7:15 pm

IRLP Reflector 9005 8:00 pm

Monday

LARC 2m Net

No Net currently due to repeater repairs

Wednesday

ARES Net

145.450 + VE3OME 7:30 pm

ARES Ontario Net

IRLP Reflector 9005 8:00 pm

Thursday

PROCOMM Net

147.180 + VE3TTT 8:00 pm

444.400 + VE3SUE 8:00 pm

Friday

Tech Net

147.180 + VE3TTT 8:00 pm

444.400 + VE3SUE 8:00 pm

Saturday

VE3TTT 2m Net

147.180 + VE3TTT 7:30 pm

444.400 + VE3SUE 7:30 pm

146.940 - VE3TCB 7:30 pm

442.300 + VE3TCB 7:30 pm

447.050 - VE3SRT 7:30 pm

447.075 - VE3BHR 7:30 pm

If you have a Net that should be listed here, please forward the information to John Visser, VA3MSV at va3msv@hotmail.com and I'll add it to the list.

New Ham Antenna Installed on the ISS Columbus Module

ARISS US Hardware Manager Lou McFadin, W5DID says that all the teamwork and effort to expand the ARISS amateur radio station aboard the ISS were successful this weekend when the new dual band 2m/70CM antenna was installed on the outside of ESA's Columbus module.

Lou congratulated the team, "This is an example of what can be achieved by volunteer hams working closely with a space agency. This antenna project was funded entirely by AMSAT-NA and volunteers who built the antennas for both an ESA experiment and for ARISS. I am very proud of all the teamwork and effort that has gone into this project."

The new ARISS antenna is very similar to the antennas already on the Russian service module. Now that the antennas are in place the ARISS team will be working to bring amateur radio to the Columbus module.

In conclusion Lou noted the tremendous contribution from ESA for the experiment, the launch and the EVA making this expansion of amateur radio aboard the ISS possible.

[ANS thanks Lou McFadin, W5DID for the above the information]

UO-11 Calls Again

Silent for 18 months, it seems as if 25 year old OSCAR-11 has reactivated itself on 145.826 MHz. After its batteries failed, UO-11 remained operational with good signals when its solar cells were exposed to sufficient sunlight.

The UO-11 Control Station at G3CWV came out of retirement last weekend with Clive noting, "I have received two reports from Keith N4ZQ that he has heard UO-11 on 19 November at 13:33 - 13:43, and on 22 November at 13:02 UTC. The frequency is 145.826 MHz. Mode is FM."

Clive says, "I've been receiving good signals from the satellite during the morning passes, when it was not in eclipse. However, on November 27 nothing was heard this morning, so the watchdog timer may have caused the bird to switch off. I would be interested in any reports of reception AFTER 09:30 UTC 26 November."

Since last week, reception reports have been rolling in from around the world:

KB2M reported he has been collecting telemetry from UO-11 for the last week or so. His files are available for anyone decoding the telemetry.

KU7Z heard strong signals from UO-11 on November 26 in Utah.

VK5DG heard UO-11 buzzing away over the west half of VK on November 26 at 0003 UTC.

NH6VB reported from Hawaii his 706MKIIG and Arrow antenna on a photo tripod, copied a weak, barely above noise level, but it was there.

ZL2BX says he heard very strong signals from UO-11 during the entire pass on November 22. Up to 60db over S9 almost all pass. (TS-2000, 10 el yagis, preamp at ant). Also same report from VK2AYE.

W5IU heard the old familiar "buzz" loud and clear on a Yaesu FT-530 HT and a hand held three element Yagi on a November 23 pass over Fort Worth, TX, this morning. It reached full scale on the FT-530 during a good part of the pass.

K9MSG in Indianapolis reported that on November 24 he heard UO-11 on two passes using a ground plane vertical on a tower. Signals on the first pass were S-2 to S-7 signal level and reception was very noisy. The second pass of that day yielded reception at S-1 to S-3 with 1 to 3 second noise bursts.

Clive wraps up with, "Very many thanks to everyone who sent reception reports of this satellite or posted them to the amsat-bb board. I've been overwhelmed by the number received! I've replied to most, but my apologies if I've missed anyone."

