



Q S X
P E

*Port Elizabeth Branch of the
South African Radio League*

P.O. Box 462, Port Elizabeth. 6000.

Season's

Greetings

National Call	145.5 Mhz
P.E. Repeater	145.05/65
Grahamstown	145.15/75
Lady's Slipper	145.10/70

ZS2PE

Bulletin: Sunday 08h40
HF: 40m — 7098 KHz
VHF: FM-145,700 MHz

Dec. 83



Port Elizabeth Branch

Chairman's Christmas Message



It seems like only a short while ago that we were collecting subs, planning field stations and numerous other mid year events. Suddenly Christmas is upon us once again, a fact borne out by my having to don a Santa Claus outfit recently at our childrens party. The look of awe and happiness on their faces was a sight to behold, which brings us to the true meaning of Christmas, joy and happiness. As I have said in previous years, more's the pity we don't apply our Christmas philosophy throughout the year. Perhaps we should print a Xmas message every month. On behalf of our Committee, I wish you and yours, a joyous Christmas and a prosperous new year

Best 73

Dick

Dick Schönborn ZS2RS
CHAIRMAN.

Committee

CHAIRMAN:	Dick ZS2RS (322111)	VICE CHAIRMAN:	Trevor ZS2AE(321746)
SECRETARY:	Marge ZS2OB (303498)	TREASURER:	Brian ZS2AB (303498)
PROJECTS:	Lionel ZS2DD (321770)	SPECIAL EVENTS:	Colin ZS2AO (312471)
P.R.O.:	Pete ZS2PJ (301493)	AWARDS:	Attie ZR2DY (325449)

Q5X-PE - ZS2OB and ZS2AB.

Christmas Party

On Sunday 4th December at Wyndomayne Tea Gardens just outside Port Elizabeth, the Branch had its Christmas Party for the children of all ages! 18 kids, together with 20 adults, enjoyed a delicious spread and a good time was had by all. Before the party, there were pony rides for those who wanted them and a sparkling pool enticed quite a few of the youngsters to have a dip. Fortunately the weather was kind to us. Just after 4 o'clock, Father Christmas arrived and gave out all the presents and not one of the kids was too shy or frightened to get their own gifts. Maybe it was because Father Christmas had such a kind face and he enjoyed kissing all the girls. Some of them, however, objected to the curly beard. All agreed that it was most pleasant and thanks must go to Pete ZS2PJ who did the organising, but who unfortunately arrived back from his trip to U.K. and the Continent just as everyone was going home. Roll on, next Christmas!

REMINISCENCES

from Vi Cruickshanks ZS2ER.



In the year 1937 we required a new Radio set in our home, so purchased a Phillips from ZS2L OM Roy Perkin who owned a Radio shop. Whilst chatting away, I said, "Being an ex-telegraphist I must be able to receive Morse", so then he suggested I become a lady Ham. I knew nothing about Ham Radio in those days. He said, "It's time we had a lady Ham, I'll build you a small set". Well, that's how it all started. So ZS2L got in touch with OM Norman Jervis ZS2P and between them built my first rig which had an output of 10 watts, crystal controlled with a 6C4 WFO, 6C4 doublers driving a single pair 6L6s Class A.F.1, the RX being an 1155A, with the RF 24, antenna was a folded dipole. I did not have to take the Morse test being an ex-telegraphist and received my licence on the 9th of November 1937. I went onto phone soon after but did all my DX in Morse. Whenever I hooked up with an ex P.O. telegraphist, we recognised the P.O. fist and would go all out. What a surprise they got when we would QRT I'd tell them I was an XYL. My very first contact was with a local Ham ZS2EC, J Maasdorp, whom I believe is now a Silent Key. What excitement my first QSO over the air!

I became a member of the S.A.R.R.L. in 1937 and am still a member of the S.A.R.R.L. At that time, the general opinion was that I was the first XYL in South Africa, until shortly after a young lady arrived at my QTH one morning and said she'd called to meet the other YL Ham, WJ! None other than Iris ZS2AA. Iris had received her licence a few months before me, so she was the first YL to become a South African Ham.

Our local Radio monthly meetings were held regularly at OM Viv Hicks ZS2AK's QTH at Humewood. These were always well attended as there were approximately 39 members at the time. Later on we held our meetings at the Tech. In 1961 I celebrated my 25th Ham Anniversary and gave a party at the Tech and was host to all members and their wives. I had a very special birthday cake made in the shape and colour of our badge, which was enjoyed by all.

