



# Antique Wireless Association of Southern Africa



# 219

October 2024



## Eddystone EC10 MkII

The EC10 was the first all-transistor shortwave radio made by the famous Eddystone company, manufactured from 1967 to 1977. The EC10 – Front View It's a general-coverage, single-conversion superhet, operating from batteries or a plug-in mains supply which replaces the battery compartment.

Coverage is 550 kHz to 30 MHz: Band 1 18 MHz – 30 MHz Band 2 8.5 MHz – 18 MHz, Band 3 3.5 MHz – 8.5 MHz, Band 4 1.5 MHz – 3.5 MHz, Band 5 550 kHz – 1.5 MHz. The IF is 465 kHz.

The Mark I uses ten transistors (all germanium) and three diodes.

The Mark II adds a variable-capacitance diode (varicap) to the Local Oscillator section to provide a fine tuning control All models feature an RF gain control and a BFO for use with CW or SSB signals.

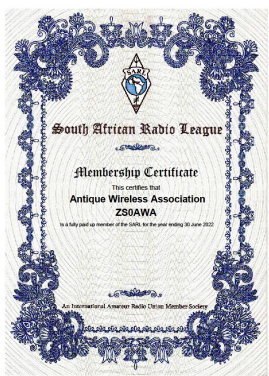
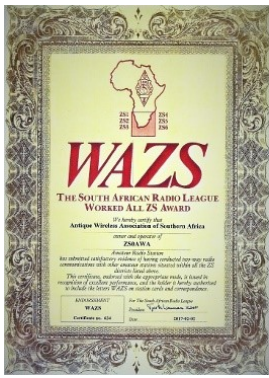
There is also a switchable audio filter centred on 1 kHz to improve clarity on CW signals.

Audio output is some 800 mW into the internal speaker. An external speaker can be used, and there is a high-impedance audio output for connection to an external audio amplifier.

The set operates from a variety of antennas: unbalanced, balanced or a short telescopic rod. Input impedance is 75 ohms on Bands 1 – 4 and 400 ohms on Band 5.

Sensitivity is quoted as better than 5 microvolts on Bands 5 – 2, better than 15 microvolts on Band 1.

The Mark II features a signal strength meter useful for tuning. The Fine Tuning control, which operates a varicap in the local oscillator section, is essential when tuning signals in the highest band.



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### AWA Committee:

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- \* Technical Advisor—Rad ZS6RAD
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- \* KZN—Don ZS5DR
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- Wally ZS6WLY

Visit our website:  
[www.awasa.org.za](http://www.awasa.org.za)

## Reflections:

It was a cool September evening in 1984 and Rd, now ZS6RAD, and myself stood outside the offices of the Postmaster in Kimberley waiting to write the RAE.

I had for several months now been doing a course by mail to study all the requirements for the RAE. Of course this was before the days of the internet and when we still had a functioning postal system, even if it was into the far reaches of the Northern Cape.

I pulled out my soft pack of 20 Texan plain and offered Rad one, knowing full well he did not smoke, and to my amazement he took one. Lit it up and dragged away on it. I was supposed to be the nervous one as Rad was writing for the second time in his career having previously been licensed in the UK.

He never let me forget that evening and always blamed me for his addiction to the weed.

I was never good at the technical side of things, so I had made sure that I knew enough of the regulations to get as high a score as possible, which turned out to be my saving grace.

I remember there was a circuit that we had to draw,

those were also the days when one had to write all your answers, no monkey puzzle, and for the life of me I could not even think of the circuit. If I remember it was something to do with a bias, but I could be way off here. It was after all, a long time ago.

We got home late that night, the trip home was 165km and I was sure I had flunked. Rad needed a few more Texans after his ordeal and never stopped for a long time after that. I do think however he changed to something a bit milder.

There were always a few instances that caused one to break out in a cold sweat. This was one of them. The other was my first CW QSO after getting my full ZS license.