Further details, including an audio clip to help identify the satellite are on Clive's OLD website at: <http://www.users.zetnet.co.uk/clivew>

[ANS thanks Clive, G3CWV for the above information]

Upcoming Events

Thu., Dec. 10, 2009

L.A.R.C. Meeting – Annual Christmas Potluck Dinner

Sat., Dec. 19, 2009

[RAC Winter Contest](#)

Thu., Jan. 14, 2010

L.A.R.C. Meeting – Topic to be determined

Sat., Jan 30, 2010 –

Sun., Jan 31, 2010

[Winter Field Day](#)

Sat., Feb. 6, 2010

[Big Event 32 - Flea Market and Hamfest](#)

Niagara Peninsula Amateur Radio Club
Merriton Community Centre, 7 Park Ave., St. Catharines, Ontario

Thu., Feb. 11, 2010

L.A.R.C. Meeting – Topic to be determined

Sat., Feb. 27, 2010

[Burlington Spring Flea Market](#)

Burlington Amateur Radio Club
Royal Canadian Legion - 828 Legion Rd., Burlington

Thu., Mar. 11, 2010

L.A.R.C. Meeting – Topic to be determined

Sun., Jun. 6, 2010

[Central Ontario Hamfest & Fleamarket](#)

GARC & KWARC
Waterloo Regional Police Association,
R.R. 2, 1128 Rife Rd. North Dumfries
Township. Beside Hwy 401, between
exits 268 & 275. Lat: 43° 20' 51.20" N,
Long: 80° 24' 58.89" W

If you have an upcoming event that you would like to have listed here, please forward the information to John Visser, VA3MSV at va3msv@hotmail.com and I'll add it to the list.

Jerry Sevick, W2FMI (SK)



Jerry Sevick, W2FMI -- renowned for his research and publications related to short vertical antennas and transmission line transformers -- passed away on Sunday, November 28. He was 90. In 2005, Sevick, an ARRL Technical Advisor, received the Dayton Hamvention Technical Excellence Award. The Hamvention Awards Committee noted that Sevick's April 1978 *QST* article on short ground-radial systems "now serves as the world's standard for earth conductivity measurements."

In a span of 10 years -- 1971-1981 -- Sevick authored 10 *QST* articles on antenna-related topics. While most of his articles dealt with vertical antennas, especially shortened verticals, he also wrote on related subjects such as radial systems and ground conductivity, broadband matching networks and impedance bridges.

In the course of designing networks to match coaxial cable to short ground mounted vertical antennas, Sevick looked at the transmission line transformer as a possible vehicle. He undertook the characterization and design of transformers for low impedance applications, resulting in his book [Transmission Line Transformers](#), published in 1987 by the ARRL. He also wrote *Understanding, Building and Using Baluns and Ununs* and *The Short Vertical Antenna and Ground Radial*.

"Jerry embodied the old-fashioned amateur spirit of innovation by experiment, applying his many years of experience as a Bell Labs researcher to a retirement project analyzing the performance of short vertical antennas," said Gary Breed, K9AY, Sevick's collaborator and editor. "That work led him to the study of transmission line transformers for which he became well known in both the ham and professional radio engineering communities. He brought a little-known piece of technology to the forefront and worried until the end whether enough people understood the principles behind the operation of these devices."

Sevick was a graduate of Wayne State University and a member of their Athletic Hall of Fame (he was drafted by both the Chicago Bears and Detroit Lions, but did not play professional football). During World War II, Sevick served as a pilot in the US Army Air Corps. In 1952, he graduated from Harvard University with a doctorate in Applied Physics with a dissertation on "An Experimental and Theoretical Investigation of Back-Scattering Cross Sections." From 1952-1956, he returned to Wayne State University to teach physics. While at Wayne State, Sevick was a local weather forecaster on WXYZ-TV7. In 1956, he joined the staff at AT&T Bell Laboratories where he supervised groups working in high-frequency transistor and integrated-circuit development, reliability, applications engineering and high-speed PCM; later, he served as Director of Technical Relations and retired in 1985.

