

# THE PROPAGATOR

VK2ALU

THE MONTHLY NEWSLETTER OF THE  
ILLAWARRA AMATEUR RADIO SOCIETY  
A MEMBER SOCIETY OF THE WIRELESS INSTITUTE OF AUSTRALIA

Published by the  
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P.O. Box 110  
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NOTICE OF GENERAL MEETING

Members are advised that the next GENERAL MEETING of the Illawarra Amateur Radio Society will be held at the Wollongong Town Hall Committee Room on Monday, 14th July 1975 at 7.30 p.m.

THE AGENDA READS AS FOLLOWS

- 1) Apologies and welcome to visitors and new members.
- 2) Minutes of previous meeting.
- 3) Correspondence.
- 4) Acceptance of the Constitution.
- 5) Election of Office Bearers.
- 6) Financial Report.
- 7) General Business.
- 8) Raffle.
- 9) Lecture.

ILLAWARRA AMATEUR RADIO SOCIETY.

At the Monthly General Meeting of the Illawarra Branch of the W.I.A. held on 9th June 1975, at which 35 members and 17 visitors were present, the following motions were carried unanimously.

"That this group ceases to be the Illawarra Branch of the W.I.A. and from now on be known as the Illawarra Amateur Radio Society, and that the books of account of the Illawarra Branch of the W.I.A. be wound up and audited, and that the residual assets of the Illawarra Branch of the W.I.A. be transferred to the Illawarra Amateur Radio Society for its establishment."

"That the present committee of the Illawarra Branch of the W.I.A. act as the interim committee of the Illawarra Amateur Radio Society."

This means that we are now an autonomous organisation and not tied to any outside body.

Elsewhere in this issue of The Propagator may be found the proposed Constitution for the Illawarra Amateur Radio Society. At the next General Meeting to be held on Monday 14th July 1975 at Wollongong Town Hall Committee Room, this Constitution is to be put up for adoption. Also at the meeting, the election of committee of the Illawarra Amateur Radio Society is to be held. The committee so elected will hold office until the Annual General Meeting to be held in March 1976.

We urge each of you to attend the next meeting to consider these matters.

These changes have been brought about following a great deal of consideration by the Interim Committee in view of possible changes in the set-up of the W.I.A., and also having in mind the specific interests of Amateurs in the Illawarra District. We have held three Committee Meetings on these matters and have been well represented at two meetings in Sydney and we feel after all this that we are able to offer a strong and active future for the Illawarra Amateur Radio Society.

Ian. VK2ZJA.

Secretary.



Moonbounce Report-July.

Work continued throughout the month on the completion of transmitter modifications and adjustments.

Much was learned in the process about UHF cavity type high power amplifier operation, including the effects of this level of r.f. power on substances such as epoxy resin and nylon. - They don't last very long at all if in the stronger areas of the electrostatic field-hi!

Teflon or porcelain (& I understand, fibreglass- though not tried) are about all the insulating materials which will last in the most intense parts of the field as far as I know.

The transmitter r.f. output after the filter is now 600 watts, as measured on the Sierra R.F. Power Meter. (extrapolated from its max. scale reading of 500 watts by means of the R.F. Power meter built into the transmitter.) This at just on 1KW. dc. input.

It has not been possible to raise screen voltage up to the desired value of 300 volts so far, due to transformer voltage limitations. I am therefore on the lookout for a transformer of, preferably, 450 to 500 volts each side of centre tap at about 100 ma. - Can anyone help? (Not too big in size please, or it won't fit.)

Sometime over the next few days the transmitter and its power supplies will be reinstalled at Dapto site and checks made of power output into the antenna feed.

The July EME tests are scheduled for next weekend (12th & 13th July) and VK2AMW is set down for two CQ periods of an hour each, one in the middle of the day and the other in the evening, on Saturday 12th. July.

It is hoped that the possible 3db. increase in transmitter power output will make a big difference in achieving contacts.

The new receive system input coax. filter has now been silverplated and will be installed shortly.

Lyle VK2ALU.

DX PANORAMA

by Gerry VK2APG.

The last month has had some very unfortunate incident occur to Hank 2BHL and myself. Hank lost his 4 element monobander 20 mx cubical quad antenna, and I lost my 3 element tribander in the heavy winds we experienced a few weeks back.

Conditions appear to be picking up on 20 mx. Some interesting DX has been worked from Africa via the short path. The band is also opening to Europe via the long path around 2300 GMT.

Some interesting stations worked in the last few weeks are:

YB9ABX	40	0752 GMT	Jayapura Indonesia
ZE7JR	20	0520	Bulawayo Rhodesia
FB8ZG	20	0545	Amsterdam Island
ZS6CY	20	0635	Johannesburg
CR8AB	20	0520	Dili Portuguese Timor
VKOGW	20	0554	Casey Antarctica
ZS6APO	20	0540	Johannesburg, father of local VK2AGW from Towradgi.

