

TASMANIAN AMATEUR RADIO

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Southern Branches of the Wireless Institute
of Australia, Tasmanian Division.*

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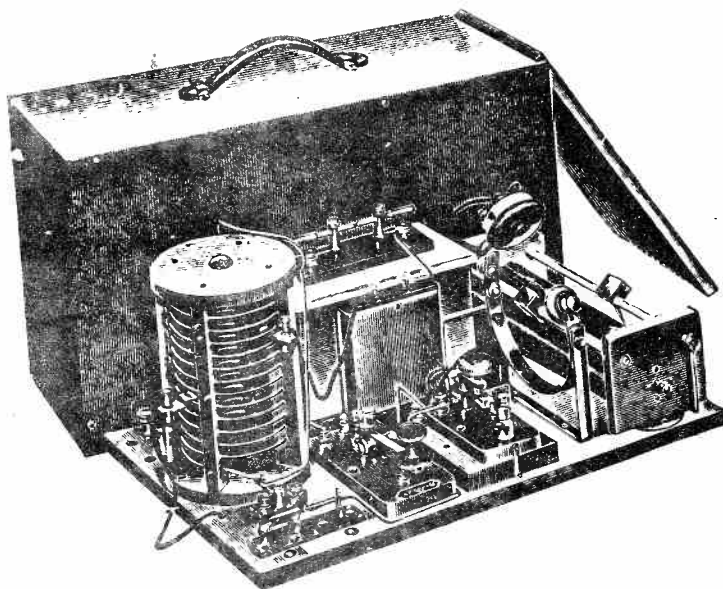
P.O. BOX 275
LAUNCESTON
TAS. - 7250

MEETINGS

Southern Branch - SES Rooms Melville St
Northern Branch - Clubrooms 34 Bourke St
North West Branch - Penguin High School

August 1 - 8.00PM
August 10 - 7.45PM
August 14 - 7.30PM

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Receiving Range up to 300 miles.

TRANSMITTING.—Wireless Coil high tension Condenser, with
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EDITORIAL

QRM has a new editor.... I recently obtained a limited call and began work on morse, but now I have this job my spare time will be limited, so the full call will have to wait.

I believe in the theory that the strength of any organization depends upon unity of its members, so I will try to be an active supporter of the WIA albeit that it may require changes.

As far as content of QRM goes, I personally do'nt subscribe to the opinion that amateurs no longer build their own equipment, so I will try to include constructional articles each month. If you could provide anything please forward them to Bob Grant the technical editor, or to myself. Articles could be for novice, intermediate or advanced and preferably detailed, including PC layout etc.

I would also like to publish correspondence from any person, whether members of the WIA or not. Letters must include either the writers name or callsign, to include in publication and a phone number so I can verify the authenticity.

Thank you for reading this editorial and I hope this magazine can provide a worthwhile service to its readers.

73 de VK7ZKT
Ken Kirkman



The Federation Insurance Limited
(Incorporated in Victoria)

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The WIA wishes to thank Federation Insurance Limited for their support and reminds all members of the WIA, that should they wish to insure with this very reputable company, special rates would be available upon indication of membership.

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This year TARC 79 is to be hosted by the Northern Branch and an organizing committee has been formed to co-ordinate activities.

The venue for the convention will be at the Alanvale College in Newnham, Launceston. This is a modern building with facilities not unlike those at Hobart TCAE the venue for TARC 78. The amount of space available poses no restrictions as to displays or activities so we are only limited to the efforts of those able to help.

At this stage it is envisaged to open the convention at 1pm on the 17th and to provide trade displays and working amateur stations for view by amateurs and public visitors during the afternoon. It is planned to have workshops on ATV, microprocessors etc.

The Sunday will be given over to mainly a get-together for all the families, with fox hunts, activities for the wives and children and an auction of surplus donated equipment.

The dinner for the Saturday night has yet to be finalised, but an interim booking has been made for a room with bar and dancing facilities at the Matador Restaurant. Costs for catering and in restaurants have risen substantially this year but it is hoped to keep the overall registration fee below ten dollars per adult.

If you could help with displays, workshops or donations of surplus gear or even suggestions for activities, then please contact the Northern Branch. Suggestions could also include functions for the often neglected XYL. Anyway remember to keep the weekend of 17th-18th of November free and hopefully firm details and registration forms will be available by next month.

Footnote Anyone requiring help with accommodation please let the Branch know as soon as possible.