London Hydro Visit

By Ruth Dahl, VE3RBO



I had an amazing time when we visited London Hydro. We were welcomed by Shelley Popowich who handled most of our visit from setting up a tour of the control room to arranging a wonderful meal. The control room was fascinating; they have multiple maps with each one covering different voltages in each area of the city. They have a huge video screen that they can check connecting substations so that they know which ones to turn off when working in different areas. Our only issue when we were in the control room was putting a group of Hams in a room where they can talk power and interference; there were a lot of good questions and chatter. We had to cut them off so we could get to the meeting.

The first presentation was handled by Deputy Fire Chief Dan Oldridge, VE3NCI, his discussion was about the new One Voice Radio System. This basically means that they can take any radio and tie it into the system. So that they only have to carry one radio instead of multiple ones. CAD voice will speed up voice response by 7 seconds. Will definitely make it easier in a disaster situation. He covered that they had had to go through a lot to get this idea even up and running, dozens and dozens of reports over the past 5 years. From KVA communications that assisted in generating and assessing theoretical propagation. And lots of reports, between the Steering Committee and the City. As well as an Inter Agency Agreement. They had quite a bit of trouble erecting their 800 MHz tower on Oxford St., 2 inches thick of paperwork for tender. Project tripled in cost. They will be switching over in approximately 2 months, Police Dept. already using it. The Fire Dept. cannot go

just digital as there is always too much background noise, so they will stay basically analog. Operations Systems will be moving out to the Byron Station#12. They are looking to incorporate HAMS in the future, as we cover a larger area outside the city. He also showed us a couple of videos, a funny one to do with acorns and a serious one to do with how quickly a home can become engulfed in flames. All in all it was very fascinating.

The other speaker was Michael Martin from IBM who spoke about SMART METERS. By the summer of 2010 every home in Ontario will have a SMART METER, the meter is to help us to know when we are using too much power and how to regulate when and how much we use. The meters will have different costs for different times of the day calling it the TOU Time- of- use prices. This pricing system will have off-peak, mid-peak and on-peak times. The meter automatically records your total electrical usage hour by hour and it will send it to London Hydro through wireless technology. This if used correctly could help you save money. The meters also help out with our use of electricity, with each house adjusting their usage to either off-peak or mid-peak times there will not be as much of a demand on the hydro system. After the presentations there were a lot of good and some amusing questions. I have heard from many of the 41 people in attendance that they very much enjoyed the meeting.

L.A.R.C. Auditor Report for 2008/2009

Rob Hockin
9934 Lamont Dr – RR 4
Komoka, ON
N0L 1R0

2009-10-28

The Board of Directors
London Amateur Radio Club
London, ON

I have examined the books of receipts and disbursements of London Amateur Radio Club Inc, prepared by your treasurer for the year ended June 30, 2009.

In my opinion, the statements of cash receipts and expenditures present fairly the results of the club's operations.

The only change made in preparing financial statements was to separate the investment income applicable to GIC's from the principal of maturing investments.

Additional minor recommendations have been provided to the current treasurer.



VA3HO

Emerging Technology: New LED Ham Radio Light Communications Record Set Down-Under

A new, non line-of-sight optical communications distance record of 288 km has been set down-under with a one-way transmission between two hams transmitting with Light Emitting Diodes.

On the night of October 27th, Rex Moncur, VK7MO, and Joe Gelston, VK7JG, assisted by Paul Godden, VK7KPG, set a new one way non line-of-sight optical record of 288 km across Australia's Bass Strait. And they did this using red light scattered of the clouds.

VK7MO was on Mt. Liptrap in South Gippsland listening on his A-P-D based receiver. This while VK7JG and VK7KPG were on Mt. Horror in North-East V-K-7 transmitting with a 3 watt Luxeon LED transmitter. The signals from Mt. Horror were bounced off of some high altitude cirrus clouds estimated to have been at about 20,000 feet.

On the receiving end, the callsigns from Mt. Horror were decoded by VK7MO using a new program

called Weak Signal Communicator. Weak Signal Communicator is actually a new front end for the Spectrum Lab audio analyzing application that has been recently created by David Smith, VK3HZ.

The experimenters also tried the WSJT decoding program developed a few years ago by Joe Taylor, K1JT. The sync signal was received at -30dB but unfortunately there were no decodes.

