APRIL 2019

(Published each April - August - December)

CHANNEL CHATTER EDITOR

GEOFF PECK M: 0403 309 020 E: two.pecks@bigpond.com Selcall: 0951

EXECUTIVE COMMITTEE

PRESIDENT: Kim Rhodes
VICE PRESIDENT: Roy Watkins
TREASURER: Peter Hackett
SECRETARY: Peter Shrader

WHATS INSIDE THIS EDITION ?

- H.E.L.P. (4357) At Work
- Presidents Report
- Johns River (NSW)
 Muster
- Amateur Radio Wednesday Night Skeds
- Cooyar Muster
- Expedition to the South Coast WA
- Out-n-About App Used Stand Alone
- Solar Controllers and HF Radio Receivers
- Getting Out-n-About app back on a new phone
- Who Stole the lonosphere?
- Welcome New Members
- Direct Dial Phone Calls From Your HF Radio
- Westprint Mob Article



DISCLAIMER

The opinions and information contained within this newsletter are provided in good faith and whilst Austravel Safety Net Inc. has taken all care in the preparation of the material provided, Austravel Safety Net Inc. does not accept legal liability or responsibility related to articles placed by its members.

CHANNEL CHATTER

Austravel Safety Net Inc.

The HF Radio Communications Network for Trips, Treks, Tracks & Tours

H.E.L.P. (4357) AT WORK!

My name is Blair (0295) and boy have I got a story for you...

I live in Karratha and work in the Pilbara for BHP out at their Yandi site. To get to and from work it's a 1000km round trip and putting the HF (Barrett 4050) in the car has been one of the best decisions made to date, and here we go.

Wednesday the 27th of March I left work around 5:30am to head to Perth. At about 7am I was sitting in the Dome Café in Newman having eggs benny and a nice coffee. After filling the car up I headed out to continue on my journey.

Passing through Meekatharra at about 12:30PM I was thinking of stopping for lunch and thought no, I will stop in Cue so off I went.

Just after 1pm and 35km out of Cue my car died, my heart sank, I knew what had gone wrong and knew I was in trouble.

I picked up my phone and there was no reception, jumped on the UHF CB and nobody was answering (all the time there were people passing by). I put the call out for help via the Austravel H.E.L.P. (4357) emergency call system and waited. Then two lads in a ute stopped and offered some help in the form of a sat phone and they still had trouble getting through to their boss in Perth, and at that time Kim (7880) answered my call for help via the HF radio and he stayed in touch with me till the lads from Lacy contracting came to pick me up.

Next day I was woken up around 6:45am and told I was to be picked up and taken to Seivy's Mechanical Services in Mt. Magnet. When I told them what had happened Troy (the owner) told me it was a fuel pump issue and nothing could be done till the following week, because the lads at Seivy's were all going to the state volunteer firefighter champs and we're leaving first thing Friday morning.

RADIO NETW

My heart sank a second time, I told them I was heading to Perth to see my kids who live in Busselton (haven't seen them since September), I was looking at cancelling the trip down to see them and booked into the pub in Mt. Magnet for a few days (I was gutted). So they pulled the fuel tank out to make a head start for when they got back, then they pulled the fuel pump out to have a look, (pulled the whole thing apart too) and connected the pump motor up to a battery and low and behold, the motor scooted across the floor.

We all looked at each other and we knew that there was nothing wrong with the fuel pump - then the mission was on to find the fault and we found it. An errant O ring and a little plastic piece that wasn't fitted properly (story for another time) - so it was all put back together and "hey presto" we had fuel squirting everywhere, problem solved.

I left Seivy's at 12:30PM and made it down to Perth by 6:30pm Thursday evening; all the while the lads from Austravel were in touch with me and were relieved that I was all ok. (continued page 3) Page 2

Presidents Report (Kim Rhodes7880)

Hi all,

Christmas is over and the days are getting shorter, signaling the time to pack up and head North. I hope I get to do the same this year. There are a few new features in Austravel for your benefit plus an AGM later in the year and I hope you can attend.

The next AGM is to be held on the 22nd September 2019. Location for the primary meeting is Casino Village, north east NSW and by Skype back to Kellerberrin WA speedway as per last year but in reverse.

Channel 1 has proved its worth in WA skeds and the committee have decided to add it to Alice Springs and Casino bases. It will provide, late afternoon, night and morning access from Ayres Rock area and all in between with Casino covering in and around Brisbane allowing more people to practice their radios on the skeds.

We have launched a new support feature for any member travelling in rural and remote areas of Australia with a SAT phone. Termed "Help-**SAT**", anyone with full or social membership can contact an Austravel emergency responder to attain assistance, in much the same way as HF radio users would using H.E.L.P.(4357).

Help-**SAT** users, can make contact with an Austravel emergency responder, should they have an emergency of some kind to manage from within a rural and remote areas.