During the War years, we carried on with our meetings which were held at our QTH, although a number of our Hams were away on service. There were a few members still in Port Elizabeth and on two occasions Reg Green ZS6J and a friend flew down to Port Elizabeth from East London where they were on Military service at the time, especially to attend the meetings.

In 1967, I was asked by the Grahamstown S.A.B.C. to give two broadcasts on 'Thursdays Youth News Reel' and on 'Personality Parade Womans' World' which I did, although a little nervous.

During the War years, I gave Morse lessons to the WAAFS during the evenings. They were stationed at the Crusader Club in St. George's Park. In 1952 we formed a YL Club and started off in Johannesburg with a few members. Today the numbers have increased from strength to strength. At our Conference in 1974 a presentation was made to Diana ZS6M by the YL members of the YLRL for her years of tireless and devoted work on our behalf, the gift being a beautiful silver tray.

I attended many Conferences and met a large number of Hams who became life-long friends. Unfortunately a number of them are Silent Keys today, which is the one sad thing about Ham Radio - losing one's friends.



My OM took a keen interest in my Hobby as he was a Signals Officer during the War and could read Morse Code. He always looked after my antennas and such like. After his death 9 years ago I donated a cottage at St. John's Gardens and living in a Complex it would have been difficult to operate a Ham station without causing QRM. I still have my Call sign but unlikely that I will go on the air again as time is marching on and so are the years! The happy years I enjoyed of Ham Radio will remain with me until I too become a Silent Key.



IF - there were no QRM

IF you can keep your head when all about you
Are calling you and causing QRM;
IF you can trust yourself, although they're shouting
And one by one you're going back to them;
IF you can wait and not be tired by waiting,
For rare DX or skeds, you'll realise
That hams are friends and there should be no hating,
Nor should you moan or talk too wise.

IF you can think of new rigs you will master;
IF you can dream of aerials by the score;
IF you can meet with triumph and disaster
And test for faults to see if there are more;
IF you can bear to hear the words you've spoken
Which were recorded and played back to you;
Or see your 6146 broken and sure
It was the last one too!

IF you can make one heap of all your spare parts.
And tell your friends to come and take their choice;
IF you can bear to see your best parts vanish,
And never breathe a word or raise your voice;
IF you can build and not be tired of building;
IF you can change that final valve once more
And all your valves and wires you will be shielding
Which have some parasitics in their core.

IF you can talk with DX and with local;
IF you can work c.w. and lone;
IF you can whistle and exercise your vocal
And your c.w. has a T9 tone;
IF you can fill the unforgetting ether
with R.F. equal to a "ton";
Yours is the world and every ham that's in it,
And ...which is more....you'll be a ham, my son.

With apologies to Rudyard Kipling's poem "IF". Thanks to ZS6TH.

BRANCH TROPHIES

For the information of all the new members and as a reminder to those who may have forgotten about them, here are the details of Branch Trophies which are awarded at the Branch A.G.M. each year.

THE ZS2AE HOME CONSTRUCTORS TROPHY. Donated by Brian Weller ZS2AE. This trophy is made available to the P.E. Branch, to be awarded on an annual basis to the Branch member, who in the opinion of the Committee serving at the time, has constructed the best piece of radio or associated equipment during the Branch year. The trophy takes the form of an engraved silver cup, which shall be awarded to the winner at each Branch A.G.M. together with a printed certificate. The cup will remain the property of the Branch and must be returned to the Branch just prior to the A.G.M. The accompanying certificate will remain the members property once awarded. The Committee will ask members interested in qualifying for the trophy to bring their respective projects to a meeting for judging or in the case of a piece of equipment or installation not being readily transportable, the Committee will visit the site of such equipment for judging purposes.

The unit submitted for consideration may form part of a complete system employing other items of commercially made equipment, but units constructed from commercially available kits shall not be eligible for the award. Outer housing cabinets for the constructed equipment may be of commercial origin, but more favourable consideration will be given to units which are completely constructed in the home workshop.

While there is no restriction on the type or purpose of the equipment submitted for consideration, preference is to be given to items relating mainly to the more specialised modes of communication available to the amateur i.e. RTTY, SSTV, FAX, computer equipment, etc. Aspects of construction which will be taken into account will be decided by the judges i.e. neatness of layout, finish and wiring, etc and the degree of electronic sophistication of the equipment will not necessarily determine the winner. This trophy is made available in the hope that it will spur some of our members on in the field of home construction, an aspect of ham radio which seems to be sadly becoming a thing of the past.