None the less, the possibility of bridging Bass Strait by optical communications using weak signal technology now been proven. A full report will be posted to the Radio and Electronics Association of Southern Tasmania website in the near future.

Only the inquisitive minds of radio amateurs could make a feat like this possible and doing it with relatively inexpensive gear. The U-R-L for the REAST website is <http://reast.asn.au/optical.php> (VK7TW)

Tragic death of 1996 Young Amateur of the Year runner-up

The Society is saddened to report the death of Ben Clarkson, G7WHO, at the tragically young age of 27. Runner-up 1996 Young Amateur of the Year, Ben gained his licence on his 14th birthday. An enthusiastic member of the Reading and District Radio Club and a Scout Leader, Ben will be sadly missed by all who knew him.

Tragic Death of 1996 Young Amateur of the Year Runner-Up: by [AI2IA](#) on November 28, 2009

From this British article it is impossible to tell if his untimely demise was due to a ham radio accident or other causes. Hopefully, if it had to occur, it was natural causes. My thoughts are with his family.

RE: Tragic Death of 1996 Young Amateur of the Year Runner-Up by [N9XCR](#) on November 28, 2009

I finally found a news source that gives us the reason. It could be a coincidence, but I doubt it. It was due to a car accident with a milk float.

From:

http://news.bbc.co.uk/2/hi/uk_news/england/sussex/8384038.stm

A driver who died when his car was in collision with a milk float in West Sussex has been named by police.

Ben Clarkson, 27, of Goodwood Drive, Runcton, died at the scene of the accident, in Sidlesham, on 20 November.

His passenger, a 21-year-old local man, is still in St George's Hospital, Tooting, south London, being treated for serious injuries.

The 26-year-old driver of the milk float was treated for a hand injury at St Richard's Hospital Chichester.

He was later released.

Police have renewed their appeal for anyone who witnessed the collision or who has other information to come forward.

Origins Of The Handie Talkie

The Forerunner Of Today's Cellphone

by Greg Whiter, VK3CA
Part 1 of 2 - 69 Years Old in 2009

The humble Handie-Talkie, which most of us have come to accept as being an integral part of our amateur radio inventory today, celebrates its 69th birthday during 2009. Like many of the other technological advances of that time, the handie-talkie was conceived and born of the Second World War. Its conception was driven by the US Army's requirement for a small, lightweight, user friendly voice radio, which would provide short-range communications within the battlefield at section and platoon level.

Starting life as the US Army Signal Corp's SCR-536 (BC-611) short range radio set, it quickly attracted the name "handie-talkie" because of its ability to be operated in one hand against the side of the head.



The SCR-536's small size (seen to the left) can be attributed to its use of RCA's then advanced new miniature "all glass" 7 pin battery valves (shown at left), which first appeared on the US market in early 1940, but were not seen outside the US until after the war (AWV released them in Australia during the late 1940's).

The SCR-536's design was years ahead of its time and far better than anything then available to the Germans, Japanese, Russians, British (shown at right) or Australians; all of their offerings being generally low performance, large, "Man-packed" units.

WHO WERE THE HANDIE-TALKIE'S INNOVATORS

The Galvin Manufacturing Corporation of Chicago, founded by Paul and Joseph Galvin (shown to the right) in 1928, initially produced AC mains battery eliminators for use with the popular battery powered broadcast radios of the time. However they also became more and more involved in the demand for mobile and fixed broadcast radios for the home market as well as early US Police FM communication systems.



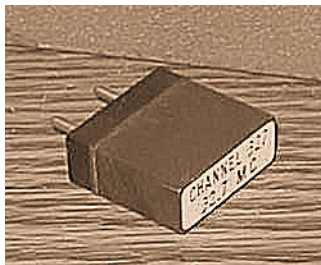
Galvin's product trade name was Motorola, which represented 'Radio on the Move'. In 1948 the Corporation became Motorola Incorporated and was one of the first manufacturers of television receivers for the emerging US mass market. Motorola's continued innovation over the years has made it the well-known household name it is today.



During World War 2 Galvin also designed and produced a variety of communication equipment for the US Government, however their most famous is without a doubt the SCR-536 (BC-611) Handie-Talkie.