Austravel emergency responders, armed with the Pathways resource and/or internet search, make investigative phone calls on the members behalf to track down the required needs. This could otherwise be difficult for a SAT phone owners who travelled without a list of important contacts. See the KISS Help-*SAT* or Help-*SAT* flyer for more information.

Since the last magazine we have also introduced a new level of member ship to assist where members in one household have more than one HF radio. Often a motorhome and the tow car have separate radios and may need to be used to talk from one to the other or partners have a HF radio each in their vehicles. Household membership is a second membership, second selcall number, available to the one household. Most importantly household membership is half price plus normal Telcall+ if required. Contact the membership officer (Geoff Peck 0951) for more information.

I am always looking for feed back from members . It can be good or bad; but primarily I would like to know what we can do to improve our club for members. For example it has been mentioned that more social events would be nice. That would be good but as always, we have the same few people organising things and the work load is high for the few. Hence I would urge members to become involved in the development and growth of Austravel Safety Net as a very social radio club.

If I get all my ducks to lined up, I look forward to meeting members in Casino at the AGM.

Cheers

Kim Rhodes (7880)

Johns River (NSW) Muster

Yours truly (the editor), attended a HF radio enthusiasts muster in the pretty little town of Johns River on the mid north coast of NSW. Past musters have been organised and well run by Ken and Shirly Billings (8634), however Shirley has been a little unwell lately so Ken decided to call in the troops and ask for help to run this years muster.....so to the rescue came Lindsay and Jeanie McIntosh (2262).

March is a great time of the year to hold a muster in that part of Australia, and certainly the area put on a great face, even though, like many other areas the drought is creating a negative impact. The camp site behind the Johns River Community hall was a great venue, topped of by a local market on the Saturday. Some touring up and down bush tracks proved interesting and led expertly by Lindsay,.... his local knowledge of the area shone through.

The afternoon happy hour sessions triggered the usual jokes and tales, all the more enhanced by the occasional tipple of whatever "floated your boat" at the time. The weekend was highlighted by a community meal for 30 odd people, with Lindsay and Jeannie; along with helpful assistants, catering perfectly - MKR would have scored this meal very highly!

This muster raised over \$300 for the John River community hall, a good effort I reckon. Many thanks to the organisers, Ken, Shirley, Lindsay and Jeannie.....looking forward to next years event.

Page 3

(Continued from front page)

so a very big thank you to Kim (7880) for the assistance that was provided and to Roy and Geoff for getting touch with me as well.

So what is the moral of the story?

All ways be prepared, I had plenty of water, some food and my swag with me and my HF paid for it self that day.

From the Editor:- Another "positive outcome" attributed to Austravel Safety Net's unique emergency call system H.E.L.P. (4357). Members are urged to review how to use the H.E.L.P. (4357) call system before starting that upcoming outback trip. If unsure how to use it, phone call any of the emergency responders listed in green text in the published selcall list for assis-

Amateur Radio Wednesday Night Skeds

Since we have many radio amateurs in the Austravel Safety network I decided to start a sked on the amateur frequency 3.640Mhz USB on a Wednesday evening at 5.30PM WST or 7.30PM EST. This allows any commercial radios which may not have the normal LSB for this amateur band to come on air and have a chat. We are called the commercial radio users group (CRUG) for short.



Although, primarily in W.A. we can probably be heard in the Eastern States as well. I operate a full wave loop antenna and 400 watts from home. My amateur callsign is VK6TQ and we usually have 10 or so callers.

After a few minutes on air we try and have some semi-technical discussions that we would not normally have on the Austravel channels.

Nearly all HF radios have the ability to free tune receive this frequency and I will accept SMS call in to my mobile 0427 983329 for input to the sked from licensed amateurs or non licensed members listening. If there is some interest from the East I will look at changing my antenna to something more suited for across Australia contact.

Any Austravel member with an amateur license can have amateur band TX/RX frequencies placed in their Codan or Barrett radios. Some Codan radios have the ability to add an option code that unlocks for free tune TX within the amateur bands. The radios have a low power option where required as well. Have a listen if you like and the group would like to hear from you. Its all just for fun.

For anything and just about everything 12 volt.....JGM Direct will have a product and price to suit.

Your Channel Chatter editor visits this favourite "men's toy shop" often when needing a 12 volt this or that.