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Yaesu FR101 Receiver This comes complete with 3 crystal filters, 4MHz coverage on 6 and 2 metres converters plus FM. POA

Telytype tape reperforator and reader \$30

6 metre 8 element 51-53MHz Beam complete with 150W Toroidal Balun. 12dB Gain \$140

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In stock "Cantenna" dummy load \$40.50
Bi-directional Wattmeter 100MHz-1GHz \$246
Co-ax switch 4 position \$24.50

G5RV MULTIBAND HF ANTENNA*

Notes on use of G5RV

(a) The G5RV does not have to be used with its 102 ft length perfectly horizontal. It can be used in a sloping configuration with little or no loss of efficiency provided the angle is not too acute.

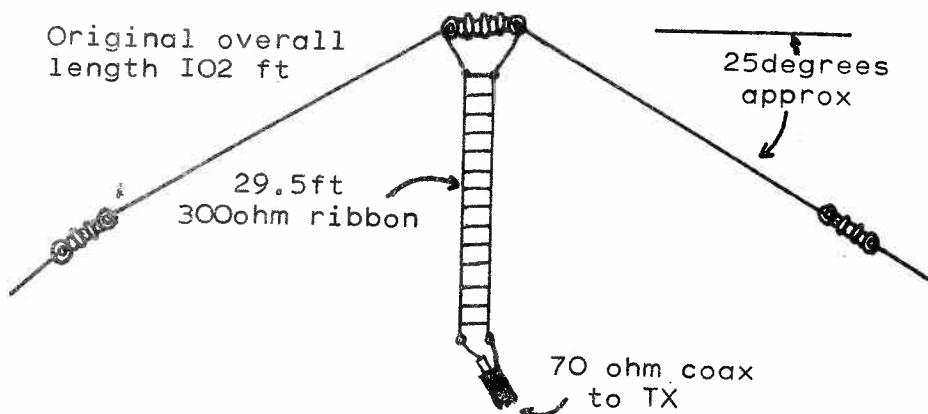
(b) The length of coax used does seem to be important. Most operators who successfully use the G5RV have been able to confine the length of coax to less than 30ft

(c) Often amateurs are heard to say that the G5RV is a compromise and so must perform poorly in some respects but it is no more a compromise than any other multiband antenna including triband yagis.

Tuning the G5RV

This is probably the greatest bugbear in the use of the G5RV and the reason why many operators give it away as a bad job. They are faced initially with a very high SWR and assume that the only answer is the use of a tuning unit. The antenna can be tuned by shortening (but not cutting) until an acceptable SWR is achieved. Do this in steps of about 6ins at a time at both ends and checking the SWR each time. Do this on say the 20 metre band and when satisfactory check the other bands. These will usually be found to be satisfactory but some compromise may be necessary. The following results were obtained as an example.

80metres	SWR 1.3
40metres	SWR 1.6
20metres	SWR 1.0 - 1.1
15metres	SWR 1.6
10metres	SWR 4.0



*Article reprinted in part from AR april 74

AROUND THE BANDS By Joe VK7JG

On the HF bands several DXpeditions have been active over the last month. The Isle of Man celebrated 1000 years of self government with a special GT call and more stations from there were worked in one day, by some VK7's during the first week of July, than they would have worked in one year normally.

As these notes are being written, expeditions are active from ZK2, A35, KH7, KH8 and KH9. Stations signing ZA1A and ZA1BY have also been worked by VK's and ZL's, however no word of any VK7 making a QSO has filtered thru. ZA is the prefix for Albania and further news is being awaited with interest.

The ZL1ADI trip to Manahiki, although postponed, is now mentioned as late July, possibly. Even if Chuck does not make it most DXers feel fairly certain that one way or another, this location will be activated in the next couple of months.

The last month on the air has been quite profitable, although much listening on 28MHz was required to get results.

7MHz was good to central and south America late afternoon and early evenings local time, with signals up to S7 from ZP5PX, CP6CTS and LU's on both CW and SSB. Other areas heard were W, JA, JD, UAØ, TI, C6&VP2

14MHz produced such rare ones as OHØ, SV8, D2A, ZB2, XF4, (the last mentioned could have another burst of activity soon) and 5NØ together with dozens of Europeans, Asians and Central Americans.

21MHz also excelled with XF4, 7P8, 5NØ, HBØ, M1, LX, SU, SV9, VP2K, 1SØ, 9J2, A2, FR7, ZS, GT, HR, 4S7 and others from all continents.