In 1940, with Europe at War and the rumbles getting ever closer to US shores, Paul Galvin (1895 to 1959) authorized a team to design and build a light, portable, infantry radio set. This resulted in a uniquely packaged high performance, self contained, hand held radio that weighed

around 2.5 kg. In 1941 the US Army Signal Corp placed a Contract with Galvin and by 1945 130,000 units had been manufactured under the designation SCR-536 (BC-611).



As an aside, Galvin also coordinated 30 other manufacturers, implementing quantity production techniques, which resulted in the eventual delivery of 35 million quartz crystal units (shown to the left) during WW II.



During the 1940's, amongst other activities, Paul Galvin's interests saw him serving as president of the RMA (Radio Manufacturers

Association). Shown below is an extract from a 1940's Motorola advertisement



Origins Of The Handie Talkie

The Forerunner Of Today's Cellphone

by Greg Whiter, VK3CA
Part 2 of 2 - Technical Details of the SCR-536

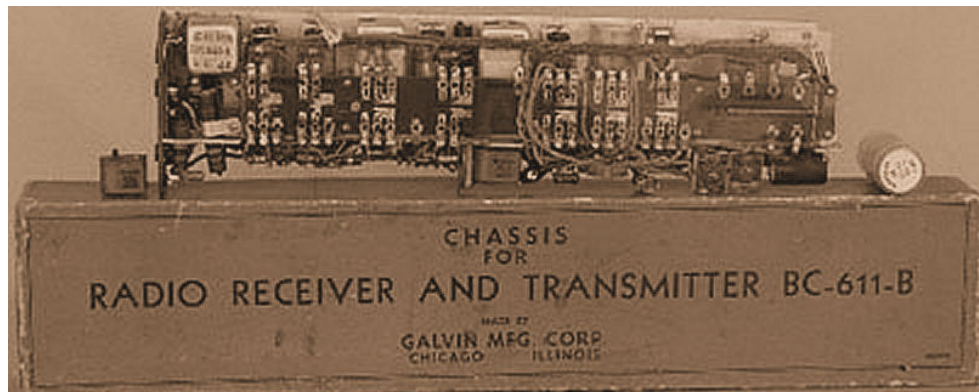
Shown to the right is an SCR-536 hard at work on the battlefield during World War Two.

SCR-536 DESCRIPTION

The SCR-536 consisted of a five valve (four used in transmit and five in receive mode), low power, battery operated, AM transceiver designed primarily for portability and ease of operation. It featured single channel crystal control between 3.5 and 6 MHz with a transmit power output of around 250 mW. Receiver sensitivity was quoted, as being 6 μ V while the SCR-536's specified range was 1.6 kilometres over open terrain and 4.8 kilometres over salt water. No doubt these distances varied according to battery condition, position of antenna and type of vegetation surrounding the handie-talkie.



Battery life was quoted as 19 hours but generally the set was described as battery 'thirsty' and, although it was tropicalised, susceptibility to dampness and mould quite often reduced battery performance.



OPERATION

Extending the telescopic antenna turned on receiver power, while transmit-receive change over was effected by depressing the SCR-536's only other operator accessible control, the PTT switch. Internal AVC handled volume and the Operator's Manual advised reducing the antenna length to reduce receiver overload on very strong signals!

Field implemented frequency changes were not very practical as two internal crystals and two coils required replacing, with re-tuning also being necessary. If required this was usually carried out back at Base prior to field operations. One can't help but wonder how, operationally, the problems of a 'jammed' frequency channel (jammed either intentionally by the enemy or unintentionally by other SCR-536 users) were handled on a busy battlefield.

