

= Vintage amateur radio =

Vintage amateur radio is a subset of amateur radio activity , considered a form of nostalgia or hobby much like antique car collecting , where enthusiasts collect , restore , preserve , build , and operate amateur radio equipment from bygone years , most notably those using vacuum tube technology .

Popular modes of operation include voice communication using amplitude modulation (AM) , and Morse code using continuous wave (CW) radiotelegraphy . Among enthusiasts , there is considerable interest in owning , restoring and operating vintage military and commercial radio equipment , much of it more than 40 years old . Some undertake to construct their own gear , known in ham slang as homebrewing , using vintage parts and designs . A number of amateur radio clubs and organizations sponsor contests , events , and swap meets that cater to this specialized aspect of the hobby .

= = Appeal = =

Many amateurs prefer the relatively precise digital frequency displays and stability of modern , state @-@ of @-@ the @-@ art , microprocessor based amateur radios . Vintage radio enthusiasts contend that modern amateur equipment lacks the aesthetic appeal and " soul " of amateur electronic gear from the vacuum tube era . Additionally , many find satisfaction in taking commercially @-@ made amateur equipment from the 1930s @-@ 1970s (affectionately called boat anchors by US amateurs because of their large size and weight) and carefully restoring it .

Enthusiasts feel that the spacious electrical and mechanical designs of boat anchor radios are more easily worked on than the miniaturized layouts of modern Japanese gear . Fixing a modern transceiver often involves nothing more than a VLSI chip replacement . Vintage amateur radio devotees enjoy the more primitive experience that boat anchor radios offer , calling it " real radio " . Enthusiasts claim that boat anchors sound better than modern equipment , saying that the tube audio from vintage gear is " warmer " and more aesthetically pleasing . Some hobbyists see vintage radio operation as a valuable asset to help preserve the history and heritage of radio for future generations , and may assist in the restoration and operation of vintage radio equipment for historical exhibits , museums and museum ships .

= = AM activity = =

Amplitude modulation (AM) was once the main voice mode in amateur radio before being superseded by Single @-@ sideband modulation (SSB) . But AM has recently become a nostalgic specialty interest on the shortwave ham bands . Vintage radio operation has drawn a wide range of amateur radio enthusiasts from rock star Joe Walsh , WB6ACU , to former Federal Communications Commission attorney Riley Hollingsworth , K4ZDH . A majority of " AM 'ers " stations consist of vintage transmitters and receivers housed in separate cabinets . Some operators have even obtained old AM broadcast transmitters from radio stations that have upgraded their equipment . Others build their equipment from scratch (called homebrewing) using both modern and vintage @-@ era components .

In the United States , shortwave HF frequencies (in MHz) on which amateur radio AM activity can be found include 1 @-@ 885 , 1 @-@ 930 , 1 @-@ 985 , 3 @-@ 870 @-@ 3 @-@ 885 , 7 @-@ 290 @-@ 7 @-@ 295 , 7 @-@ 160 , 14 @-@ 286 , 14 @-@ 330 , 21 @-@ 425 , and 29 @-@ 000 @-@ 29 @-@ 200 , and sometimes feature " special event " stations using unique call signs . In the United Kingdom , AM activity can be found almost every day on frequencies between 3 @-@ 615 and 3 @-@ 625 MHz . The French AM activity can be found almost every day the morning between 6h30 and 8h00 the frequency 3 @-@ 550 MHz . Conversations (QSO 's in ham slang) are typically configured as " roundtables " consisting of several participants . Interested newcomers are usually encouraged to switch their modern transceivers to AM mode , introduce themselves , and join the conversation .

= = Classic gear = =

Vintage operating activity is not limited to the AM mode . Many devotees use their " classic " amateur gear from vintage @-@ era American manufacturers like Eico , EF Johnson , National , Heathkit , Hammarlund , Drake , Collins , WRL , Swan , Signal / One , Lafayette and Hallicrafters , to make radiotelegraphy (CW) , SSB , FM and RTTY two @-@ way contacts . Although 1930s through 1970s gear is considered " vintage " , collectors may differ on the cutoff dates .

Some even sub @-@ specialize in military radio collecting and undertake to restore and operate surplus communications equipment , much of it dating back to World War II , from the ubiquitous US Signal Corps SCR @-@ 300 and SCR @-@ 536 walkie talkies to exotic gear like the British Paraset , a small espionage transceiver supplied to Resistance forces in France , Belgium and the Netherlands .