Also heard were several other African countries such as 7Q7, 9J2, 5Z4, .

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WANTED

Hank VK2BHL requires a cathode ray tube, around 2-3 inch type. Preferably one with a reasonably short neck.

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## COMPONENTS FOR SALE

### Greenear Condensers - 100V

Packet of 4 of each value, .1, .047, .022, .01 and .0047 uF at \$2 per packet.

### Trimmers

20-150 pF with ceramic bases and mica insulation. Suitable for R.F. at 4 for \$1.

### Printed Circuit Board

9" x 12", fibreglass base. Same type of board as used in the Bill-Dit carphone kits at \$2.50 each.

### Coaxial Cable

Coaxial cable can be purchased by the club in 100 metre reels at a good price. If there is sufficient demand, one or more reels will be bought and cut into the required lengths. The lengths will be available for pickup at club meetings, Woonona, Figtree or Dapto.

Types available:

	<u>UR 67</u>	<u>UR 57</u>	<u>RG58C/U</u>
Impedance	52	75	50
Conductor	7/029	1/044	19/0068
Dis. over sheath ins.	.405	.405	.195
Attenuation dB per 100 ft. at 100 MHz	2.00	1.89	
Attenuation dB for 100 ft. at 200 MHz	2.94	2.77	9.3
Price per metre	75¢	75¢	abt 27¢

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The Secretary,  
The Illawarra Amateur Radio Society,  
P.O. Box 110,  
DAPTO. N.S.W. 2530

Please send me ..... 20-150 pF trimmers @ \$1 for 4 .....  
..... packets Greenear condensers @ \$2 each .....  
..... pieces P.C. board @ \$2.50 each .....  
plus postage and packing ..... 0.40

Cheque/postal note is attached for \$ .....

I would like to order ..... metres of ..... coax cable  
..... metres of ..... coax cable.

This cable will be purchased only if sufficient orders are received. Do not send money now.

NAME: .....

ADDRESS: .....

COMMONWEALTH OF AUSTRALIA

POSTMASTER-GENERAL'S DEPARTMENT

AMATEUR OPERATORS' CERTIFICATES OF PROFICIENCY

SECTION M (Theory)

AUGUST, 1969.

(Time allowed - 2½ hours)

NOTE : SEVEN questions only to be attempted. Credit will not be given for more than SEVEN answers. All questions carry equal marks.

1. (a) With the aid of a circuit diagram describe the operation of the balanced-modulator stage of a single-sideband suppressed-carrier transmitter.

(b) Describe how you would tune a receiver fitted for S.S.B. reception in order to resolve an S.S.B. signal.

2. (a) Explain briefly the theory of radio transmission via the ionosphere.

(b) Discuss the effects on high-frequency transmission of the daily variations of the ionosphere, the seasonal changes and the eleven year sunspot cycle.

(c) What is an "ionospheric prediction chart"?

3. With the aid of a circuit diagram explain the operation of a transistor type high-frequency receiver.

4. (a) Describe with the aid of a sketch three ways pea lamps (torch globes) may be used as inexpensive metering indicators in amateur station transmitters and associated equipment.

(b) Explain why a thermocouple ammeter can measure both direct and alternating current.

5. (a) Define the following terms :-

(i) dielectric constant;

(ii) dielectric strength;

(iii) resonance;

(iv) impedance.

(b) What factors determine :-

(i) the resistance; and

(ii) the reactance, of a coil of copper wire.

6. (a) With the aid of a circuit diagram describe the operation of a full-wave H.T. power supply which uses mercury vapour rectifiers. Explain any precautions which are necessary when using mercury vapour rectifiers.

(b) Explain the functions of each component of the filter supply.

7. (a) Assisted by a sketch, describe the construction and theory of operation of a crystal microphone.

(b) Listing component values, show by means of a circuit diagram how this type of microphone is connected to an amplifier.

8. (a) With the aid of a sketch showing voltage and current curves describe an aerial and associated resonant feed line suitable for transmitting and receiving on the 7 Mc/s (40 metre) amateur band.