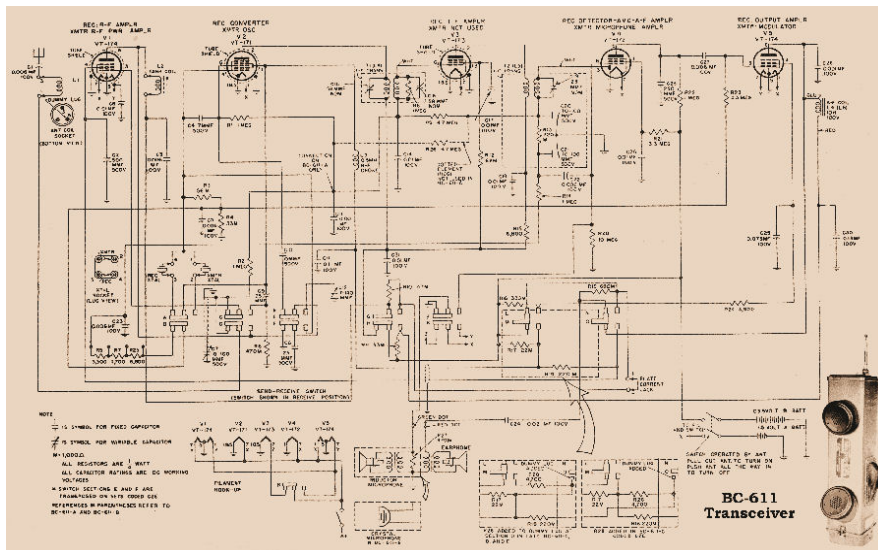




When the set was not in use the top of the retracted telescopic antenna was protected by an otherwise retained screw-on cover.

The version of the SCR-536 shown to the left has a deeper than normal base plate. This type of base housed two 6.5 mm phono jacks, one for an external microphone and the other for external headphones.

CIRCUITRY



The receiver was a single conversion superhet using a 455 KHz IF stage with a RF amplifier.

This configuration opposed the trend of the day where similar infantry equipment using regenerative receivers was the norm. Not only did the SCR-536 use a superheterodyne design but it also had the high receiver performance (for its time) which a RF amplifier stage could provide. Galvin achieved all this in such a small package by building one of the first true transceivers where each valve, except the IF amplifier, was used in both transmit and receive modes.

Interestingly this design approach meant that the PTT switch required a mammoth thirteen poles, nearly all of which were double throw.



The valve line up was as follows: 3S4 RX RF amp, TX RF Power amp; 1R5 RC Mixer/Osc, TX Crystal Osc; 1T4 RX IF amp, TX not used; 1S5 RX Detector/AVC/AF amp, TX Mic preamp; 3S4 RX AF output stage, TX Choke modulator. In order to preserve 1.5 volt 'A' battery life only one half of the 3S4 filaments were used during receive and the

1T4 IF amplifier filament was disconnected during transmit. To change frequency the grid and anode coils of the 3S4 stage were swapped and realigned. Further, the TX and RX crystals were changed, their frequencies being selected from available fifty different channel pairs.

CONSTRUCTION

The SCR-536 resembled a bulky telephone handset of lightweight aluminum alloy construction. The case was of 'wrap-around' rectangular design with three internal parallel compartments. One accepted the transceiver electronics and integral telescopic antenna. The second, the radical new 'layer' construction BA-38 103.5 volt 'B' battery and the third,



the BA-37 1.5 volt 'A' filament battery. The transceiver chassis simply slid into its compartment, as did the batteries into their separately insulated areas. A dynamic microphone and ear-piece were positioned similar to a telephone handset and a 'knuckle' type PTT switch was positioned for left handed operation. The 'knuckle' actuator operated thirteen sections of the spring-loaded transmit-receive wafer slide switch.

An innovation of the SCR-536's construction, which assisted in keeping its overall size down, was the use of 'component-cups'. These cups fitted around each valve base and consisted of two Bakelite shells, or walls, which contained all the resistors and capacitors directly associated with that valve. The walls were then filled with a sealing compound and the wiring leads brought out and soldered into circuit. Later versions, however, moved away from using these component cups.

Tropicalisation to moisture and fungi-proof the electronics was performed by spraying the transceiver chassis with a special varnish.

SCR-536's ANCESTORS

So that is the story of the 'original' handie-talkie, the one that started it all. Generally further development of the concept had to wait until the transistor revolution of the 1960's. During this period



we saw the emergence of the 27 MHz AM CB 'walkie-talkie'. Such units came in transmit power levels of up to 1 watt and had up to four crystal controlled channels. By today's standards they were still very large though. Amateurs didn't start to see commercially available walkie-talkies until the seventies, this period signalling the start of the 2 Metre 'hand-held's' ever-increasing popularity.

Today's technology has given us 'credit card' size multi-band hand-held's. And these days we all take for granted our tiny mobile phones that were only a dream less than two decades ago.