28MHz although slow, came up with FK8, FO8, CT2, ZK2, A35, SU, KH7 and XF4. If conditions follow the normal yearly pattern August should be even better.

6 metre activity We have had several good mid-winter openings to VK2, 3, 4, 5 lately. On the 8th July there was very short skip conditions to VK3 when signals were S9 to VK3OT.

ZL TV has been viewable in colour but there has been no amateur activity noted.

2 metres During a very strong 6m opening to VK2, 2 metre signals were heard but no contact made. That is all till next month but don't forget the next Equinox when once again record breaking contacts should be possible to W land.

73 Joe VK7JG



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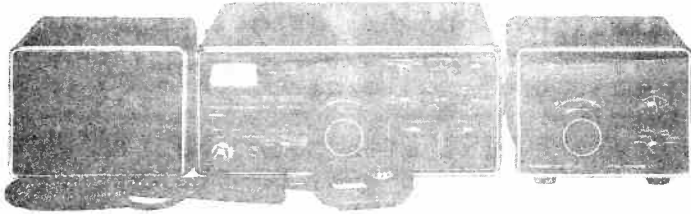
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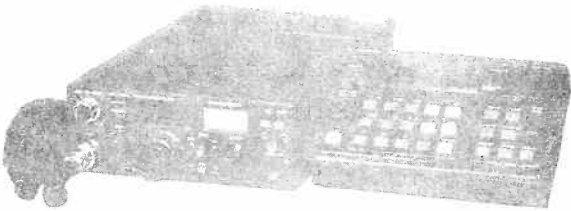
5A THE QUADRANT, LAUNCESTON, TASMANIAN, 7250 - P.O. BOX 328 - PHONE: 31 7075

TS-700SP



The TS-700SP is the all-mode solid state transceiver that provides you with versatility plus over the entire 2 meter band. It's feature-packed design puts you on SSB, FM, CW, and AM. The AC and DC power supplies are built in which allows you to operate the TS-700SP just about anywhere. Equipped with a VFO that enables continuous tuning from 144-148 MHz, the TS-700SP comes complete with built-in digital frequency readout, receiver preamplifier, VOX, sidetone, and microphone.

TR-7600



The new TR-7600 (TR-7625) is a high-performance 2m FM transceiver with memory, designed to permit multichannel (800 channel) operation. Featuring the ability of repeater operation, this transceiver brings you all the convenience and versatility in both mobile and fixed station operation. The TR-7600 (TR-7625) has provision for connection of the optional microprocessor control unit, RM-76 for added versatility.

TR-7600 (TR-7625) SPECIFICATIONS

• Frequency Range: 144.0 to 147.995 MHz • Mode: FM • Frequency Synthesizer: Digital control of phase locked VCO • Synthesizer Stability: Less than ± 750 Hz at 25°C • No. of Channel: 300 • Operating Temperature: -20 to $+50^{\circ}\text{C}$ • Power Voltage: 11.5V DC to 16.0V DC (13.8V DC standard) • Grounding: Negative • Antenna Impedance: 50Ω • DC Current: Less than 0.5A in receive with no input signal, Less than 3(6)A in HI

AGAIN ONE ONLY THIS UNIT WAS \$419
NOW SAVE AT ONLY \$375.00

SPECIFICATIONS

• Frequency Range: 144.0 to 148.0 MHz • Mode: SSB (USB, LSB), CW, AM, FM • Antenna Impedance: 50 ohms • Frequency Stability: Within ± 3 kHz during one hour after one minute of warm-up, and within 150 Hz during any 30 minute period thereafter • Power Consumption: Transmit: 98 Watts (120/220V AC), 4.0A (13.8V DC), Receive (no signal): 48 Watts (120/220V AC), 1.2A (13.8V DC) • RF Output Power: SSB, FM, CW; 10 Watts, AM; 3 Watts, FM (Low); Approx. 1 Watt • Modulation: SSB; Balanced modulation, FM; Variable reactance frequency shift; AM; Low power modulation • Maximum Frequency Deviation (FM): ± 5 kHz • Carrier Suppression: Better than 40 dB • Sideband Suppression: Better than 40 dB • Spurious Radiation: Better than -60 dB • Microphone: Low impedance microphone (500 ohms) • AF Response: 400 to 2,600 Hz • Repeater Frequency Shift: 600 kHz • Sensitivity: SSB and CW; $0.25 \mu\text{V}$ for 10 dB (S+N)/N, AM: $1.0 \mu\text{V}$ for 10 dB (S+N)/N, FM: $0.4 \mu\text{V}$ for 20 dB noise quieting, $1.0 \mu\text{V}$ for 30 dB (S+N)/N • Selectivity: SSB, CW and AM; 2.4 kHz/ -6 dB, 4.8 kHz/ -60 dB, FM: 12 kHz/ -6 dB, 24 kHz/ -60 dB • Image Ratio: Better than 70 dB • IF Rejection: Better than 70 dB • Squelch Sensitivity: $0.25 \mu\text{V}$ • AF Output Power: 2 Watts/8 ohms load with less than 10% distortion • AM Output Impedance: 8 ohms • Dimensions: 278 (10-7/8)W x 124 (4-7/8)H x 370 (12-5/8)D mm (inch) • Weight: 11 kg (24.4 lbs)