My expectations did not come true and I actually ended up passing by the hair on my chinny chin. It was the regulations that got me through with something like a 96% on them and just scraping through on the technical side. Within a few months I had my first call sign ZR4AC, being relegated to VHF only in the middle of SA where the only other VHF station within 165km, was my neighbour.

A 12 element ZL Special soon put me on the map to Bloemfontein, over 300km away and in the next 6 months I had passed my CW 12WPM test to get a full ZS call sign.

Oh what days they were !

Why have I ghone down this route ? I was looking at the events calendar and noticed that the RAE exams are coming up soon and thought of the fun I had trying to get through all my stuff.

I don't know if any of them will go through the same trauma we did, but maybe there will be one or two. And who knows, we may see one or two of the new recruits getting their first radio with valves in it and they will come looking for assistance and fall in love with the valve era.

I am sure I was not the first to go through the tribulations of wrting the RAE and I definitely won't be the last. Even if the exam is that much easier today than it was then. One still has to learn and put it all to good use.

All the best to those writing the RAE and we look forward to hearing them on frequency

73

DE Andy ZS6ADY

## Wikipedia

### Stellar Coronal Mass Ejections

There have been a small number of CMEs observed on other stars, all of which as of 2016 have been found on red dwarfs. These have been detected mainly by spectroscopy, most often by studying Balmer lines: the material ejected toward the observer causes asymmetry in the blue wing of the line profiles due to Doppler shift.

This enhancement can be seen in absorption when it occurs on the stellar disc (the material is cooler than its surroundings), and in emission when it is outside the disc.

The observed projected velocities of CMEs range from  $\approx 84$  to 5,800 km/s (52 to 3,600 mi/s). There are few stellar CME candidates in shorter wavelengths in UV or X-ray data.

Compared to activity on the Sun, CME activity on other stars seems to be far less common.

The low number of stellar CME detections can be caused by lower intrinsic CME rates compared to the models (e.g. due to magnetic suppression), projection effects, or overestimated Balmer signatures because of the unknown plasma parameters of the stellar CMEs.



## A Day In the Life at SAIEE

Saturday 28th October we arrived at the SAIEE to be greeted with a power outage in the entire area, which did not bode well for what we had planned for the day.

Not many turned up for the day, but we still had a good eyeball QSO and enjoyed some time with Renato giving us a show and tell about oscillators and how they could be used.

He showed a drawing of a circuit introducing an oscillator on a frequency and what its results were and then removed the frequency and introduced a second oscillator. It was all quite confusing for me, but when I saw the end result, it all actually made sense.

After showing the diagram, he pulled out of his hat a whole conglomerate of wires and small capacitors (quite the magician he was) and proceeded to couple it all up to a power supply (a battery) and demonstrate how we got a tone. Then he proceeded to swipe a small metal cage over a loop of wires and show how the tone changed, thus producing a .....metal detector.

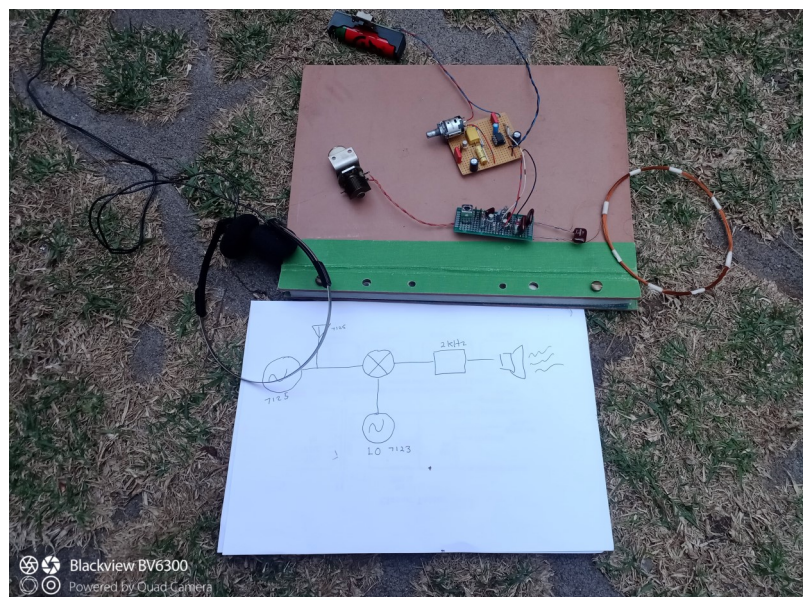
We then spent some time discussing the various things he had brought along to show how they could be detected on an oscilloscope but unfortunately with the power being out, we could not do the actual tests.