THE ZS20E DX TROPHY. Donated by Marge Weller ZS20F.

This trophy is made available to the Port Elizabeth Branch, to be awarded on an annual basis to the Branch member who, in the opinion of the Committee serving at the time, has established two way contact with the greatest number of dx stations on the HF bands during the Branch year. The trophy takes the form of an engraved silver cup, which shall be awarded to the winner at each Branch A.G.M., together with a printed certificate. The cup will remain the property of the Branch and must be returned to the Branch just prior to the A.G.M. The accompanying certificate will remain the members property once awarded. The winner will be decided by the Committee after scrutiny of the logbooks of those who wish to qualify for the award. QSL cards need not be produced as these often arrive after long delays.

The certificate will carry certain endorsements i.e. cw only, SSB only, RTTY only or any other mode only, or mixed. All the available HF bands from 1,8 to 30MHz may be used, but special endorsements will be made should the winner have used only the bands below 10MHz. Contacts made during the various HF contests are permissible.

V.H.F. TROPHY.

This is a silver cup which will be awarded to the member who presents evidence of outstanding achievement on any of the V.H.F. bands during the Branch year. The cup will remain the property of the Branch but a certificate will be awarded to the member.

AGM'84

Many of the new members have no doubt wondered at the enclosed envelope with qCX-PE nearly every month, and many of the others have disposed of them in file 13. As we are fully aware, we cannot force anyone to give a donation and this is why we have come, cap in hand, with a request for a donation, no matter how small. Times are hard, but with the generosity which is usual with the members of the Branch, we know we can rely on you to play your part to make the 1984 A.G.M. to be held in Port Elizabeth both one of the best ever.

A whole year has gone by since we listed those who had given donations and the list has grown a whole lot longer, so here goes:

ZC2CZ, ZS2AG, ZS2V, ZR2BY, ZS2BQ, ZS1VS exZS2JJ, ZS2EY, ZS2CM, ZS2RM, ZS2TC, ZS2CQ, ZS2DD, ZS2ER, ZS1WD, ZS2DR, ZS2SA, ZS2TJ, ZS2RT, ZS2AW, ZS2FP, ZS2W, ZS2PP, ZS2KA, ZS2LC, ZS2WH, ZS2A1, ZS2MJ, ZS2JJ, ZS2FW, ZS2SW, ZS2J, ZS2HZ (now Silent Key), ZS2TX, ZS2FE, ZS2AB, ZS2RS and Gay, ZS2PJ, ZS2FT, ZS2GP, ZS1AAE, ZS2BE, ZS2WV, ZS2AF, ZS2OE, ZS2SI, ZS2VH, ZS25X, ZS2MS, K8EMI, ZS2HE, Bill Hodges, Gordon Knapp, Langley Lookwhy, Mike Robertson, Jan Stark, ZS2PA, ZS2PC, ZS2ME, John Chamen, Gloria and Jock Kotze, xyl Late ZS2KS, Audrey Furrell in memory of late ZS2ZY and several donations of equipment which have been sold for A.G.M. funds.

The fund now stands at R2156 which is somewhat off our planned target. We would therefore be very happy and grateful if we could reach the target and not have to draw on Branch savings. We have only three little months to go.

A.G.M. WORKING GROUP:

Recently a very well attended meeting was held in the Sunridge Park Scout Hall of volunteers for this group. Some of the aspects of planning are as follows, together with the name of those responsible for each:

Registration at Hotel: Colin Ashwell and Gordon Knapp. 2 more needed.

Transport to and from hotel from Airport and station: Jan van Ree and Mitch Rundle. Several more needed.

Friday evening supper: Marge Weller. Will need the help of all the wives prepared to do some cooking, etc.

Hotel Liaison: Dick Schönborn.

P.A. system and recording of votes: Trevor Scarr, Christopher Scarr and maybe others.

Vote counting: Pete Smith and his computer.

Photographs: casual - Clive Fife. Official: Bob Binnell.

Entertainment for wives: Colin Ashwell, Oceanarium and others. (needed)

Folders: Mike Robertson. Printing: Mike Robertson and Fred Bonthuys.

Gifts for delegates: Colette Rundle.

These are just some of the details to be arranged, and there are others such as the Headquarters bulletin, dinner and cabaret, entertainment for those remaining on Sunday, name tags and the 1001 things which will go to making a memorable A.G.M. Remember it was 10 years since the last A.G.M. here and quite likely to be another 10 years before the next one in Port Elizabeth. Anyone who can offer their help, PLEASE get in touch with any of the Committee members. Your help will be gratefully and greatly appreciated. Thanks in advance.



