



Founded 1979 Incorporation No A6677 P.O. Box 692, Shepparton 3632

VK3RGV repeaters and transmitter operating frequencies

53.725MHz (-1 MHz offset), **In Service**

146.65MHz (-600 kHz offset), **In Service**

438.2MHz (-7 MHz - offset -D-Star), **In Service**

438.650MHz (-7 MHz offset and 91.5 Hz tone access only), **In Service**

438.900MHz (-7 MHz offset- DMR repeater), **In Service**

439.775MHz (-5 MHz offset), **In Service, IRLP (node #6990)**

VK3RDS, 438.7625 MHz (-7 MHz offset DMR repeater) **Shepparton on test @ VK3YNV QTH**

Access to most analogue repeaters is by sub-audible 123 Hz tone or noise/carrier mute (less sensitive).

Club informal on air get togethers - Wednesday evenings. All welcome. Club call sign VK3SOL:-

2mx repeater 8.00pm 146.650 MHz,

3.63 MHz SSB ± interference 8.30pm.

The vintage radio club have a sked at 11.00am Sunday on the 2 mx repeater.

Meetings occur on the first Saturday of the month at 1pm. Due to the pandemic temporarily they will be conducted on air via our 2 metre repeater and Peter VK3FPSR will officiate as President.

Variations in these times, days and location are normally notified in the preceding newsletter.

Website – www.sadarc.org Face book - www.facebook.com/sadarc.org

Info for the page contact - Denny French on denny3782@gmail.com

Note: Want to get your licence? SADARC has examination assessors, contact the secretary for details.

The following repeaters do not belong to our club but provide good signals for many members.

Mount Major VK3RDU repeaters, TX operating frequencies, 146.850 MHz and 439.875 MHz

UHF CB Repeater WBT03 Mt Wombat Channels 3- 33, 476.475 MHz, **In service** * 24/4/2020

DISCLAIMER:- No guarantee is given as to the accuracy of information in this newsletter.

Warning: - There is a danger of electrocution or injury when working on electrical/radio gear or working at heights doing antenna work. You do so at your own risk.

President: - Peter Rentsch

VK3FPSR/GV

peter@rentsch.com.au

Secretary: - Andy Ashley

VK3AJA

secretary@sadarc.org

Assistant Secretary:- Geoff Angus

VK3ZNA

Vice-President: - Barrie Halliday

VK3KBY

Treasurer: -Andy Ashley

VK3AJA

secretary@sadarc.org

Membership Sec: - Andy Ashley

VK3AJA

"

Webmaster: - Ray Gardner ray@etheira.net

VK3YNV

Publicity Officer: - Vacant

Communications Managers (External Events):- Bruce (VK3PNG) 0427 715 663 & Darren (VK3HEN) Glasson

Tech. Committee: Geoff VK3ZNA, Ray VK3YNV, Josh Gardner & Rodney VK3UG – with power to co-opt.

Newsletter: - Rodney VK3UG (Editor) rodlynn6@bigpond.com

Peter & Andy (Printing/ Distribution)

Radio museum call

CLUBS' MEMBERS BROADCAST WISH FOR RADIO HERITAGE TO BE PRESERVED

By John Lewis

Amateur radio enthusiasts are pushing for the former site of Radio Australia in Shepparton North to be upgraded and retained as a national museum of radio broadcast history.

Members of the Shepparton and District Amateur Radio Club and The Vintage Radio Club of North East Victoria are due to present a 25-page proposal to an anonymous consortium of buyers said to be interested in acquiring a 258 ha block of land along Verney Rd.

The block includes two buildings and several large broadcast towers on the former site of Radio Australia. The site is currently owned by BAI Communications.

The Shepparton club's assistant secretary, Geoff Angus, said the proposal would be presented to Greater Shepparton City Council for forwarding to the consortium.