A very informative day.



Show and tell

The Circuit and model.





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## AWA AGM – 2024

Notice is given for the 2024 AGM of the Antique Wireless Association of Southern Africa to be held on Saturday 9th November 2024 at the premises of the SAIEE in Observatory Johannesburg.

There will be a fleamarket and open display as well as free access to the SAIEE museum.

The SAIEE shack will be available for use.

Times will be from 09:00 until 15:00 with the AGM held at approximately 10:00, thereafter fleamarket and braai facilities and eyeball QSO. Bring along all your valuable junk that you wish to dispose of at the fleamarket.

The Shack will be on air from 08:30 running the AWA SSB net.

Should you wish to bring your own meat and refreshments, please feel free to do so, otherwise meat packs and cold drinks will be on sale.

Please let Andy ZS6ADY know if you would be interested in a meat pack, for planning purposes.

We look forward to seeing many of you there.

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## Live Wire with a Loot Locator June 1969 Popular Electronics

Carl Kohler's indefatigable and unflappable electronics do-it-yourselfer, the lesser half of Friend Wife, is at it again in this "Live Wire with a Loot Locator" technodrama in a 1969 issue of *Popular Electronics* magazine. His latest junk box endeavor is the Kohler Loot Locator, which, per his ambitious claims, will unearth - literally - endless treasures buried in the sandy beaches surrounding their humble abode. Of course the missus is typically dubious of his success, given past brainchildren and displays of electromechanical prowess. This time proved different, for a reason you will discover upon reading the story. That [Sonalert](#) mentioned being part of the Loot Locator is an audible alarm product still manufactured by Mallory (the capacitor people). The [Heathkit color TV](#) cost about \$400 in 1969, which is the equivalent of about [\\$3,443](#) in 2024 money. Throw in another couple hundred for the "heap" of second-hand HP (back when Hewlett Packard made quality TE and not just computers) test equipment and a nice dinner, and that would have been quite a haul.

## Live wire with a Loot Locator

By Carl Kohler

Beyond an open window of the new workshack, the Gulf of Mexico murmured frothily upon a promising beach. Intently completing the electronic project at hand, I didn't hear Friend Wife approaching until she was already past the door I had unwittingly left unlocked and ajar.

Normally I might've fended her off with evasive tact or sickening diplomacy. Failing that, I have a grouch act calculated to strike terror in the heart of man or beast, child or distant relative. It works keen on the lady, too.

But she was shrewd enough to have brought with her the price of admission to my intellectual's sanctuary: the steaming pot of fresh coffee smelled wonderful and my defenses suddenly suffered undeniable voltage droop. Here, then, was my lovely, illogical bride-the lady who only last year saw fit to have my 3-element beam strung with Christmas lights, and then had the gall to feign hurt dismay at my resultant rage. Oh, I've been on to her for years. It's staying ahead of her that keeps me sleepless and tossing fretfully some nights. The communications gap in the same generation is called Marriage.

"What'cha building this time that ain't gonna work?" she demanded, her eyes boldly narrowing at the sight of the excitingly designed home-crafted instrument before me. "Hey, that gismo looks awful familiar, Buster!"

Smoothly sipping the delicious brew, I shifted position casually in a sly effort to block her view of the nearly finished electronic metal detector. "Don't let me keep you," I hinted delicately. "I know you must have many little tasks awaiting your skill and diligence, dear."