Hamnet News

Unfortunately, due to pressure of work, the Hamnet committee has not been able to complete the Hamnet booklet yet. This booklet is intended to serve as a guide to the members involved in an emergency. With the summer holidays just round the corner, comes the likelihood of emergencies such as vehicle accidents and drownings.

The cardinal rule in any type of accident is to do what is necessary. By this is meant that if you are the first to arrive on the scene, then render whatever assistance is required to preserve life. If you arrive while assistance is already being given, assess the situation and then either offer your help to the emergency personnel or leave the area - never get in the way, you may cost a life.

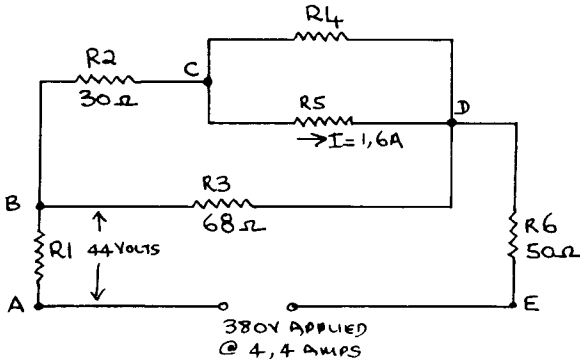
Remember that the Police are the best people to contact in most emergency situations with the exception of accidents at sea where valuable time can be saved by reporting the accident direct to the Port Captain. Make a point of memorising the telephone numbers of the Police, Fire Brigade and the Port Captain.

73 for the festive season. A1 ZS2V.

Reprinted from QJA, Algoa Branch.

COMPETITION

Ohm's Law Problem: How long has it been since you used the necessary formulae? Bring the answers along to the January meeting of the Branch and all the correct answers will be put into a draw for a nice prize. From the diagram find all resistances, all voltage drops, all currents.



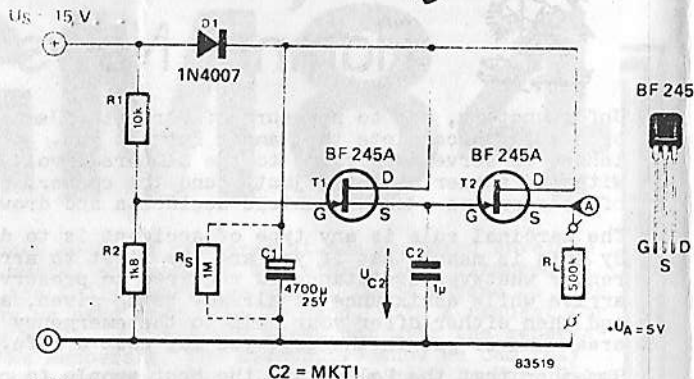
ANSWERS. Ohms. Amps. Volts.

- R1
- R2
- R3
- R4
- R5
- R6



Construction Projects

power backup for CMOS ICs during mains power failures



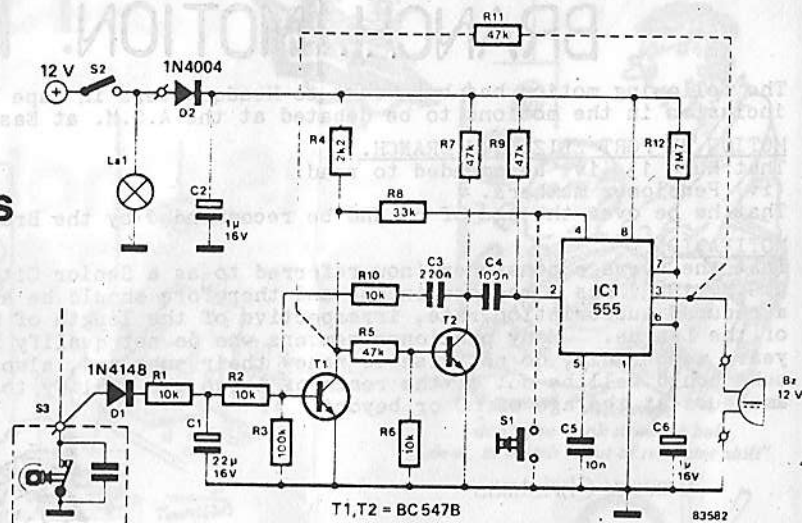
Even very brief mains power failures cause problems for electronic circuits. Stored data are lost and the operating statuses are no longer what they were before the power failure. Mains power failures cannot be prevented, but methods can be employed to provide a voltage backup for the duration of the fault. For this reason, mains-powered equipment is often fitted with backup batteries (nicad or lithium cells) to maintain operation during a mains power failure. In view of the low currents (microamperes) required for data storage with modern RAMs, there is an alternative backup method which is well worth considering: power backup with an electrolytic capacitor for energy storage!