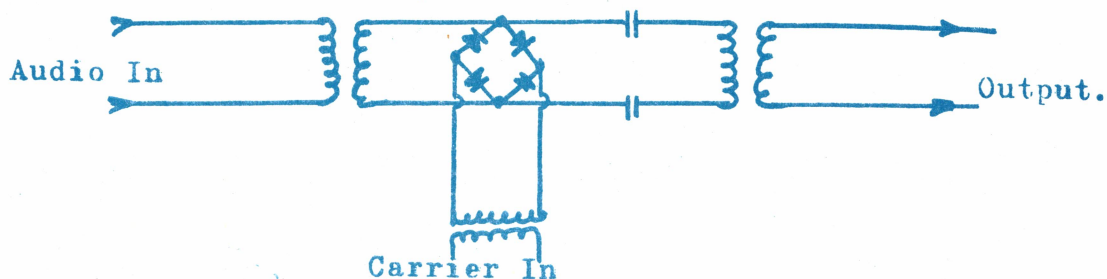
(b) Would you use series or parallel tuning of the feed line? Give reasons for your choice.

9. (a) Draw a circuit diagram of a power supply suitable for a mobile amateur transmitter.

(b) Using circuit diagrams and sketches where necessary, explain the measures you would adopt to eliminate ignition and other interference which may be experienced, when operating a mobile station in a motor vehicle. Assume that the vehicle battery is also used for the radio equipment.



1 (a).



The basic principle of the balanced modulator (BM) is to introduce the carrier frequency in such a way that it does not appear in the output. This requirement is satisfied by introducing the audio in push pull and the carrier frequency in parallel and connecting the output in push pull. Alternatively, the audio can be connected in push pull, carrier in push pull and output in parallel.

Both methods can effectively eliminate carrier from the output by cancelling action.

For good carrier suppression, it is essential that the circuit has good electrical symmetry for resistance, capacitance and inductance.

If the circuit is properly balanced, there will be no output when no audio drive is applied. Injecting audio results in the balance of the bridge being upset and R.F. double sideband will appear as the output.

(b).

With the BFO off, tune the signal for maximum S meter deflection on voice peaks. Then switch on the BFO and either adjust the BFO frequency or if that is fixed, the VFO until the audio becomes intelligible. (If not use opposite sideband).

2. (a). The ionosphere is a series of layers of varying density of ionisation at different heights above 60 miles of the earth's surface. If a radio wave leaves a transmitting antenna it can be bounced by the various ionised layers (depending on time of day) back to earth, back to the ionosphere, back to earth etc.

The various layers are:

- E - Layer at about 70 miles ... best operation when the sun is high, (around noon), practically disappears after sunset.
- D - Layer ... lower than the E layer. Ionisation strongest when the sun is high. Absorbs most of the 1.8 & 3.5 MHz signals.
- F - Layer at about 175 miles at night. Ionisation decreases after sundown reaching a minimum just before sunrise.

In the daytime, the F layer splits into:

F1 layer at about 140 miles.

F2 layer at about 200 miles.

Highest ionisation again around noon - merge into F layer at sunset.

Other major factors that affect propagation are;

- i. Refraction.
- ii. Absorption.
- iii. Wave angle.
- iv. Skip distance.
- v. Critical Frequency.
- vi. Maximum useable frequency.
- vii. Fading.
- viii. Back Scatter. Etc.

(b) i. Daily variations were commented on under (a).

ii. Seasonal Changes; Ionisation depends on U.V. radiation, therefore it depends on the amount of the sun's radiation. In addition to the daily variations, seasonal changes result in higher critical frequencies in the E - layer in summer, average about 4MHz as against winter average of 3MHz. The F layer critical freq. is about 4 - 5 MHz in the evening. The F1 layer with a critical freq. of about 5MHz in summer practically disappears in winter. The daytime critical freq. (max) for F2 are highest in winter (10 - 12 MHz) and lowest in summer (7 MHz).