*"... the lady of the house is a militant homemaker whose dwelling sparkles ..."*

"What tasks?"

"Surely you want the neighbors, here, to know that the lady of the house is a militant homemaker whose dwelling sparkles with---"

She stepped forward, peering harshly over me at the detector. "I loathe housework and I don't care who knows it! Hey, I remember that screwy thing! It was supposed to find gold or uranium - or something! And all it ever found was a buncha lousy bones!" She chuckled meanly, grinning down at me with the expression of a woman who has just found an open wound to salt. "Yeah, that was really the craziest flop you ever butchered the budget to put together! Remember?"

I stared into the distance with dignity. She had me. It was true. I had built a rare earth detector. The same one, in fact, that now lay-considerably modified and improved-before her jeering eyes. Due to a cruel quirk of a heartless fate, I'd made a small miscalculation - substituting animal horn for Bakelite in the search coil - which had caused the detector to respond only to bone, improbable as it still seemed these many years later.

"You have a fantastic memory," I said coldly.

"Sure have!" She sounded proud.

"Then, surely you must recall that memorable day when you brightly informed me that it took two coats of paint to cover all my QSL Cards." I smiled thinly up at her. "If we're going to relive old errors, let's be impartial, eh?"

"You had to mention it, didn't you?"

I shrugged. "No, I didn't have to. I could just as easily have recalled the time I caught you using my stock of expensive tantalum capacitors for hair - rollers or that shattering instance when you ---"

"Never mind all that," she chattered hastily, pointing to the instrument atop the workbench. "What I wanna hear is what this piece of fancy junk is supposed to be, anyway."

Standing tall, I drew myself to my full height, assuming the patient mien of a man-a superbly gifted, saintly modest, highly intelligent and utterly articulate man -who is about to attempt the heartbreaking chore of explaining quantum theory to an aborigine in small, easily understood words (if not a language so explicit that it teeters on the borderline of basic babytalk). She stiffened just as she always does when she senses I'm going to talk down to her.

"This ultra-sensitive and rather sophisticated instrument is the Kohler Loot Locator," I informed her with a kindly smile. "It's modified and brought sternly up-to-date. Comprised of all manner of truly efficient components, including silicon transistors, a 9-volt alkaline battery, a varactor tuning-control, a Faraday shielded search coil, a Sonalert and a ---"

"What's it do?" she whined impatiently.

"--- very stable circuit of original design that is charmingly representative of every advance made in the art and science of solid-state technology, this stunningly effective prototype will operate most beneficently in our behalf."

"Doing what?" The doll was maddeningly single-minded. "What's it gonna accomplish, big shot.?"

"In two words : locate loot."

"Locate whaat?" She wore a bewildered expression.

"Loot . . . swag . . . booty . . . treasure," I chanted, knowing a dreamy film of greed was glazing my eyes. "That beach out there is jam-packed with ancient pirate treasure - and the Kohler Loot Locator is going to find it!"

She hooted raucously, like a banshee trying to win a hollering contest. I've heard that damning laughter many times before during the years of our relationship. It generally indicates that she is of the opinion that I've lost my mind. I suffered the derisive snorting with a face carved from the granite of total resistance to ridicule.

"Pirate treasure! Oh, wow!" She wiped tears of merriment from her eyes with the back of her hand. Very ladylike, very graceful. "Man, you're too much! Swag! Beautiful!" She dissolved into another spasm of mirth, shripping hysterically.

Restraint cracked. I spat cold coffee back into the cup, gesturing abruptly toward the door. "All right, laughing-girl, now you know what I'm preparing to do. Your morbid, unsympathetic curiosity has been satisfied. Kindly trudge back to your house and break a few dishes or burn some food."

A hand gently touched my arm.

"Aw, I didn't mean to hurt your feelings! Honest. I just lost my head when you were putting me on about looking for loot with - her mouth quivered with more laughter but she fought it back - that thing!"