Surface mount technology and highly integrated microcontrollers have given today's design engineers the freedom to build radios

so small that Galvin's design team would find it hard believe, were they with us today. Furthermore, we may well ask 'what will the next 50 years do to the humble handie-talkie?

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A Ham Radio Operator's Night Before Christmas

from ©1996 by Gary Pearce KN4AQ

T'was the night before Christmas,
And all through two-meters,
Not a signal was keying up
Any repeaters.

The antennas reached up
From the tower, quite high,
To catch the weak signals
That bounced from the sky.

The children, Tech-Pluses,
Took their HTs to bed,
And dreamed of the day
They'd be Extras, instead.

Mom put on her headphones,
I plugged in the key,
And we tuned 40 meters
For that rare ZK3.

When the meter was pegged
by a signal with power.
It smoked a small diode,
and, I swear, shook the tower.

Mom yanked off her phones,
And with all she could muster
Logged a spot of the signal
On the DX Packet Cluster,

While I ran to the window
And peered up at the sky,
To see what could generate
RF that high.

It was way in the distance,
But the moon made it gleam –
A flying sleigh, with an
Eight element beam,

And a little old driver
who looked slightly mean.
So I thought for a moment,
That it might be Wayne Green.

But no, it was Santa
The Santa of Hams.

On a mission, this Christmas
To clean up the bands.

He circled the tower,
Then stopped in his track,
And he slid down the coax
Right into the shack.

While Mom and I hid
Behind stacks of CQ,
This Santa of hamming
Knew just what to do.

He cleared off the shack desk
Of paper and parts,
And filled out all my late QSLs
For a start.

He ran copper braid,
Took a steel rod and pounded
It into the earth, till
The station was grounded.

He tightened loose fittings,
Re-soldered connections,
Cranked down modulation,
Installed lightning protection.

He neutralized tubes
In my linear amp...
(Never worked right before –
Now it works like a champ).

A new, low-pass filter
Cleaned up the TV,
He corrected the settings
In my TNC.

He repaired the computer
That would not compute,
And he backed up the hard drive
And got it to boot.

Then, he reached really deep
In the bag that he brought,
And he pulled out a big box,
"A new rig?" I thought!

"A new Kenwood? An Icom?
A Yaesu, for me?!"
(If he thought I'd been bad
it might be QRP!)

Yes! The Ultimate Station!
How could I deserve this?
Could it be all those hours
that I worked Public Service?

He hooked it all up
And in record time, quickly
Worked 100 countries,
All down on 160.

I should have been happy,
It was my call he sent,
But the cards and the postage
Will cost two month's rent!

He made final adjustments,
And left a card by the key:
"To Gary, from Santa Claus.
Seventy-Three."

Then he grabbed his HT,
Looked me straight in the eye,
Punched a code on the pad,
And was gone - no good bye.

I ran back to the station,
And the pile-up was big,
But a card from St. Nick
Would be worth my new rig.

Oh, too late, for his final
came over the air.
It was copied all over.
It was heard everywhere.

The Ham's Santa exclaimed
What a ham might expect,
"Merry Christmas to all,
And to all, good DX."

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'Twas an Amateur Christmas

By Jack Wright, KC4ZEK

'Twas the night before Christmas, when all through the night,
We Amateurs sent messages, with the speed of light.

The stockings were hung by the ham rigs with care,
In hopes a new dual-bander, soon would be there.

And Ma with her HT, and I with my set,
Had just settled down for a long Winter's net.

Here and there are the books that we need,
Books that were crazy if we dont read.

Books equal to motherhood, and apple pie,
Like Uncle Wayne, they Never Say Die!

When out in the street there arose such a clatter,
I sprang to the window to see what was the matter.

When what to my wondering eyes should see,
But a plain gray van, with a license plate: "FCC".

With a little old driver so lively and quick,
I knew as my heart sank, it was not St. Nick.

He knocked at the door, no chimney to help,
Said "I'm from the government, I'll have those cookies & milk."

Now I thought to myself, "What a sticky wicket",
With laser sharp eyes he was examining my ticket.

He tested the radios, one by one,
I held my breath, and tried not to run.