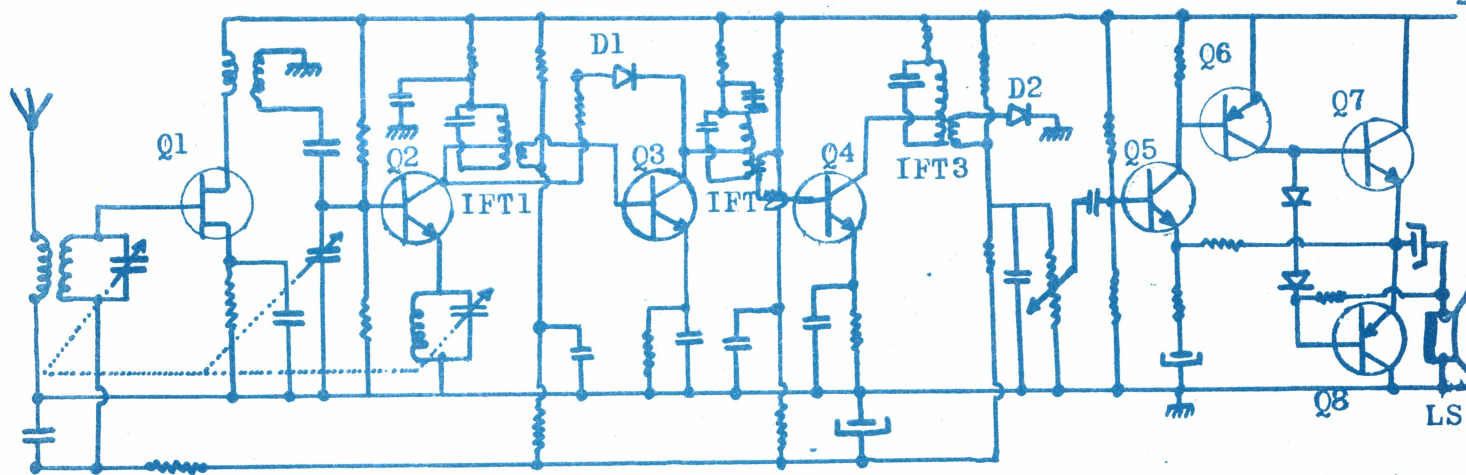


2. (b). cont'd.

iii. 11 year sunspot cycle : There is a definite correlation between average sunspot activity and critical freq. The critical frequency is higher during sunspot maximum activity & lower during sunspot minimum. During sunspot low activity periods, the lower bands (7 & 3.5MHz) are often the only useable bands at night. At such times 28MHz is "dead" while 14 MHz is usually only open during the daytime.

(c). With Ionospheric prediction charts it is possible to predict with reasonable accuracy the maximum useable frequency that will hold over any path on the earth during the monthly period.

3.



- Q1 ... FET R.F. Amplifier tuned to the signal freq. of say 1430KHz (2WL).  
 Q2 .. Self osc. mixer. Oscillator freq. of 1885KHz is mixed with 1430KHz.  
 Q3&4 IF T1 to 3 . IF Amplifier tuned to 455KHz. (reject 3315KHz).  
 D1 ... Damper diode to broaden IF response, and reduce gain on strong signals.  
 D2 ... Detector / AGC Diode.  
 Q5 to Q8 Audio amplifier.

4. (a).

- i. Voltage indicator with a series resistor.
- ii. As current indicator with a shunt resistor.
- iii. As RF output indicator with a picking coil.
- iv. As absorption wavemeter with a tuned LC Circuit.

(b).

A thermocouple ammeter can read both AC & DC current because the current heats up a small piece of resistance wire which in turn heats up the thermocouple made of 2 dissimilar metals, thereby generating a small DC voltage that can be measured on the scale.

5.(a). i. Dielectric constant is the ratio by which the capacitance of a condenser changes when the air is replaced by some other material as the insulator between the plates.

ii. Dielectric strength is a measure of the voltage per thickness unit, that the dielectric material can withstand before breakdown occurs.

iii. Resonance occurs when a tuned circuit is neither inductive nor capacitive but presents a resistive element. Or  $X_c = X_L \therefore Z = R$

iv. An off - resonance LC circuit will present an impedance which can be inductive or capacitive depending on whether the frequency is above or below the resonant freq.

$$\text{Inductive: } Z = \omega L = 2\pi fL$$

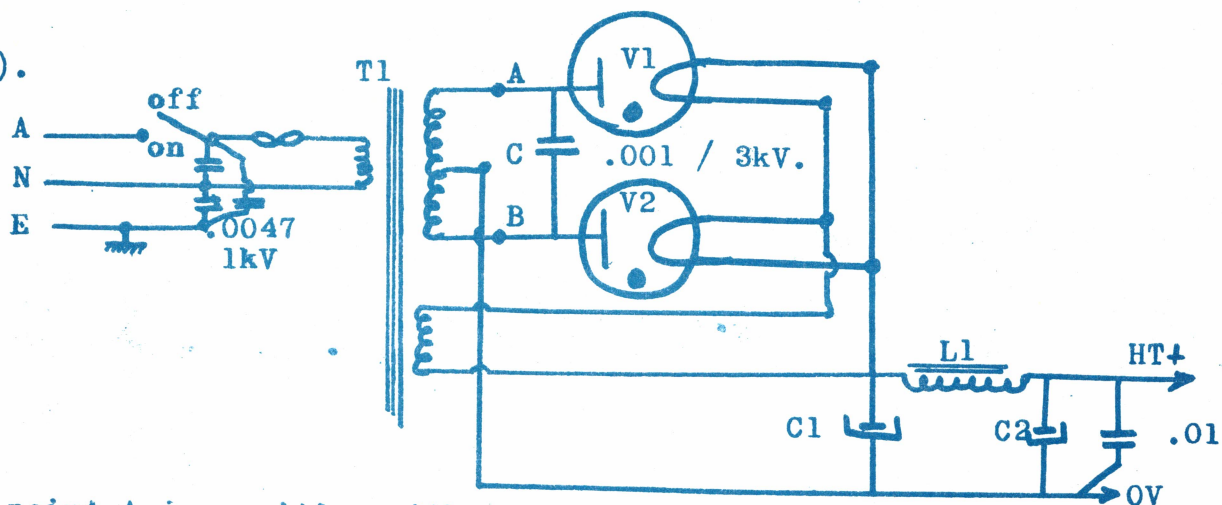
$$\text{Capacitive: } Z = \frac{1}{\omega C} = \frac{1}{2\pi fC}$$