"So who's putting you on?" I arched an eyebrow at her, questioningly. "I'm perfectly serious."

"You're perfectly nuts," she declared, all sham humility vanishing, "if you actually think you're going to find any - any swag or treasure with that bone-picking thingamajig!"

"It's been modified. And I have complete assurance from the oldest, most trustworthy residents of this area that there is indeed bona fide pirate loot stashed in those bleached sands." I clutched the light, mobile Locator protectively to my chest. "You'll change your tune when I prove there were pirates here!"

"Oh, I know there were pirates here. In fact, there still are!"

"I beg your pardon?"

"One of them sold me some bait, yesterday, when I went fishing!"

I glared at her in silence.

"Tell me," she said, softening her expression and voice. "Why didn't you try to find pirate treasure with this whatchamacallit when we were living on the California coast?"

"Simple. There never has been any pirate loot buried out there, no matter what the Los Angeles Chamber of Commerce may insist to the contrary."

"How do you know?"

I bent a pitying smirk of undisguised superiority upon her. "Sheer logic and a rudimentary understanding of human psychology would help you to recognize instantly the validity of my theory. Too bad, being female, you're naturally exempt from these necessary mental qualities, sister!"

"So?"

"So what self-determined pirate was likely to step ashore - much less be there long enough to bury his treasure - with all those missions along the coast. Why, there were probably even more of them during the pirating days."

"What's that got to do with it?"

"Just the risk of being apprehended and sent to church against their will, that's all." I grinned triumphantly. "Elementary logic. I can well imagine how your alleged mind balks at it."

"It doesn't even figure."

"It doesn't, eh?"

"Heck, no!"

I handed her the cup of cold coffee. "When was the last time you ever heard of a bunch of bank bandits burying their loot in a churchyard?"

She marched off to the house without another word of comment or argument. I sighed, returning to my work on the Loot Locator. She always loses. What stings, is, she refuses to realize it.

A week later I stopped walking along the pale sand to rest, momentarily letting the Locator lay at my feet. Mopping my sweating brow, I gave some dismally realistic thought to what the Locator had located in the past two days. Exactly 176 soda pop cans, 816 beer cans, 11 car bodies, 26 stoves and a couple of refrigerators - all of them in advanced stages of rusty disintegration. Regarding the compact trench-spade with distaste, I glanced at the beachcombing couple nearby, diligently peering at the sand as they strolled along the water's edge.

The sound of a car behind me diverted my attention. It was Friend Wife. Bringing me coffee and cruel amusement as usual. Having trailed me into this folly, she wasn't about to keep her distance and allow me to fail graciously. No, she wanted to be there for the kill - that moment of truth when I admitted I was finding nothing resembling pirate loot, and possibly even confessing that my Locator was a proven flop. I suspected she would settle for nothing less than the joy of hearing me voice my laboriously developed suspicions that no freebooters had ever stepped ashore here, either.

"How's it going, treasure hunter?" she jeered, handing hot coffee to me. "Need any help getting the troves of swag back to the house?"

"Uh . . . well, I'm working my way through quite a bit of trash that must be gotten past in order to reach the lower levels of deposit where anciently placed items - such as doubloons, pieces of eight and chests brimming with loot - were originally buried," I stalled lamely, trying for a nicely detached expression. "I expect to stumble upon a treasure cache anytime now."

"Hogwash!"

"How can you say that?"

"It's easy. Hogwash!"

Suddenly, in staring mutely at my feet, my eyes swept past the Locator, tilted so the search plate was partially exposed - and I saw a large, gleaming ring clinging to the magnetic plate. Swiftly I bent and picked it up, holding it before her face.

"Wh-What's that?" she stammered. "Just a little piece of hogwash, dear! Just a small sample of what the magnificent Kohler Loot Locator is doing while the world snickers and smirks." I polished the ring on my damp shirt. Made of thick gold, it was studded with diamonds glittering in the sunlight. Visions of wealth beyond mine or the IRS's wildest dreams romped briefly through my head. I trembled with excitement, spilling hot coffee all over myself. "Now are you convinced that -"

"Podden me, buddy," said a booming voice just behind my right shoulder, "but that's my wife's ring you got there?"