VFO-700S SPECIFICATION

• Frequency Range: 8.2-9.2 MHz • Frequency Stability: Within 150 Hz during 30 minute period after warm-up • Dimensions: 160 (6-5/16)W x 123 (4-3/4)H x 200 (7-7/8)D mm (inch) • Weight: 2.4 kg (5.3 lbs)

* Model name and specifications may change according to destination.

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FINANCE CAN BE ARRANGED

NORTHWEST BRANCH NOTES By Jim VK7NOW

The monthly meeting of the North West Branch was held at our new headquarters at the Penguin High School, with another good attendance of 45 members.

Minutes of previous meeting were read by the Sec and accepted.

Donation of \$1.00 per member was accepted for WARC.

Chairman spoke at length regarding "Knocking and Whiteanting" and passed around a pamphlet illustrating the subject. (see article below) The Chairman also outlined details as to why the Branch's funds were temporarily "Frozen" by Council and also explained how this unfortunate incident was resolved. Everybody concerned "kissed and made up" and one may now expect to hear members in the West speaking with members in the East via Repeater 3, Hi!

New Members 3 new members were nominated and accepted-

Terry Austin (Burnie) Florian Biner (Penguin) Norm Verral (Burnie)

VK7AX Tony gave up to date info on Repeater 3 and the Beacon. Tony also mentioned that 19 members attended the first meeting of the ATV group, which proved very successful. The ATV chain is also operating.

Steve gave the meeting on the progress of the Microprocessor group and suggested combining this with the ATV group.

Activities Vince VK7NVH organized 4 groups who gave a very interesting practical demonstration on the uses of the CRO and associated equipment. The groups were lead by Graham VK7ZAQ, Paul VK7ZPB, Tony VK7AX and Winston VK7EM.

Silent Key It was decided to send a letter of condolence to the widow of Bert VK7BI. Members will remember the excellent job that Bert did the for the Branch when we hosted TARC a couple of years ago. The Tas Division of the WIA will be poorer with the passing of Bert.

As usual an excellent supper was served by members from the Burnie area. Thought for the month "Remorse is the period between one hangover and another"

Wireless Institute of Australia North Western Branch

The WIA is an edifice built by many eminent people in the wireless world over the longest period of any radio institution in the World.

This monument to these pioneers is built on the firmest foundation as stated by the Objects of its Articles of Association.

The immediate objectives of the WIA are-To encourage and assist persons interested in any or all aspects of amateur radio and allied techniques with special reference to licensed amateur transmitters and to promote the extension of interest and active participation and co-ordination in such pursuits as the above.

The building on this foundation may be made to crumble, decay and collapse by some of the thinking and attitudes that we have which can react against these objects or delay them.

These thoughts and attitudes in us all are the Borers and White-ants that retard and stagnate any group of people or organization.

LETTERS TO THE EDITOR

The Editor QRM

Firstly congratulations on a fine magazine, its format is light, interesting and informative and I find it very enjoyable reading. I would like to submit an article in the near future which I hope will be of interest to the readers. So best wishes to you all involved on the magazine for a job well done.

Secondly please note that I am no longer using my old call sign of VK7TL. I have been moving around too much this year to contemplate setting up a station so have let my license lapse until I can get a permanent (and suitable) place. I will still be a member of WIA and would still like to receive QRM.