The ABC shut down the shortwave radio station in January 2017 after 70 years of broadcasting across Australia and the Pacific region. The decision was heavily criticised at the time by radio enthusiasts and federal senators including South Australian NXT Party leader Nick Xenophon.

It was put up for sale later that year, with an online listing describing the site as "a significant land banking opportunity" in a growth area of Shepparton.

The clubs' lengthy proposal for a national radio museum at the site includes several suggestions for potential exhibitions, such as a history of shortwave broadcasting in Australia; the establishment of the Radio Australia site in 1941; documenting the locations and signal reach of the original antennas; displays of restored radio transmitters from across Australia; and displays of television equipment from the former studios of GMV6 and HSV7, which are held in storage in Shepparton.



Radio enthusiast: Shepparton and District Amateur Radio Club's Geoff Angus.

The proposal also suggests the site could feature interactive displays based on STEM subjects for the benefit of school students.

Shepparton and District Amateur Radio Club members last month held a demonstration of the site's capabilities when they successfully "bounced" radio signals off the surface of the moon.

The 25-page proposal includes a request to include radio terms such as Kilowatt Ave, Rhombic Crt, Transmitter Park and Antenna Dve as well as the

names of former Radio Australia staff during the naming of streets and parks in future housing developments in the area.

Shepparton and District Amateur Radio Club president Peter Rentsch says in the proposal's opening statement the Shepparton site is the largest intact HF radio transmitter site in the country.

"After 75 years of service it deserves to be preserved and retained as a museum, more importantly an interactive museum for Shepparton, the Goulburn Valley and future gen-



Masts from past: The former Radio Australia site at north Shepparton is the only radio transmission site in Australia where the original broadcast towers are still standing.



Not happy: The former South Australian Senator Nick Xenophon at the locked gates of Shepparton's Radio Australia site in 2017 after criticising the ABC's decision to shut down shortwave radio broadcasts from the site.

erations," Mr Rentsch said.

He said Radio Australia was the only site in Australia where the original broadcasting towers were still standing.

"All other high-frequency transmitting sites in Australia have either been demolished with little or nothing remaining to indicate a station location, or only the buildings remain as a reminder of our early radio communications," Mr Rentsch said.

● **For more information about the Shepparton and District Amateur Radio Club visit** www.sadarc.org.au

A great job, well done Geoff. Thanks also to John Lewis from the Shepparton News for the composition of the article and its appearance in Monday 20/4/2020 issue of the paper. Do you like Geoff's latest kilowatt linear!!!! Just kidding, but you can have a try and tell us what the device is. Being able to identify this device could form part of training for your licence upgrade.

This article gives our club more publicity. A bit more info on the museum proposal later in the newsletter.

Presidents Report April 2020

After being involved in Amateur Radio now for 10 years it has been interesting the last few weeks how much busier the bands have been. As a Club we have made it busier by having our meetings via the 2m Mt Wombat repeater. I felt that under the circumstances the meeting went very well and I thank all those who participated.

Karen and I hope that everybody is keeping well and safe and avoiding unnecessary travel. This can make life a little difficult at times but the alternative would be far more laborious and difficult to cope with. We are both well and it really has not been a great burden to stay at home.

Geoff VK3ZNA has been busy preparing a 25 page submission for the new owners and the Greater Shepparton Council and what we as a Club would like to see eventuate at the Radio Australia site. This is a very comprehensive submission and with Rodney VK3UG, s help it hopefully will encourage both groups to involve us in any future discussions.

The feedback from the RA weekend still continues to be positive and I am still getting comments associated with this weekend. If we are able to facilitate what we would like at RA these weekends may become a regular occurrence. For our Club it will mean a great deal of work for our hobby and the promotion of Amateur Radio but as it is a hobby we love and enjoy the work becomes fun and pleasurable and not burdensome.

As we are still in Stage 3 Lockdown our next meeting will be on air as last time. We will start at 1.00pm as per normal on the Mt Wombat 2m repeater.