(b). i. Resistance of a coil of copper wire is determined by the length of the wire and the diameter.

ii. The reactance is determined by the number of turns and the number of layers. With many layers, the capacity between the layers starts to play a role.



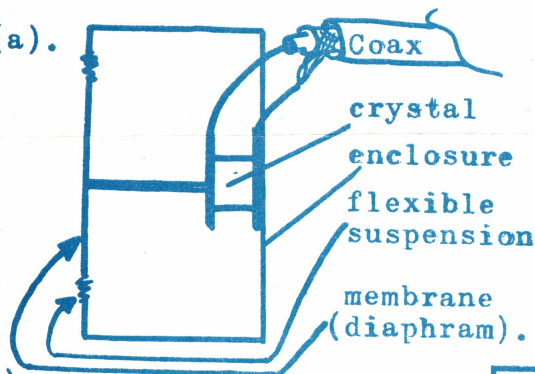
6.(a).



When point A is positive with respect to point C valve V1 conducts charging up C1 and, via L1, C2. When point A becomes negative, point B becomes positive with respect to point C and the same takes place via V2. Due to the mercury vapour, the voltage drop across V1 & V2 is practically independent of the load, and is usually 10 - 15 volts. The thing to watch for with mercury vapour tubes is the peak inverse voltage (PIV). ie. when the cathode is positive with respect to the anode. Another precaution is RF bypass capacitors on the AC & DC line to prevent the RF generated (as noise) by the mercury vapour tubes to escape the power supply.

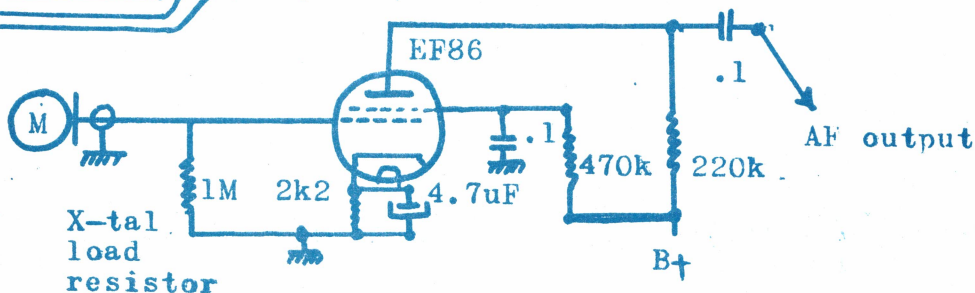
(b). Without C1, L1 & C2 the output would be C1 & C2 are storage capacitors which store the DC voltage. L1 is a choke of low DC resistance but high inductance to reduce ripple. (presents a high impedance to the ripple but a low impedance to DC). The resulting output is then depending on the load.

7.(a).

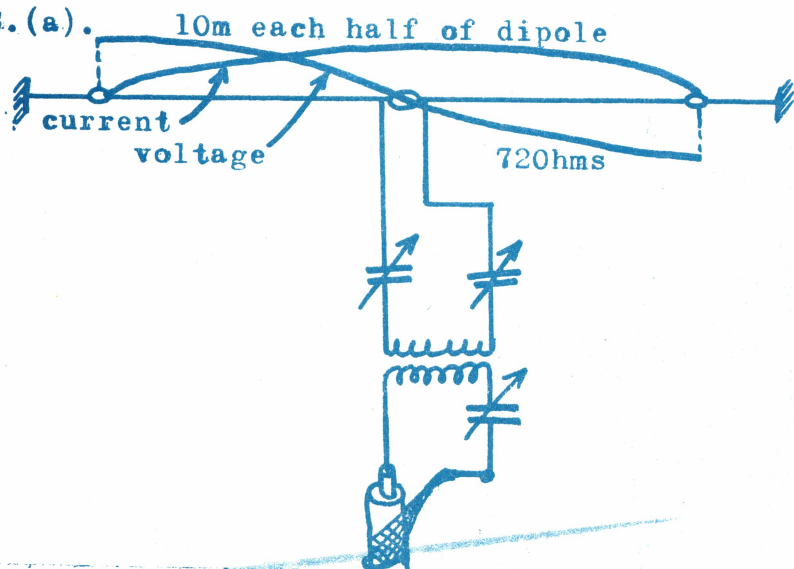


Sound waves striking the diaphragm cause compression and expansion of the crystal. Due to the Piezo effect a small voltage is then generated by the crystal which can be amplified.