I turned. He was King Kong in Bermuda shorts and a gaudy shirt splashed with tropical fish on a background of garish crimson. The same guy I'd seen studying the water's edge a few moments earlier. He also looked tough enough to chew nails without his store-teeth and spit out their heads without bruising his gums. I smiled intensely up at him.

"Y-Your wife's r-ring, sir?" I chirped.

"Yeah, dat's right! She losted it out here a coupla days ago. We been looking fer it ever since, see?" He plucked the gem-encrusted ring from my fingers just as deftly as I could have taken candy from a baby. Now I knew how babies feel when somebody puts the snatch on their goodies. "Sure was nice of you to find it for us!"

"M-My pleasure," I lied manfully.



"Bet ya made the thingie yourself, huh?"

jerked a beefy thumb at the Locator. "I wanna buy it, buddy. How much ya want fer it?"

I hesitated, waiting for Mouthy to assure this character that I was also morally above business transactions but she remained silent. He misinterpreted by pause.

"Bet ya made the thingie yourself, huh?"

"Right!" I bit the word out, holding my chin high.

He named a sum that would comfortably purchase a Heathkit Color TV, a middling heap of Hewlett-Packard test equipment and still leave enough to take a mouthy wife to dinner at the best restaurant. Furthermore, he reeled it over in cash and I took it like a man getting rich in a dream.

"You sure this thingie works good?" he asked, turning to leave. "We lose a lotta stuff in the sand, going around the world and seeing all them beaches, ya know!"

My fist tightened about the sheaf of bills it held. There're only two things I love better than electronics. One of them was keeping her yap shut. I was holding the other.

"That precision handcrafted instrument you just bought, sir," I assured him in a confident tone common to solvent men, "is so sensitive that it'll detect a germ with iron-rich blood!"

He departed, happy.

I got into the car, counting the bills with a reverence bordering on an ill-concealed mania. "Did that little old Locator ever find the loot or did it ever find the loot?" I babbled. "I no longer hear you chuckling with glee, kid."

"Y-you pirate!" she accused.

"The gentleman set the price."

"Talk about piracy!"

"Listen, sister," I said tartly. "Have you ever heard of pioneering?"

"Sure I have. Why?"

"Well, what you've just witnessed was a tidy example of another somewhat romantic endeavor along the same line as pioneering."

"What's that?"

"Buck-aneering, baby!" And this time I dissolved into merry laughter.

"Don't suppose you'd take a modest reward for finding a ring that means quite a bunch to my little woman, would'ja, buddy?"

"Of course not!" Mouthy chimed nobly from the car. "My husband wouldn't dream of accepting money for having accidentally found your wife's lovely piece of jewelry!"

For a tenth of a second I think I understood why some husbands are entirely capable of sending their wives to a better world slightly ahead of divine schedule. I nodded, my face probably a mixture of emotions-greed-disappointment-false cheer-anguish. The works, simultaneously.

"N -No reward, th-thanks," I croaked.

"Hey, that's a purty tricky little chunka stuff you got there!" King Kong squatted, running a hairy hand admiringly over the Locator. "Does it work?"

"Does a chicken have lips?" I said bitterly.

"Huh?"

"It found your wife's ring, didn't it?"