That's it for this month and I look forward to hearing you all on the 2nd of May for our "on air" meeting.

Cheers for now.

Peter Rentsch
President

CLUB CALLANDER

2nd May – "On air meeting" 2m Repeater Mt Wombat 1.00pm

6th June – Regular meeting – format to be advised.

SADARC April 2020 Virtual Meeting

On April 4, 2020 the meeting conducted 'over the air' using the MtWombat 2 meter repeater. It is believed that this is only the second time the Club has carried out a meeting 'over the air'.

The meeting commenced at 1.00 PM EADST with our President Peter VK3FPSR as network controller for VK3SOL.

Apologies: - VK3AJA Andy, VK3PNG Bruce, VK3KBY Barrie and probably those without call signs.

Virtual Attendees:- VK3FALN Alan, VK3FTRK Geoff, VK3ZNA Geoff, VK3ZYZ Denys, VK3YNV Ray, Josh G, VK3UG Rodney, VK3UI John, VK3CAF Clint, VK3FNQS Jason, VK3NQS Colin, VK3ECH Rob, VK3AO Alan, VK3ASK Peter, VK3BPH Kevin, VK3YYY Ian, VK3EB Dallas. (18members) VK3PNG Bruce, checked in after the meeting closed.

Minutes from the March meeting were not read out, but VK3FALN Alan moved and VK3FTRK seconded the acceptance of the March Minutes.

VK3ASK Peter, to proceed with negotiations with Vision Australia on behalf of the Club to continue renting the present Clubrooms for the foreseeable future.

Correspondence In: - Invoice from ACMA for Club licence, 10 of QSL Cards received from the Radio Australia weekend, and a bundle from the Victorian QSL Bureau to be distributed. An Authority from Australia Post.

(N.B. A further 7 of QSL Cards from the Radio Australia weekend have been received since the Virtual meeting.)

Payments Outward: - Club Insurance approx \$218.00

Treasurers Report: - With held for this meeting.

Reports: - VK3YNV Ray, Radio Australia weekend, he has many photographs of participants taken over the weekend. There were around 1037 contacts logged for the weekend. Using the PX1 array on 80 metres, a contact was logged into the UK.

Josh G. is to set up a map showing the locations of all contacts made. Some contacts into California were reported as +20dB over 9.

QSL cards are still in the development stage and as yet to be formalized for submitting to the printers. Once received, they can be sent out.

VK3UG Rodney, requested signal strength reports.

VK3ZNA Geoff, to send letters of thanks to Icom Australia, BAI Australia and to VK3OF Rex for their support for the weekend. Also (VK3FPSR) XYL Karen for her support over the weekend.

Moved VK3BPH Kevin, Seconded VK3UG Rodney.

VK3UG Rodney mentioned that 2 of the Icom IC7300 transceivers have been purchased by attending operators since that weekend.

VK3ZYZ Denys noted a very enjoyable weekend with the development of the 10 of 6:1 baluns 300 ohm to 50 ohms.

The balun construction was placed on the QRZ page and has had over 1000 views.

VK3FPSR Peter announced an OTA (over the air) round of applause for VK3YNV Ray, Josh G, VK3ZYZ Dens, VK3YLS Paul, Terry F, VK3UG Rodney and VK3ZNA Geoff, for their work in carrying out the necessary duties for the very successful weekend of Moon-Bounce and HF communications.

There was the initial planning, testing of the antennas from inside the building, further testing of the individual antennas at the matrix switch, (there was no connection through the Matrix switch). Repairing of the those aerials that could be repaired, preparing and testing of the 10 baluns (these are suitable for at least 400w PEP +++). Preparing 3 lengths of low loss coaxial cable, assembling 3 of remote control antenna switching control consoles and switched to allow operators to select 3 aerials from each of the 3 transceiver positions. Providing 3 sets of computers loading the software required and networking those for online QSO logging. Then after the weekend, recovering the 10 baluns, these were installed about 3 metres above ground directly to the 300 ohm feeders to each of the 10 available antennas. One antenna was not used, but could easily be activated by swapping co-axial cables at the remote antenna selectors.