NORTHERN BRANCH NOTES

by Ken VK7ZKT

Page 8

The monthly meeting of the Northern Branch was held at Bourke St on 13th July. The meeting was chaired by Ed VK7HE with 25 members of the branch attending.

Minutes of the previous meeting were accepted as correct and the meeting then dealt with two items of business arising from the previous branch meeting.

Purchase of Equipment The meeting voted on and accepted a motion to purchase an HF transceiver (TS120V) and in a second motion approved the purchase of a 2 metre FM transceiver (IC225). The total cost of these items was \$668 tax exempt and it was further agreed that this be funded from the clubroom account.

Treasurers Report was presented by Brian VK7ZBY and accepted.

Call Books The equipment store manager, David VK7YY reported that call books for 1979 would soon be available at a cost of \$2.95 and owing to an initial limited printing, orders should be placed with the equipment store ASAP to ensure delivery.

Outward QSL Col VK7KW reported that no mailage stickers have arrived as yet and could members using the Bureau leave identification on cards for contact if necessary.

Sunday Broadcast Brian VK7ZBY asked the meeting if there would be support for a re-broadcast on 6metres FM (52.525)

Clubroom Renovations Bill VK7TE reported that requirements for painting and wiring at the clubrooms were being processed thru the City Council. A Working Bee was then arranged to provide bench and shelf space in the radio room at Bourke St. Sat 21st and Sun 22nd.

Ladies Committee Reported that the progressive dinner held recently was a great success and thanks all who attended. Next function is to be a Wine and Cheese evening on 25th August (see below)

Educational Brian VK7ZBY proposed that the Branch purchase 15 ARRL handbooks at \$3.00 ea, to be held by the Branch for use at future AOCP classes. It was also reported that 18 AM/FM portable receivers purchased recently, would soon be available for purchase by members. The sets are being modified for 2 metres and should resale for about 7 to 8 dollars. It is envisaged that these sets could be used for Fox Hunts in the future and especially at TARC 79.

Meeting closed at 9.45PM and supper was served by Yours Truly wearing my other hat as refreshments officer.

Next Meeting Executive Friday Aug 3rd
 General Friday Aug 10th

WINE and CHEESE EVENING

A Wine and Cheese evening is to be held on 25th August at the Riverside council chambers hall. This is a modern hall with all facilities and should prove to be an excellent venue. Cabaret style entertainment is to follow with supper and drinks provided. Cost of tickets is 4 dollars and are available from the Branch Sec Lucy VK7NSB, Ed VK7HE or any of the members of the Ladies Committee. The number of tickets is limited so be early.

QSL BUREAU

If you intend to forward cards through the Bureau, please remember when having them printed, that they must be no larger than 140 X 87 mm as any larger than this cannot be handled.

A short guide re QSL and Bureau requirements is available from the Bureau and QSL officers on application.

Chas VK7CH QSL Manager

AN INTRODUCTION TO 6 metres

by Joe
VK7JG

What is the 6 metre Band? It is the lowest frequency VHF band available for amateur use and here in VK it covers 52-54MHz. This is unfortunately only the upper half of the international allocation of the 6 metre band of 50-54MHz.

Being a VHF band, most of the time it exhibits normal VHF propagation characteristics, but under various influences eg. Sporadic-E, F2, TEP then world wide communication is possible. I shall explain the meaning of these propagation modes, further on in the article.

Conditions vary considerably with the time of year and position of the sunspot cycle. With a good opening it is possible to work as far as Japan with 5 and 9 signals using only 3W PEP from a portable.

Equipment can be either built or purchased and if your hobby is construction then almost every amateur handbook contains details on 6m transverters and antenna. (The RSGB handbooks are an exception as there is no 6m allocation in England.)

In every active 6m area throughout the world, Beacons have been built for propagation prediction purposes, also TV and FM transmissions that are close in frequency to 6m, can be used to detect openings.

The more common and possibly the most spectacular form of propagation found on 6m, is Sporadic-E reflection. This carries the bulk of 6m traffic within VK and peaks usually from November to January (summer DX season) and to a lesser extent June to July (winter DX season). It also occurs for brief times during other months but the only way to detect the openings is by constant monitoring of the band. Sporadic-E signals are usually very strong and often the DX signal is stronger than the local. The best skip distance is about 1600 Km but this does vary.