(b).



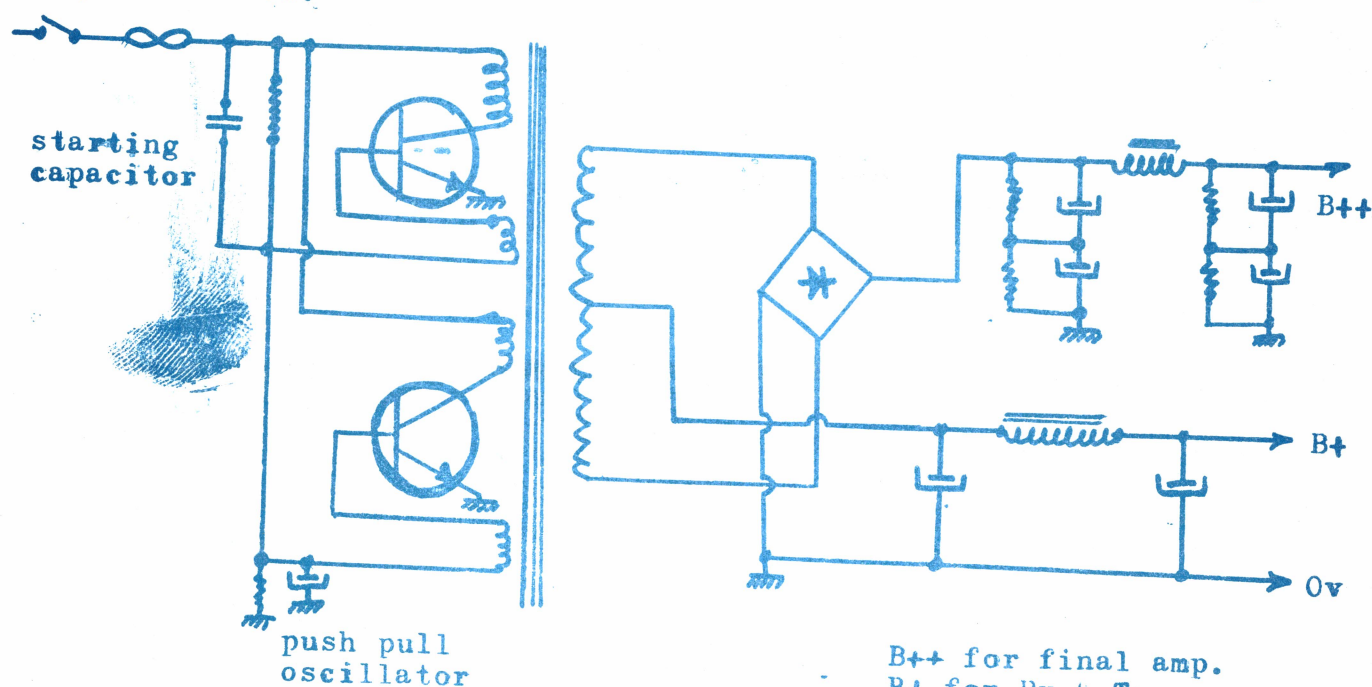
8.(a).



(b). Series tuning should be used as the impedance is only 72 Ohms.

9. (a). i. If the mobile equipment is transistorised and suitable for 12V operation, the battery voltage can be used direct.

ii. If valve finals are used, an inverter either synchronous, asynchrone or transistorised can be used to transform the voltage to the required level.



B++ for final amp.  
B+ for Rx & Tx.

(b). Mobile interference elimination.

- i. Supply directly from the battery, preferably in shielded cable.
- ii. Good earthing of aerial base.(coax).
- iii. Suppressor(10 - 15kOhms) between coil and distributor, as close as practical to coil.
- iv. In bad cases additional suppression in each spark plug lead.
- v. Capacitor (.05 to .5uF) from cold side of coil to frame of coil.
- vi. Generator armature; condensor from hot lead to the frame of the generator
- vii. Generator field regulator, .5uF capacitor in series with 10 - 22 Ohm resistor from the regulator to deck. (ditto for most alternators).
- viii. Bonding strap of flexible copper braid (heavy) between rear of engine tappet cover and body bulkhead.
- ix. Ditto bonnet to bulkhead.
- x. Ditto from exhaust pipe to body.
- xi. In extreme cases, use shielded spark plug leads, shielded spark plug terminals, earth at distributor. Enclose distributor in "tin can" type of enclosure to seal in the RF. Shielded lead between the coil and distributor, tin can cap over coil.
- xii. Ferrite rod, 50 turns of heavy copper wire near coil, in "cold" lead. The lot canned and earthed.

coil .01 1uF 100uF Key

- xiii. Give engine a tune up, clean points etc.
- xiv. Spotweld all loose body panels, mudguards etc. especially after a prang.
- xv. Put antistatic powder in the tubes of your tyres.
- xvi. If all this has failed, buy a car with a diesel engine.