VK3YNV Ray advised that the final clearing of the site by the E-Waste contractor was Wednesday and BAI are to hand over the site very soon. BAI are renting the engine/generator building. The new owners are to be contacted ASAP to request accommodation.

VK3ZNA Geoff reported that the Proposal to establish a Museum is a work in progress; it is expected to be finalized within the next 2 weeks.

VK3UG Rodney, asked if the aerials can be retained for as long as possible and to contact the Shepparton News for an article on SADARC and the RA weekend. (Draft Proposal is ready and Shepp News have been contacted.)

VK3EB Dallas asked that they should include a great Circle map centred on Shepparton.

VK3FNQS Jason, suggested we apply for VK3SRA as an alternative or second call sign to VK3SOL (at time of writing, VK3SRA is not allocated on the ACMA database)

Moved by VK3FNQS Jason, seconded by VK3FTRK Geoff.

VK3YNV Ray announced that an offer has been made from VK3FY Chris to our Club to supply a “Fusion” base station for MtWombat. This would replace our existing 2 metre repeater. Ray commented that the technical committee do not consider this viable at this time. The 2 metre repeater is used as an emergency channel to be available at any time for general chats. If a Digital mode was added, that could take precedence over an emergency call. Consideration could be given to setting up another separate channel. Yaesu Fusion is available in VHF and UHF as per the Yaesu website.

VK3BPH Kevin questioned the power supply capacity on MtWombat if another base station was added. Ray indicated that if excessive power was to be drawn from the power supply, then the batteries would supply the balance.

VK3YNV Ray, made mention of upgrading the VK3RDU MtMajor repeaters. Both VHF and UHF repeaters are Philips FM828's.

VK3FNQS Jason, expressed interest in the possible linking of MtMajor with MtWombat.

An upgrade would increase transmitter output and a possible improvement in receiver performance. Ray to investigate

(Ray has made enquiries and further work is to be done to get internet access from one of the services on MtMajor.)

VK3FTRK Geoff offered some of his land for repeaters. This would require funding for suitable masts/towers, guys, concrete foundations, antennas and co-axial cables, batteries, internet connection. No further comment was made.

The OTA meeting closed at 2.15PM.

VK3PNG Bruce, made a call in just after the meeting closed, he requested he is an apology.

Compiled by VK3ZNA Acting Secretary

Editors Ramblings

- Geoff VK3ZNA has finished his submission on behalf of SADARC and the Vintage Radio club to the new owners of the Radio Australia site. Geoff has collected a lot of information and compiled it into a very comprehensive submission of 25 pages setting out the advantages to the new owners to have an active museum, how it would be advantageous to the community, the local council and us as radio amateurs and vintage radio enthusiasts. We are hopeful that this will be a win win situation for all concerned. If the ideas in the submission are accepted it will mean that SADARC may have access to the site for amateur activities, but we would also have to be prepared to assist to make this proposed museum a functional reality. You will not be able to leave it to the elusive “they”.
- Geoff Russell has really been getting into amateur radio on 40 metres. With 10 watts and antennas on near 20 metre high masts he has been working into the USA. There is nothing like a good location with high antennas and no or little electrical noise. Congratulations. Of course as you would expect, not as strong as we were able to do on the 14th and 15th March at the RA site.
- **So that a complete story of the club's activity prior and during the 14th and 15th of March can be put together, please forward any information you have about the weekend what you achieved etc. And please send it in soon before memories fade.**