"Hey, yeah! Dat's right, it did!" He pondered the truth of this fact for a few seconds. Then, rising to his full eight feet of towering flab once more, he

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## AWA Valve QSO Party

1. The aim of the AWA QSO party is to create activity on the 40 and 80 meter bands. It is a phone only contest.
2. Dates : Saturday 05 October 2024 and Sunday 06 October 2024. The Saturday will be an **AM** QSO Party and the Sunday an **SSB** QSO Party
3. Time. From 15:00 - 19:00 SAST (both dates)
4. Preferably, Valve radio's, or radio's with valves in them may be used.
5. Frequencies - 80m 3,600 to 3650 Mhz  
40m 7,050 to 7,100 Mhz and 7.130 to 7200Mhz (The frequency between 7.100 and 7.130 is contest free)
6. Exchange - call sign, RS and consecutive serial numbers starting at 001, plus type of radio used. eg HT37 Tx.
7. Scoring - All valve radio 3 points per contact  
Hybrid (valve & solid state) 2 points per contact  
Solid State Radio 1 point per contact
8. Certificates will be awarded to the first three places in each category. (AM/SSB)
9. Sponsor : The Antique Wireless Association of Southern Africa (AWA).
10. An excel log sheet is available on the AWA website. Copy and paste the following link : [Downloads \(awasa.org.za\)](https://www.awasa.org.za/downloads)  
Look in "Other Downloads"

All contact logs to be sent to:

email: [andyzs6ady@vodamail.co.za](mailto:andyzs6ady@vodamail.co.za)



All Valve



Solid State



Hybrid



# WHY SETTLE FOR HALF?

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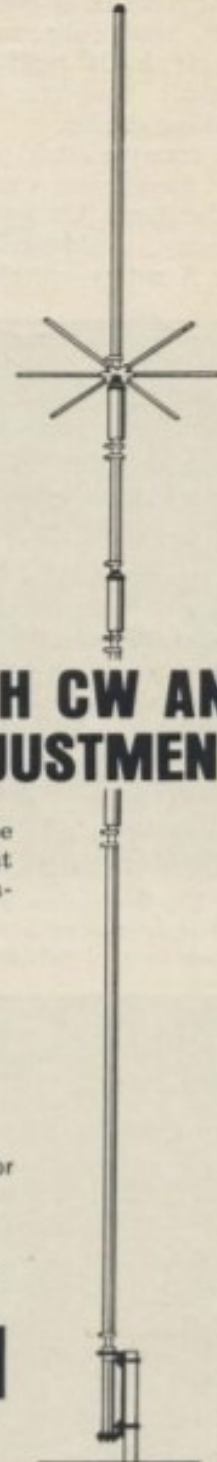
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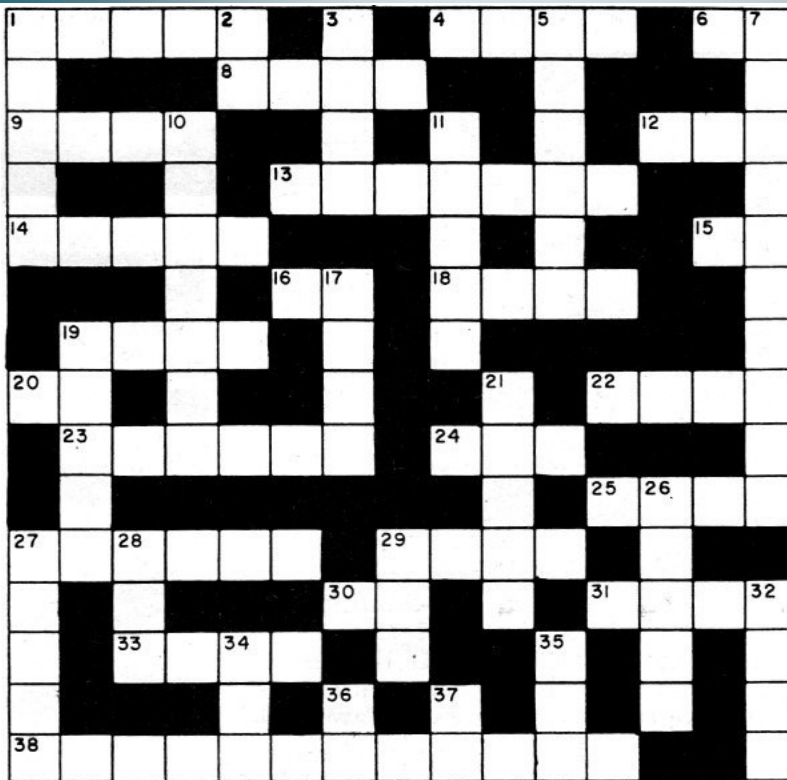
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**Across**