There is considerable interest in vintage military and commercial radio equipment among EU amateur radio operators , especially gear from British manufacturers such as Marconi , Racal , Eddystone , Pye , and a variety of Russian , German , Canadian , British RAF and British Army equipment , such as the well known Wireless Set No. 19 .

= = = Glowbugs = = =

" Glowbugs " are a related aspect of vintage radio and harken back to the early days of amateur radio , when the majority of hams hand @-@ crafted their own equipment . Smaller in size than " boat anchors " , " glowbug " is a term used by US amateurs to describe a simple home @-@ made tube @-@ type radio set , reminiscent of the shortwave radio @-@ building craze of the 1920s and 1930s . " Glow " refers to the glow of the vacuum tubes and " bug " to the gear 's relatively diminutive size . The Doerle regenerative receiver and Hartley transmitter circuits are considered " classic " glowbug designs . Generally , any small , home @-@ built tube @-@ type transmitter or receiver may be referred to as a glowbug . The majority of glowbug transmitters are designed to be used in the CW radiotelegraphy mode .

As late as the 1960s , glowbugs were part of many beginner ham stations , and the ARRL Radio Amateur Handbook for those years exhibited a number of such simple , tube @-@ based designs . Today , glowbug operators are enjoying a resurgence of interest among QRP enthusiasts and others with a penchant for constructing their own equipment . Many hams are assembling " glowbug rigs " on improvised chassis such as tin cakepans and wooden boards , and putting them on the air between 7040 ? 7050 kHz and 7114 ? 7125 kHz . Amateur radio Glowbug enthusiasts can often be heard communicating on the shortwave bands via CW using Morse code . Popular frequencies to hear glowbug contacts are around 3560 kHz and also 3579 @.@ 5 kHz , chosen because crystals for this frequency can be salvaged from discarded color TV sets , along with other transmitter components .

= = Clubs , events , and publications = =

Many vintage radio clubs sponsor special events and contests , such as the " AM QSO Party " sponsored by the Antique Wireless Association , the " Heavy Metal Rally " sponsored by Electric Radio Magazine , and the " Classic Radio Exchange " . Such operating events are not traditional ham radio contests inasmuch as they are a night of friendly QSO ? s using home @-@ built , restored commercial ham , broadcast or military equipment .

The Amateur Radio Lighthouse Society and The AM Radio Network 's " Expedition to Thomas Point Shoal Lighthouse " in Chesapeake Bay , MD commemorated the history of lighthouses with a vintage special event station using the call sign K3L .

Britain 's Vintage and Military Amateur Radio Society (affiliated with the Radio Society of Great Britain) coordinates regular on @-@ air " nets " where enthusiasts gather as well as massive technical files for the benefit of members . The Surplus Radio Society , a Dutch society of collectors

of old ex @-@ military radio equipment and other nostalgic receivers and transmitters holds weekly radio activity nets every Sunday on 3 @.@ 575 MHz CW / 3 @.@ 705 MHz AM and sponsors several flea markets and exchange fairs each year .

The Canada @-@ based The Wireless Set No. 19 Group , with members virtually world @-@ wide , caters to those who collect , restore and / or operate vintage military communications equipment , with emphasis on the World War II Wireless Set No. 19 radio . Many members are Amateur Radio operators who use the equipment for on @-@ air contacts with others .

The ARRL publishes " Vintage Radio " , a collection of articles from QST magazine describing vintage equipment and restoration , and CQ Amateur Radio magazine releases a yearly " Classic Radio Calendar " featuring full @-@ color vintage radio images .

= = Safety = =

Those accustomed to making repairs on solid state equipment are cautioned that vacuum tube gear contain potentially lethal voltages . The practice of discharging power @-@ supply capacitors and keeping one hand in your pocket when working on powered @-@ up gear are essential safety measures . Some older equipment directly connects the metal chassis to one side of the incoming AC line , a practice which results in the entire unit becoming electrified if the wall plug is inserted backwards . Many older radios , such as vintage receivers , are not safety @-@ fused . Restorers generally replace the AC line cord with a more modern 3 wire plug and install an in @-@ line or chassis mount fuseholder . The use of a common station ground connection to all equipment is encouraged . Those who collect , restore or otherwise use vintage radio equipment should also be aware of possible radioactive substances .