The circuit diagram shows just such an application. The 'power stand-by' capacitor C1 is 4700 µF and with a maximum load current of 10 µA, the discharge time at an output voltage of 5 V is approximately 53 minutes. The operating voltage of the circuit itself is 15 V, 10 V higher than the output voltage. As long as the 15 V supply voltage is applied, capacitor C1 charges up to the value of the operating voltage via diode D1. Simultaneously, a bias voltage of approximately 2.3 V is applied to the gate of field effect transistor T1 via voltage divider

R1/R2. This ensures that T1 is turned on and capacitor C2 is charged up. The output voltage at the source terminal of the second field effect transistor remains a constant 5 V. The two FETs can be thought of as a voltage divider. If the supply voltage fails, electrolytic capacitor C1 will become the temporary power supply. Since the gate voltage is removed from T1 it turns off. Capacitor C2 is no longer being charged. However, it can only discharge very slowly because T2 has a very high input resistance. The voltage across C2 remains almost constant. Capacitor C1 supplies the operating voltage required for T2 so that it conducts and maintains the output voltage at 5 V. Capacitor C1 discharges very slowly, as a function of its insulation resistance (R_{INS} approximately 1 M) and the load current flowing. The output voltage at the source lead of T2 remains a constant 5 V, until the voltage across C1 has also dropped to 5 V. If this voltage drops even further, FET T2 remains turned on but the output voltage decreases proportionally. For correct functioning of the circuit, it is very important to select an MKT type of foil capacitor for C2. (M stands for metallised and KT is the standard designation for polyester foil).

(Siemens Application)

car lights warning device



T1, T2 = BC 547B

83582

Anyone who has ever forgotten to switch the car lights off, after having driven in poor weather conditions, and returned later in the day to find the car battery flat will appreciate this circuit.

The circuit sounds a buzzer when you turn off the engine and have forgotten to switch off the head lights. When required, the circuit can be reset with push button S1. This may be necessary, for instance, when you have your headlights on, get stuck in a traffic jam and turn the engine off to keep the carbon monoxide level down.

When you turn the ignition key and start the engine, the dynamo or alternator runs, relays are operating, the electric fan comes on, the automatic radio aerial extends... All these produce large voltage spikes on the car's electrical system and any electronic circuit must be protected against these.

The circuit is connected to contact breaker S3 and the lighting switch S2. At first sight the use of the contact breaker as an indicator for 'engine running' may seem surprising but, during the testing of the circuit, it became apparent that if

the ignition switch is used instead, the circuit will not work properly. The cause for this was found to be variations in the battery voltage.

The pulses from the contact breaker charge capacitor C1 via resistor R1. Once C1 is fully charged, there is a stable dc voltage at the collector of transistor T2: the trigger input (terminal 2) of the timer IC (555) is then not driven.

When the engine is turned off, C1 discharges, T1 is cut off and the base-emitter voltage of T2 rises. This causes the collector voltage of T2 to drop to 0. This voltage change is converted into a trigger pulse for the timer IC by differentiating network R9/C4.

The IC is then operative and causes the buzzer to sound; with values as shown the warning tone will last for three seconds. The time can be lengthened increasing the value of C6.

The circuit does, of course, not operate with the car lights switched off as it is powered from the car lights switch!

■

BRANCH MOTION

The following motion has been sent to Headquarters in Cape Town for inclusion in the motions to be debated at the A.G.M. at Easter 1984.

MOTION BY PORT ELIZABETH BRANCH.

That Rule 13 (iv) be amended to read:

(iv) Pensioner members.

That he be over the age of 65 and be recommended by the Branch concerned.

MOTIVATION.

That the average pensioner (now referred to as a Senior Citizen since A.G.M. 1983) has a reduced income and therefore should be able to enjoy a reduced subscription rate, irrespective of the length of membership of the League. Many pensioner members who do not qualify for the 1st years membership, do not wish to renew their subs and, also the reduced subs could well be out of the reach of those who qualify to become amateurs at the age of 60 or beyond.