These signals are reflected from ionized clouds in the 'E' layer at a height of 60 to 100 Km above the earth. Openings may last from a few minutes to several hours and although they can be at any time of the day, observations have shown that the majority are around noon or early evening. During the last equinox, the first openings to W land for the day, usually occurred around 8.30am local time, then a second opening two hours later. It was also noted that the openings appeared to open firstly to southern stations eg ZL, then slowly move up the east coast to VK3, VK2 and finally VK4. Other days the openings were contained to VK4 stations only.

Determining propagation modes is very difficult, the above example possibly being F2. This provides long haul, multiple hop up to distances of 20,000 Km.

Scatter Forward scatter signals are scattered by the 'E' layer giving paths up to 2200 Km or by the troposphere at about 10 Km above earth, giving paths up to 800 Km.

Backscatter occurs when signals are reflected back toward their origin by the 'E' layer. eg VK3 beaming north and being heard in VK7. Backscatter is usually an indication of a good opening.

TEP (Trans-Equatorial Propagation) To fully explain this mode would take several pages, but it is explained in an article by Roger Harrison which was reproduced in several amateur magazines. Basically it is that communications is possible between amateurs roughly equally spaced either side of the magnetic equator. eg Tokyo to Rockhampton.

I have noticed in VK7 that this mode is usually associated with some form of Sporadic-E noise to VK4 or 8 area, then TEP to JA.

Auroral Reflection With increase of sunspot cycle 21, Aurora activity will increase as well. To use the Aurora, point your beams south, run as much power as you have (within limits) and use SSB. Signals have a characteristic phase shift making intelligibility almost impossible at times. CW sounds rather like a "shoosh" and is very wide. Southern States enjoy this mode mostly with contacts between VK7-3-5 most common.

Meteor Reflection This mode depends upon ionized areas, formed as a result of meteors striking the upper layers and reflects signals for periods of a fraction of a second to half a minute or more. To use this mode usually involves operating early in the morning at 6AM, running full power with as much help from the antenna system as possible. It is very time consuming but can provide activity when the band is normally closed.

For those who have never operated on 6metres, then why not give it a try. It can be very rewarding as well as frustrating, commonly known as the "gentlemen's" band.

Obviously the first requirement is a rig of some sort, perhaps a converted carphone even using world wide simplex frequency of 52.525MHz FM, 52.656MHz is a secondary frequency.

In VK 52.050MHz has become the national calling frequency, so when you are in the shack, leave your rig monitoring this.

A list of the Beacon frequencies can be found in the VHF column of AR and these can also be monitored to see if the band is open to a particular area. 28.885MHz is used as a HF Liason frequency so if you listen there you will learn a lot about 6m conditions.

Sunspot Cycle 21 is with us and if the last equinox opening is any indication, then we can look forward to 6 metre openings to most parts of the world within the next few years. The only disadvantage of increasing sunspot activity is a fall in Sporadic-E.

See You On 6
73 Joe VK7JG

TOPICAL TOPICS by Jim VK7NOW

Do you know what a JAR is? Wait for it - I can almost sense several members muttering something about "it is used for putting the molecular contents of 807s in". True, but the word "JAR" was the unit of capacitance long before the "Farad" was used.

It was named after the "Leydon Jar" which was the fore runner of the capacitor as we know it today. I was recently given a variable condenser which is calibrated in "Jars". It was used in conjunction with a very early Spark Transmitter and was immersed in oil, to increase its capacity and prevent arcing.

In the construction of the early sealed capacitor, a sheet of wax impregnated paper, sandwiched between tin foil and pressed together when hot, so that a bank of these placed in a hermetically sealed box would form the basis for the modern capacitor

73 till next time
Jim VK7NOW

WANTED

HF Trap vertical antenna including 80 metres

VK7ZLD Home QTH 444690

Station for Sale

Kenwood line. TS-520S, AT-200(ATU) both as new in original boxes and with handbooks.

Emotator antenna rotator unused, with extra mast clamp. Still in original box.

\$800 the lot or any reasonable offer considered. Prefer not to split.

VK7NED QTHR Dodges Ferry
J D Smith

FOR SALE

FDK Multi-7, Ch. 40 + 50 + R2 + R8. Homebrew Pwr supply to suit. 4 el 2m Gamma match Yagi, (incl 7m Coax). Mobile G/mount whip (incl 2m Coax). Mobile mount, connecting cables etc. (All connectors with plugs etc) Manual with circuit diagram. Suit new Z call-sell complete only \$200.