Int used in Sept 2 Sept 3,

St George am Rad Soc.

7-30 pms

Rochdale Civil Defence HQ

Highgate St (both of hill)

Bexley.

70-60min



D

CONSTITUTION OF THE ILLAWARRA AMATEUR RADIO SOCIETY

1. The name of the Society shall be the Illawarra Amateur Radio Society.
2. The objects for which the society is formed:
  - (a) For the association of persons interested in the science of radio and its associated interests, in all its branches and for the instruction and education of its members.
  - (b) To promote and hold either alone or jointly with any other associations, persons or clubs, social gatherings, competitions, exhibitions, trials and to accept, offer, give or contribute towards prizes, medals and awards and to promote, give or support dinners, concerts, balls, lectures, entertainments and other worthy objects.
  - (c) To establish, promote, or assist in establishing or promoting, to subscribe to, to amalgamate with or become a member of or to admit to membership any other person, club or association whose objects are similar in whole or in part to the objects of this Society, provided that no subscription be paid to any such club or association except bona-fide in furtherance of the objects of this Society.
  - (d) To purchase, take, lease, or in exchange or otherwise acquire, rights, property, instruments or equipment which may be requisite for the purpose of or conveniently used in connection with any of the objects of the Society. To exchange, dispose or grant the same and to do all or any such things itself, or by its agents duly authorised in writing by a majority of its members at a duly authorised meeting.
  - (e) To permit the same or any other property which the Society may acquire to be used by members or person, either gratuitously or for payment.
  - (f) To purchase, hire, make or provide and maintain all kinds of apparatus, furniture, implements, tools, machinery, utensils, library, equipment, stationery, cards, games and all other things required, which may be conveniently used in connection with the premises of the Society, by persons frequenting the same, whether members of the Society or not.
  - (g) To buy, prepare, make, repair, supply, sell for cash with all faults if any or deal in all kinds of apparatus intended to be used by members of the Society in connection with radio work and all kinds of refreshments required for an/or intended to be used by members of the Society or persons frequenting the Society's own premises.
  - (h) To grant, issue, authorise, modify, cancel or revoke certificates or diplomas of the Society relating to radio and its associated interests or relating to degrees of membership or any other matter.

- 2
- (i) To hire and/or employ any person or persons and to pay to them wages or gratuities for services rendered.
  - (j) To invest and deal with the monies of the Society not immediately required upon such securities and in such a manner as from time to time be determined by the majority of the members present at any ordinary general meeting or by the majority of the Committee.
  - (k) To accept or refuse any gifts of property or articles, whether subject to any special trust or not, for any one or more of the objects of the Society.
  - (l) To take or authorise such steps as may from time to time be expedient, by personal or written appeal and/or public meeting, for the purpose of procuring contributions to the funds of the Society in the shape of donations, annual subscriptions or otherwise.
  - (m) To undertake or execute any trust which may seem directly or indirectly conducive to any of the objects of the Society.
  - (n) May publish a periodical, issues to be made at least quarterly and copies made available to all members and contributors.
  - (o) May subscribe to, or contribute to any patriotic, charitable or benevolent or useful project of a public nature.
- 3. The Society shall meet in its own rooms or hall made available to the Society.
  - 4. The income and property of the Society, however derived, shall be applied solely towards the promotion of the Society as previously stated.
  - 5. Every member of the Society undertakes to contribute to the Assets of the Society in the event of same being wound up during the time he is a member, or within one year afterwards, for payment of the debts and liabilities of the Society contracted before the time at which he ceased to be a member and of the costs, charges and expenses of winding up, such amount as may be required not exceeding two dollars (\$2.00).

#### BY-LAWS OF THE ILLIWARRA AMATEUR RADIO SOCIETY

##### 1. MEMBERSHIP

- (a) The Society shall consist of an unlimited number of persons - those of who are genuinely interested in radio and electronics.
- (b) Full members - shall be any persons over 18 years of age.
- (c) Persons under the age of 18 years who hold the A.O.C.P., A.O.L.C.P. or NOVICE shall be entitled to apply for full membership.