Now Yaesu, now Kenwood, now Ten-Tec and Icom,
On Comet, on Cushcraft, on Azden and Den-Tron,

To the top of the tower, to the end of the beam,
Now dash away, dash away, signals SO CLEAN!!

After testing my setup, and laughing so gay,
Not "HUMBUG" said he, but "Your rigs are OK".

Then he was away like a flash, no question or fee,
By then, he was just like Santa Claus to me.

And..I heard him exclaim ere he drove out of sight,
"73's TO ALL, AND TO ALL A GOOD NIGHT!"

'Twas an Amateur Christmas

by APC NEWS

'Twas the night before Christmas, and all through the shack
The rigs were turned off, and the mike cords lay slack.
The antenna rotor had made its last turn,
and the tubes in the linear had long ceased to burn.

I sat there relaxing and took off my specs,
Preparing to daydream of armchair DX,
When suddenly outside I heard such a sound,
and dashed to the door to see what was around.

The moon shone down brightly and lighted the night-
For sure, propagation for the low bands was right.
I peered up to the roof where I'd heard all the racket,
And there was some guy in a Red, fur-trimmed jacket.

He looked very much like an ACA guy,
Who'd come to check up, on some bad TVI.

So I shouted up to him, "OM, QRZ" ?
"Hey, you by the chimney, all dressed up in Red."

Then I suddenly knew when I heard sleighbells jingle.
The guy on the rooftop was jolly Kris Kringle.
He had a big sack full of amateur gear,
Which made quite a load for the prancing reindeers.

Transmitters, Receivers, cabinets and racks,
Some meters, and scopes, and a lot of co-ax.
He said not a word, 'cause he'd finished his work
He picked up his sack, then he turned with a jerk.

As he leaped to his sleigh, he shouted with glee,
And I knew in a moment he'd be QRT.
But I heard him transmit as he flew o'er the trees
"Happy Christmas to all, and to all, 73's."

'Twas an Amateur Christmas

By Jim

'Twas the night before Xmas
And all through the house
Everything was stirring
Even the mouse

Transceivers were tuning
and aerials were up
the scotch was disguised
in a large plastic cup

Fingers on buttons
were starting to itch
this waiting on New Year
was becoming a bitch

But soon it came nearer
the party was nigh

dipoles and loops
were all hoisted high

Grins on all faces
this HF was great
No Morse to learn now
It had gone to its fate

The clocks being watched
ticked over so slow
one minute to midnight
one minute to go

And then right on time
came a signal so clear
they thought the transmitter
was terribly near

But they'd never forget
Oh that terrible sound
they were cursing and screaming
and running around

For out of the speaker
So crisp and so clear
Came the sound they abhorred
And had learned how to fear

And it said....

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Merry Christmas
everyone.

From John Visser, VA3MSV

MEMBERSHIP INVITATION

-- Membership application and dues are currently requested.

Our term of membership runs from October 1 to September 30 of the following year. Each and every year it is increasingly more difficult to get Amateurs to commit to membership in their local club due to the alternate functions we are asked to fund.

*The **London Amateur Radio Club** has a long history of providing technical support, social support and repeater facilities. Public service efforts are currently provided by a club affiliation with Amateur Radio Emergency Services (**ARES**) and **Radio Amateurs of Canada (RAC)**.*

Your Directors work tirelessly to provide meeting topics that are informative and entertaining, events that are timely (Christmas meeting, field day, bus trip) and participate in events that display and promote Amateur Radio in the community.

To be effective in its pursuits, the Club needs the support of the local Amateur fraternity through membership.

While we obtain financial support from our Annual Flea Market, we require membership support to fund such things as meeting hall rent, repeater sites rent and maintenance, web site fees, membership cards and liability insurance. For what it's worth, none of these things are getting any cheaper.

The cost of membership has not changed for a number of years and even in the face of increased cost, we would like to keep it that way.

With more than 1000 'hams' in the London area, it's inconceivable that less than 10% support a pastime about which most of us are passionate.

PLEASE, make a choice and do your part to keep the **London Amateur Radio Club** alive and well by purchasing your membership at our next meeting (or by mail – details on our web site). The cost is still only \$25.00 (single) or \$30.00 (family residing at the same address).