Ex VK7TL Phone Tom Hobart
Work 726976 Home 232989

SCENE AND HEARD

by Earwig

Your report is coming from the Northern Hemisphere this month. One thing that is noticeable over here is that much of the International broadcasting in Europe is on the Medium waves. The average power of the transmitters is in the hundreds of kilowatts rather than tens of kilowatts, so it is possible to hear many of the Europeans on a pocket radio. Here in London there are seven different radio programs, four of them BBC, two independent commercial and one local radio station. Also there are FM outputs of these programs. The FM band is between 89-100Mhz and broadcasts in stereo. Above 100Mhz there are two way radio links and repeaters for public utilities.

The amateur service here appears to be much the same as that in VK. Although the restrictions appear to be more enforced here than in Australia. The frequencies allocated are mostly the same except the 40 metre band is only 7.0-7.1Mhz and there is no 6 metre band. Instead an allocation in the 4 metre band is provided, which is used in most of Western Europe. Also 2 metres here is a shared band with police and military above 166Mhz. The repeater offset is 300KHz with 90sec timeouts.

Incidentally CB here is taboo and there is no sale of CB rigs in stores. There does not appear to be much illegal activity as the Post Office clamps down heavily on illegal transmissions.

The RSGB has quite a close relationship with the Post Office and appears not to conflict. The current license fee is A\$14, CW requirement is 12WPM and the exams are set by an outside body, the City and Guilds. I don't have to tune short wave to hear BBC world service. It can be heard on 648Khz practically 24 hours a day.

Well that's all this month, next month report from European scene.

73 de Earwig

SOUTHERN BRANCH NOTES

Page 12

These will be brief as the OM and myself were away for most of the preceeding month in VK3 and VK5. We took VHF gear, however were very inactive with my only contact being a VK6, mobile in 5 also. Talking of travelling, Ian VK7ZZ is presently enjoying the hospitality of VK8 land.

Back in Hobart, Ted VK7EB has been rather ill and is still in hospital, although improving now.

W.A.G.S. latest fund raising event was the square dance held recently; apparently this generated such interest, that a few dancers were seen two days later, learning how to dance-square variety-in order to be prepared for the next such event.

In order not to disappoint these enthusiasts another dance is tentatively planned for early spring.

The next fund raising event on the social calender is a Bingo night to be held at my QTH in New Town, on the 4th August. Also a Christmas function will be held on the first weekend of December. This will probably be a combined Wine bottling/Barbecue.

So far WAGS have raised close to \$600 for the building fund. The Bingo night has been carefully planned in order NOT to co-incide with the R.D. Contest on the following weekend.

If all those who took part in the RD contest last year had entered their logs, Tasmania would have won fairly easily. So this year it is hoped that amateurs will rectify matters and ensure our winning.

At the last Executive meeting there was much discussion as regards affiliation with the SES, the bait being the use of clubrooms. Any interested members of the Southern Branch (and this should include all members) should attend the next General meeting where this subject will be discussed and hopefully voted on.

The next General meeting will also include a talk on operating procedures, particularly during contests.

FOR SALE

FT221 as new condition \$500 ono Ph 287575 Brian Morgan
Hobart

WANTED

One (1) Windmill with head and would also like pump.
(vaness optional)
Preferably able to be dismantled for transportation.
Wind Generator also required.
Tower (any height) and a combustion stove.

Ph 491266/309891 Hobart
Andrew Dixon

DIVISIONAL NOTES

North Queensland Radio Convention We have been asked to publicize this event, to be held in Townsville from Friday 14 to Sunday 16 Sept 1979. A brochure is available from your branch.

Articles of Association An updated copy of these is now available and will be sent to members who joined recently and to whom we were unable to send a copy. If you require a new copy, send a 25c stamp with your request to the Secretary.

Tasmanian Award A draft copy of a "Tasmanian Devil Award" will probably be available next month. Meanwhile Council would like to hear from anyone who could help with the artwork for the certificate.

Special Council Meeting The following statement was issued on the broadcast of 8th July by Divisional Council.

A special Council meeting was held at Devonport on Sat 7th July with some North West Branch executive members present. This was felt necessary to clarify the position as regards the acquisition of some equipment by that Branch. After discussion the matter has been clarified to the satisfaction of all present.

We would like to state categorically, that no personal reflection was intended by Council or any members of the NW Branch and should this have occurred then an apology is offered.

Council meetings 2PM, 18th August at Reg Emmett's VK7KK QTH at 111 New World Ave. Lton. Remember visitors are welcome.
On-air meeting: 3595 KHz 8PM on 6th August.