1. Audio.
4. Sound energy dissipated without accomplishing any work.
6. Part of familiar term for full-range reproduction.
8. A regularly occurring pulsation of amplitude resulting from the combining of two sounds or tones.
9. Opposite of treble sound frequencies.
12. Device used in a sound system to attenuate a signal or couple two impedances.
13. Term often applied to a coaxially constructed speaker.
14. Electro-acoustic unit of power ratio based on the Napierian base of logarithms.
15. Coil found in speakers (abbr.).
16. Class of audio amplification.
18. Satisfactory in quality.
19. Transducer that picks up sound and converts it into electrical currents (fam.).
20. River in Italy.
22. Unit of loudness.
23. Material removed from surface of phonograph recording disc by the cutting stylus.

22. Undesirable noise in an audio system.
24. Opposite of a "dead" or highly damped room.
27. High frequencies.
29. Unit of stylus pressure.
30. Equipment used to address large gatherings (abbr.).
31. Essential component in a hi-fi system (abbr.).
33. Recording companies' trade association (abbr.).
38. Frequencies above 20,000 cps.

**Down**

1. Unit of sound absorption.
2. Electro-acoustic unit of relative power, voltage, or current (abbr.).
3. The amount that an audio amplifier can increase the amplitude of a signal.
5. Sound in its "third dimension."
7. In acoustics, inertance is the equivalent of \_\_\_\_\_
10. Transducer used in every audio system.
11. One circuit of audio amplification.
17. The \_\_\_\_\_ of audio frequencies extends from 15-20,000 cps,
19. The part of a speaker that receives power from the electrical circuit and converts it into mechanical energy.
21. Pertaining to the ear or sense of hearing.
26. The "receiving" circuit of an audio amplifier.
27. Ordinarily, sound is composed of a number of \_\_\_\_\_
28. Organ used for the perception of sound.
29. That portion of a magnetic circuit in which there is no ferromagnetic material.
32. Loud, undesirable sound.
34. Medium through which sound waves travel.
35. Sound ratio.
36. Meter watched by recording engineer (abbr.).
37. "Twin" of "hi."

**CONTACT US:**

WA/Telegram +27824484368  
 email: andyzs6ady@vodamail.co.za  
 www.awasa.org.za

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Antique Wireless Association  
 of Southern Africa

**Mission Statement**

Our aim is to facilitate, generate and maintain an interest in the location, acquisition, repair and use of yesterday's radio's and associated equipment. To encourage all like minded amateurs to do the same thus ensuring the maintenance and preservation of our amateur heritage.

Membership of this group is free and by association. Join by logging in to our website.

**Notices:****Net Times and Frequencies (SAST):**

Saturday 07:00 (05:00 UTC) — Western Cape SSB Net — 7.140; Every afternoon during the week from 17:00—7.140

Saturday 08:30 (06:30 UTC) — National SSB Net— 7.125;

Echolink—ZS0AWA-L; ZS6STN-R

Sandton repeater—145.700

Kempton Park Repeater—145.6625

Relay on 10.125 and 14.135 (Try all and see what suits you)

Saturday 14:00 (12:00 UTC) — CW Net—7025; 14:20 10.115/14125

**AWASA Telegram group:**

Should you want to get on the AWA Telegram group where a lot of technical discussion takes place, send a message to Andy ZS6ADY asking to be placed on the group. This is a no-Nonsense group, only for AWA business. You must download the Telegram App first. ....+27824484368

**Suffering from Interference ?**

Jaap Lourens ZS6SAI is offering his services to amateurs around Gauteng who experience interference. Contact him on 082 086 2496. You can listen to his history on the AWA website from the net of 03 August 2024. Go to the website and look under "Latest News" to find the link.