- Our repeater site is operating much as it has for several months. With the various restrictions on what and how we do things in this corona virus time, work that may need doing has had to be postponed for the time being. Personally unless there is some emergency I cannot see us doing much until well into spring. As previously reported the UHF CB repeater is not going at all well note * earlier in the newsletter.
- Andy has returned from his aborted tour of Western Australia. On the Wednesday skeds he has reported that Geoff and I are not strong and Geoff's signals are non-existent to him. Okay here but not a strong signal from Andy. I suspect that there is a notch in the radiation pattern.
- Back around the late 1980s or early 1990s 3NE radio station (1566 kHz) at Wangaratta changed their radiation system from omni-directional to directional which allowed them to increase their transmitter power from two kilowatts to five kilowatts. The new radiation pattern is a cloverleaf pattern giving better signals up and down the highway and towards Bright. One of the other conditions was for a null in the pattern towards Shepparton as the predecessor to the ACMA didn't want 3NE to poach 3SR's advertisers. I checked this pattern and it was very effective. If you drove just north of Thoona you came to an area where 3NE just disappeared for around 100 metres. With the deterioration of time this null is not now quite as pronounced. So Andy this may be why you can't hear Geoff.
- Keeping our communications lines open. Members of both SADARC and the Vintage radio clubs are gathering more on the weekly skeds on the 2 mx repeater SADARC 8pm Wednesdays, the Vintage Club 11 am on Sundays and the SADARC meetings on 2mx Fm at 1pm the first Saturday of the month. On HF members have a get together at 8.30pm of a Wednesday on 3630 ± interference. We do get a few call ins from amateurs out of our clubs immediate location. If you are not already joining in one or more of these, dust off your rigs, check the antenna and join us all. The average numbers at the weekly skeds are up around 10 members or more and the Vintage Radio group is six or more.
- Looking back over the last five years I have observed that the newsletter has grown from around four sides of A4 paper to 8 sides generally and this issue is 10 sides.
- **Don't forget our on air meeting on 2nd May at 1 pm.**

Currently circling the southern hemisphere part of the earth there are three balloons identified as PS-74, PS-75 and just released PS-76. The balloons use 3 foot diameter Mylar "party" balloons inflated with gas. Each carries a payload transmitter frequency 10.138.7Mhz. or 14.095.6Mhz. Power approx 20mW. Andy Nguyen VK3YT designed and built them. You can see the progress of the balloons on their track by going to this website "habhub tracker" this is free site. Once you have downloaded the program click to open it and it will display a map of the world. In the top left corner is a box with a button on the right hand end. Type in the box PS-74 then click the button. As if by magic a balloon icon with the PS-74 label will appear and some red lines which is the historic track of the balloon. In the left hand corner there is a table showing the parameters which are measured and transmitted back. If you type the other balloon idents as before you will get the track of that balloon. It's simple and at no cost. Give it a go.

73 David VK3ANP

Thanks David (editor)

- I am thankful:

For the wife who says it's toast tonight, because she is home with me.
 For the husband who is on the sofa being a couch potato, because he is home with me.
 For the teenager who is complaining about doing dishes because it means she is at home, not on the streets.
 For the taxes I pay because it means I am employed.
 For the mess to clean after a party because it means I have been surrounded by friends.
 For the clothes that fit a little too snug because it means I have enough to eat.
 For my shadow that watches me work because it means I am out in the sunshine
 for a lawn that needs mowing, windows that need cleaning, and gutters that need fixing
 because it means I have a home.

For all the complaining I hear about the government because it means we have freedom of speech.
For the parking spot I find at the far end of the parking lot because it means I am capable of walking and I have been blessed with transportation.
For my heating bill because it means I am warm.

For the lady behind me in church who sings off key because it means I can hear.
For the pile of laundry and ironing because it means I have clothes to wear.
For weariness and aching muscles at the end of the day because it means I have been capable of working hard.
For the alarm that goes off in the early morning hours because it means I am alive.
For a broken heart because it means I have loved deeply

Live well, laugh often, & love with all of your heart!