- (d) Junior members - shall be other members under the age of 18 years.
- (e) Application for membership shall be in the form prescribed by the Committee.
- (f) Election of members shall be by the Committee who may reject any application without assigning any reason.
- (g) Any person under the age of 18 years who has attained an A.O.C.P., A.O.L.C.P. or NOVICE certificate and is a full-time student shall be granted full membership at a rate equivalent to that of a junior member under the age of 18 years.

2. SUBSCRIPTIONS

The entrance fee and annual subscriptions payable by any class of members shall be decided at the Annual General Meeting.

3. CESSATION OF MEMBERSHIP

- (a) A member may resign his membership at any time by giving notice in writing to the Secretary, but shall continue to be responsible for any monies payable at the date of his resignation, pursuant to these By-Laws and the Constitution.
- (b) If any member be guilty of conduct deemed by the Committee to be prejudicial to the interests of the Society, such member shall be expelled by a resolution of the members at a general meeting, for which due notice shall be given.

4. MEETINGS

- (a) Annual General Meeting - Shall be held in March of each year.
- (b) A General Meeting - Shall be held monthly as arranged by the Committee.
- (c) An Extraordinary General Meeting - May be called on the signed requisition of not less than five financial members. No business shall be transacted at the Extraordinary General Meeting other than that for which the Meeting was called.
- (d) Notification of Annual General Meeting or general General Meetings is to be given to all members in writing at least seven days prior to the meeting. (Monthly General Meetings excepted).

5. PROCEEDINGS AT MEETINGS

- (a) A General Meeting may not transact any business unless a quorum of fifteen full financial members is present.



(b) CHAIRMAN

The President shall preside at all meetings, unless the persons present shall deem fit to elect another member to that office; the Chairman shall be entitled to a second or casting vote in the event of equality of voting.

(c) ORDER OF CONDUCTING BUSINESS

- (a) Welcome to new members and Visitors.
- (b) Apologies.
- (c) Minutes of previous meeting read and confirmed or otherwise.
- (d) Business arising from the minutes.
- (e) Correspondence.
- (f) Accounts.
- (g) Reports by officers.
- (h) General business.

(d) ORDER OF DEBATE

- 1 (a) No motion or amendment shall be discussed until seconded.
- 2 (b) Every amendment to a motion shall be considered and put before the original motion, and if carried shall become the original motion and be subject to further amendment.
- 3 (c) Only one amendment shall be entertained at any time except a motion to proceed with the next business, which, if carried, will supersede the original motion or any amendment.
- 4 (d) No amendment will be received by the Chairman which is a direct negative to a motion before the Chair.
- 5 (e) No member shall speak more than once to any motion except in explanation or to contradict a misstatement except the proposer who has the right to reply. After such reply the motion shall be put.
- 6 (f) During all questions and discussions, the member shall stand and address himself to the Chairman.
- 7 (g) The rulings of the Chairman shall be obeyed for the orderly conduct of the business.

(5)

6. COMMITTEE

- (a) The Management of the Society shall be vested in the Committee, consisting of the President, a Vice-President, Secretary, Treasurer and up to five other financial members, who shall be elected at the Annual General Meeting. They shall remain in office until successors are appointed at the next Annual General Meeting.
- (b) In any matter of urgency relating to the Administration of Society affairs, four members of the Committee, two of whom must be the President, Secretary or Treasurer, shall be empowered to make a decision providing all four agree on a course of action, and that where a financial transaction is involved, a limit of \$50.00 in any one calendar month be applied.
- (c) VACANCY  
If a member of the Committee fails to attend three consecutive Committee Meetings without reasonable excuse he shall be automatically removed from the Committee, and the vacancy filled at the General Meeting.
- (d) A quorum for the Committee shall be four members.
- (e) The Executive Committee shall be empowered to co-opt members as it sees fit to form other Committees to operate within the terms of reference as set down by the Executive Meeting. The Chairman of such Committees, may be co-opted as ex-officio members of the Executive Committee at the discretion of the Executive body, however, the co-opted Chairman shall have no voting power at Executive meetings.

7. ACCOUNTS AND AUDIT

The Committee shall open a Banking Account with a Bank. This shall be operated by the President, Secretary and Treasurer, any two of whom shall sign cheques.

The Committee shall cause to be kept, proper Books of Account showing the Financial transactions of the Society. The Committee shall lay before the Society at the Annual General Meeting a Profit & Loss Account, Balance Sheet, Treasurer's Report and Auditor's Report. The Society at each Annual General Meeting shall appoint an Auditor to hold office until the next Annual General Meeting.

8. ALTERATION TO THIS CONSTITUTION

This Constitution may only be altered by special resolution of which two weeks notice has been given to all financial members in writing and carried by a majority of 75% of those financial members present and voting on the issue.