A merry Christmas
and a
Prosperous New Year.

'n Geseënde Kersfees
en 'n
Voorspoedige Nuwe Jaar.



SPECIAL OFFERS FOR XMAS SEASON

40 METER RIG:

Each meter separately illuminated.

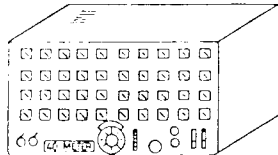
This is a must for every serious Ham, Pork or other enthusiast: no shack should be without one.

The forty meters are ergonomically designed in 4 rows of 10 for ease of use.

The system includes controls for VFO (Very Frot Operators) and uses the latest PLL (People Love Looking) technology. Other features include: 1F SHIFT (For Uncertain Operators to move); VBT (Vertical Blue Terminator); FIX (Automatically repairs itself); and many others.

This versatile rig covers all bands (including Glen Miller), and outputs about 250 WHATS FEP (I think that's some other clothing store!)

Price on application (in quintuplicate on the prescribed form, carbon copies not accepted).



For Limited Time only: 2 meter mobiles
These very popular mobiles are in high demand

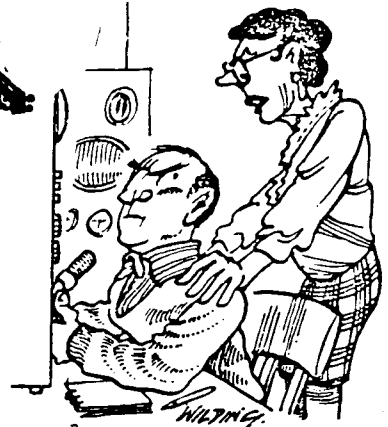
First come, never served!



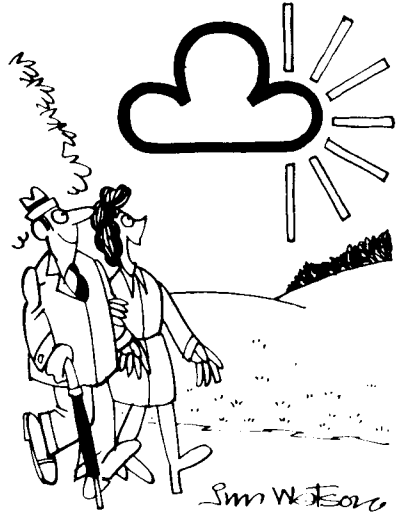
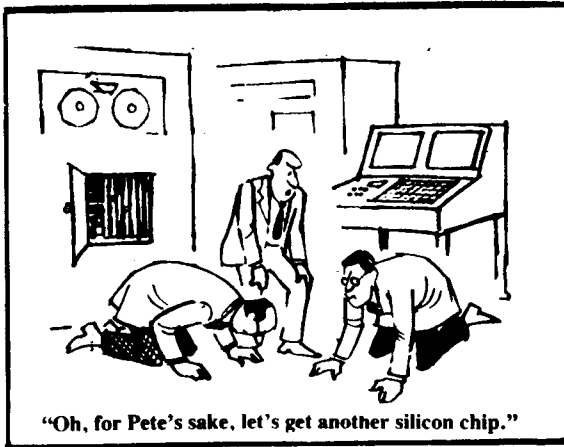
HI!



"No matter what the project he's working on is supposed to be—it ends up being a light dimmer."



"... don't you think it would help, dear, to switch it out of repeater shift?"



"IT'S JUST AS THE WEATHERMAN FORECASTED."



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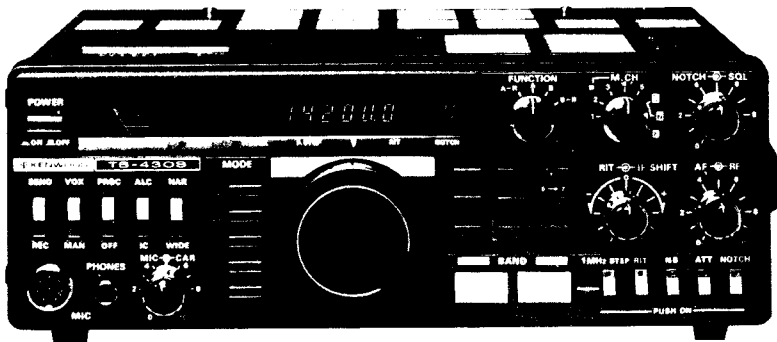
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