Mobile Radio Project Part 2: (3rd issue in Newsletter)

Hello again, Les VK3TEX here to tell you about the next stage of my mobile project, which was installation of the Dual Battery system into the vehicle.

I searched the internet far and wide looking for a quality Australian Made dual battery solution. I came up with a Manufacturer from NSW called Australian Direct. They make a wide variety of dual battery and solar panel solutions for the 4WD enthusiast. The brand name is Kickass Products. The unit I wanted had to be portable in nature so I could move it around and it wouldn't be stuck in the vehicle. Also a permanent solution for an engine bay install was difficult with the model of vehicle I had so I opted for the removable battery box.

I ordered the complete kit from Australian Direct which came with a custom made battery box, a DIY cabling kit to route the DC cable to the rear of the vehicle, and some basic installation guides via YouTube videos. Also not forgetting the most important bit, the 120AH AGM battery.

The battery box has some nice installed features and devices on it which made it an attractive buy. Namely, a DC to DC converter to charge the battery properly, as the vehicle alternator doesn't supply enough voltage to fully charge the AGM battery which requires 14.7 volts for a full charge. An alternator and solar panel input to the DC converter. Both with Anderson 50 Amp plugs. 2 DC input/output connections to the battery also on Anderson plugs. 2 USB 5 volt outlets, 1 merit plug (For Engel Fridge?) The DC converter also has a Voltage sensitive relay to disengage the car battery when the engine is switched off, and a low voltage cut-off so you can't destroy your AGM battery. First the cabling had to be routed from the front of the vehicle to the rear of the wagon which was made easy as the cabling kit came complete with all the necessary plugs, ties, etc. to do the job.

Anderson plugs were used throughout due to their excellent current rating and general ruggedness. The first part was the engine bay and then working back to the rear of the vehicle.

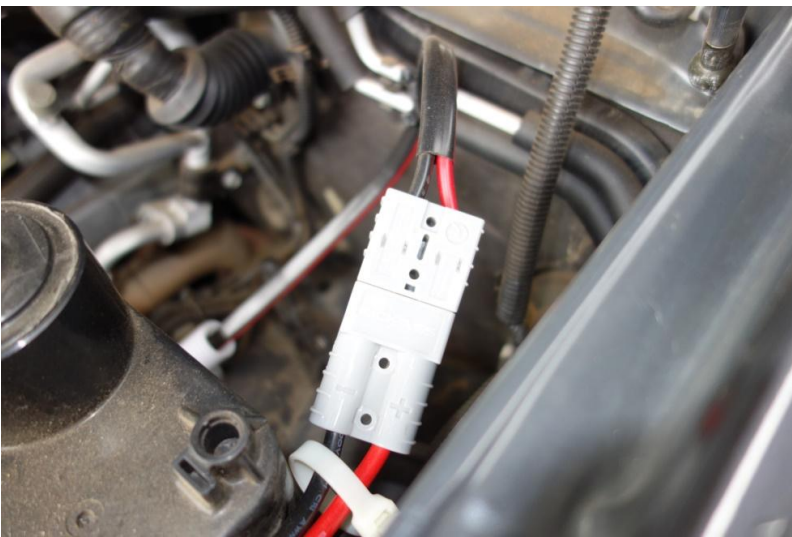
I routed the DC cable through some 25mm flexi conduit which is the type used by electricians. This was routed down the left hand side of the vehicle (passenger side) cable tied to the chassis rail and bought up through a 32mm access hole at the rear door foot-well under the carpet.

The rear plastic panel covering the wheel arch was removed to drill a hole in a plastic housing box to fit a 25mm plastic gland for the cable to exit to the rear of the vehicle, then the Anderson plug was fitted and install was complete. I left enough length on the DC cable to pretty much cover any spot in the rear that I wanted to gain access to.

I found a nice temporary place for the Battery box in the foot-well behind the front passenger seat. I put some temporary padding to stop the battery box from rocking back and forth, and didn't need any on the ends as the battery is too long to get any movement laterally.