R.D. CONTEST

We went close to winning last year. Our next chance is on 11-12th August. Note that there are a number of rule changes this year and also that there are some errors in the rules on pages 40-41 of July AR. Note particularly the following.

(a) Novice and Limited Licencees operation is a most significant bonus to us. Since they cannot operate on all available bands the Contest Manager has excluded them from participation calculation. However their point scores are most important and of course they can receive certificates. IF THIS RULE WERE USED LAST YEAR WE WOULD HAVE WON.

(b) Intrastate contacts are allowed on VHF and on 1.8, 21 and 28MHz. during the late evening and on 1.8, 7, 21 and 28MHz during Sunday afternoon

(c) A station may be worked more than once on 1.8, 21 and 28MHz.

(d) CW/RTTY contacts count double.

(e) More Log sheets should be available from Branches.

(f) Logs must be sent by 3rd September.

(g) Council is making efforts to allow VKØ contestants to send in their Log information. So work them for maximum score to VK7.

CALL BOOKS 1979

Branches are now taking orders for call books. Supplies will be limited so don't miss out. Available mid-August for \$2.95

HOME COLOUR FILM AND PRINT PROCESSING cont.

For temperature control I use an old frypan with a little water in the bottom. Place the tray with the developer in the water and a thermometer in the tray. The thermostat will need to be set fairly low and experimentation will give you the right setting to maintain around 37.8C (100F). When found mark the place on the thermostat control. Leave the tray in the frypan all the time you are printing. Some people use a temperature controlled plate warmer but they are not easy to get.

Before printing check:

The papers have been cut to size. The enlarger has been set up and has been focussed accurately on a sheet of white paper. The developer, fixer and stabiliser poured into trays and developer at correct temperature. The fixer and stabiliser can remain at room temp.

As an initial starting guide put in the filter drawer:

1 ultra violet filter, 60 yellow and 20 magenta.

Set enlarger aperture to F11 and do 3 test exposures at these times:

1 at 5 seconds 1 at 10 seconds 1 at 15 seconds

Using a pair of tweezers develop papers as follows:

Agitate in developer for 2 mins, Agitate in fixer for 1 min, Wash for 1 min in water then stabilise for $\frac{1}{2}$ min.

For the test prints you needn't worry about the stabiliser. Check test prints and determine which exposure time is best. Adjust F stops and timing as you would with B/W for correct exposure. Now look at the overall colour cast and make filter corrections as previously described. Remember if you have to add filters to the drawer then add a second or two to the exposure time as addition of filters reduces the light. Similarly removing filters then reduce exposure time. I reckon you will have a reasonable print by now and only minor mods to the filter pack will be necessary. Initially you will use up a few papers but it is surprising how quickly you will become adept at judging the changes required. Once you have settled on the F stop, the time and the filters then under no circumstances change anything: maintain consistency.

Once the prints have been stabilised the following is suggested: Place a clean towel on the table, place the wet prints on the towel and sponge off excess stabiliser with a wettex or similar and leave to dry at room temperature. They will appear slightly milky until dry, also definition will improve as they dry.

A more professional finish can be obtained by guillotining the edges leaving a border of white around the sides. Initially the cost will be the same as commercial printing but with time you can cut costs and have the satisfaction of doing it yourself. Remember your prints can be larger and you can do as many as you like. It becomes cheaper if you save up your films and do a few at the same time.

Some will find it not worth the trouble but others will find it a good hobby and very interesting.

Another small matter that comes to mind: In the confines of the dark-room the chemicals can be a little overpowering so a small exhaust fan could be well worthwhile.

I hope this article has been of some value to those who wish to try home colour printing.

All the best and 73
Peter Harrison VK2NPM

(This is the final article in this series and our thanks to Peter- ed)

COVER SHEET : R.D. CONTEST

Section

Score

Call Sign

Modes

Name

Address

Declaration:

I hereby certify that I have operated in accordance
with the rules and spirit of the contest.

Signed

Date

Call Sign.....VK7.....

CONTEST.....R. D.....Section.....

Page No.....

[illegible]

—Do not forget the Summary Page and Certificate.

Total	100	100	100
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NORTHERN BRANCH EQUIPMENT STORE

Page
15

	\$	c		\$	c
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NE556A "	1.85		<u>Tantalum Electrolytics</u>		
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