Picture showing the heavy duty DC cable red going to Battery + and negative to right body panel.



Anderson Plug so battery can be isolated from rear of vehicle. Handy for a lot of purposes....



Route of DC cable going to underside of vehicle between body and wheel arch.



Cable through side of wheel well, down to half saddle screwed to chassis cable tied to saddle then goes down along the side of chassis to an existing 32mm hole conveniently located in foot well of back seat.



The flexi conduit keeps the cable safe and protected from the outside elements and stones etc...

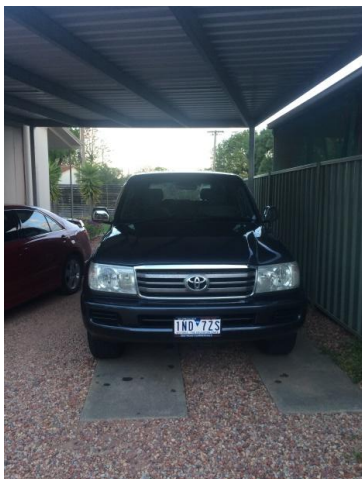


The DC cable exits the rear of the vehicle through a gland and goes to the battery box as shown in the middle picture which fits nicely in the rear foot well. Last picture is close-up of DC to DC converter.

I have not decided on a permanent location for the battery box yet, but may even make up some sort of insert for the foot well to prevent the battery box from moving about.

Well that's the power sorted for the rear of the vehicle, and I can even run a fridge off the battery box for a fresh cold one if I want!!

Once all that was sorted, I had to wait awhile before my Bull Bar was to arrive as it had to come from the ECB factory in Brisbane all the way to Echuca. Once it arrived, a very good local install company here in Echuca installed it within a day. I must say they did an excellent job on the installation.



Before and after, the Bull Bar installation. The Bull Bar is a full alloy type and it really makes the vehicle!....

Once the Bar was on, I was then able to plan the rest of the installation. I already had a rough idea in my head where I wanted everything to go and proceeded with the cabling first for the VHF/UHF antenna cable, HF cable, (both RG-58 coaxial cable) and the ATU control cable.

The best way I figured, would be to route the cable along the bottom of the vehicle down the right hand side of vehicle (Drivers side) in the engine bay down the inside of the front wheel arch to the edge of the driver's side passenger seat where on the underside there are two 32mm holes with rubber bung's in them and I would utilize one of these to route my cable to the rear of the vehicle to connect to the radio.



First picture shows the top of the flexi conduit gland right in the corner of the driver's side of the engine bay. Next picture shows gland body in the driver's side inner wheel arch, Secured with a full saddle clamp so that it does not rub against the wheel when it's full lock facing outward. This work's well as it clears the wheel and does not interfere with any components in the wheel arch housing.



The first two pictures show the conduit as it makes its way down then driver's side, of the chassis, cable tied to it with large plastic ties. The last picture shows the 32mm conduit entering into the rear driver's passenger's side foot-well via a 32mm gland. Once the cable enters the foot-well it is hidden under carpet until it's close to the radio then it emerges to connect up to the main radio body.

The last step with the cable install was the VHF/UHF cable needed to be terminated in a RG58 plug as it came unterminated from the store. I used a standard UHF CB mount for the antenna which will be seen later.

By the way, the three cables were pre-installed in the conduit before the conduit was installed. It was then trimmed (Conduit) with a Stanley blade to fine tune the length to suit the rear end at back of vehicle.

So I was happy with the cabling arrangement, as all of it was far enough away from the rest of the vehicle wiring as not to interfere with any systems of the car, namely the ECM control module etc. It was also all nice and hidden and I didn't have to drill through the vehicle fire wall or try and squeeze any wires through grommets in the fire wall that would not allow it...

(More next month from Les. You will be getting some ideas on how to outfit your vehicle for mobile amateur radio from this series, Editor)