Austravel Muster In S.E. Qld. Where?...... 35 McDougall St. Cooyar



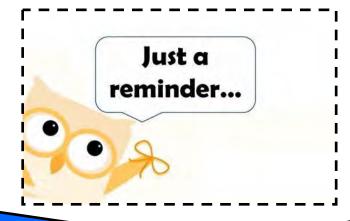
Announcing an Austravel Muster at Cooyar Qld, which is about 200 Km's north west of Brisbane. Open to members and visitors, especially those visitors wishing to know more about HF radio and / or Austravel's new technology platforms "Telcall+" and "Out-n-About"

Friday May 17th. > Sunday 19th. 2019

Free Camping Across from the Cooyar Hotel
Toilets available at the camp spot, \$3 showers (for those who need it) at
the pub

Dinner (pig on the spit) Saturday Night \$20 2 course meal - 3 meats, vegies, gravy, bread roll, dessert "live entertainment"





RSVP to: Geoff Peck 0403 309 020 membership@austravelsafetynet.org.au

In February, Austravel club members known as the 'Ace Anglers' set off for a fishing trip to Cape Arid on Western Australia's south coast. After two days of driving Kim Rhodes, Denny Sharpe, Allan Green and Paul Semple arrived in convoy at Seal Beach campsite 880 kilometres from Perth in the late afternoon.

The final 25 kilometres of the gravel track into the National Park was in such poor condition that the corrugations were big enough to cast their own shadows. Denny's Coaster bus protested at the treatment by shedding bits and pieces of its well-constructed spare wheel carrier.

Ian Armstrong drove south from Merredin and arrived on Tuesday morning with the inside of his bus looking like a war zone. Anything that could move, did and most of it was on the floor.

Always generous of spirit, Kim Rhodes took time out to feed the marine life.

A quick trip to the local beaches inspired the over-excited quintet into believing they could make music with their fishing tackle and meet daily bag limits with sought-after species of under-sea bounty.

As the persistent wind was blowing on-shore, casting into the raging southerly buster proved difficult. Bait, hook and sinker rarely lobbed any further than 6 metres from the hapless anglers in water barely a metre deep.

Clearly, it was time for changes in casting technique, but alas they too were fruitless, stirring nearby seagulls into raucous laughter. Only Kim brought back the elements of a main course.

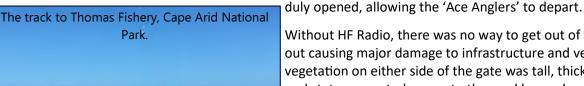
Overnight drizzle, overcast conditions and the relentless wind failed to dampen the spirits of the indomitable assembly and another assault on the pelagic populations was planned for following days.

After four days in the bush, the bucket baths weren't having quite the desired effect and there was something peculiar adding to the smell of Cape Arid in the morning. Kim announced he would drive to a location some 3 kilometres along the beach to wet a line where the air was as bracing as it was aromatic.

Infernal 'weed' fish was all their fishing tackle retrieved. No one benefitted from the fruits of his considerable labour and again the lads resorted to rifling through the contents of the car fridge in pursuit of a tin of tuna and cold drink to wash down the nightly conversation at the communal area.

So far, the group had added to their knowledge base of failed fishing spots but they had learned much about Cape Arid and its surrounds, especially Denny and Paul who drove 15kms along a narrow track to investigate the scenic attraction of Thomas Fishery.

Again, HF Radio showed how useful it is in remote areas where mobile phone service is non-existent. The group logged positions daily with Sked operators. Just as important, when it was noticed the access gate had been double padlocked, a radio/telephone call to DPAW's regional headquarters alerted the Ranger. The gate was



Without HF Radio, there was no way to get out of the park without causing major damage to infrastructure and vehicles. The vegetation on either side of the gate was tall, thick and in its natural state prevented access to the road beyond.

While the fishing didn't go according to script, the camaraderie and the humour was priceless. Denny is returning to his home State of Queensland but when he returns to WA he will be a welcome inclusion on any future adventures......Safe travels Denny (1226)!

OUT-n-ABOUT APP USED STAND ALONE

- Austravel members.... don't forget that the Out-n-About app can be a "stand alone" app for anybody's mobile phone or tablet
- Any family or friend can access a "full" version of the app by becoming a "Social" member of Austravel.
- Full access versions of the Out-n-About app under "Social" member status has all the same capabilities as a full members—only no HF radio!
- Need to know more and ask questions? Call Kim Rhodes 0427 983 329.

Out-n-About continues to surprise both Austravel members, and their family and friends; with its range of capabilities - both HF radio integrated or stand alone.

As an example, Geoff and Clemy Hurst (1949) travelled extensively in both Canada and the USA, logging their positions as they travelled. Family members back home; with their "friend's" version of the app, had the ability to track all the GPS history. Viewing this information an a tablet increases the clarity of the map positions.



Various view options opens up interesting information on each logged position showing the grandkids the topography and street views amongst other information.

MPPT or PWM refers to solar panel regulators of course and the two acronyms refer to two different methods of electronically regulating the power from solar panels to batteries.

I am not here to debate which is better but I am going to complain about the noise that radiates from electronics equipment in general.

It suffices to say that both regulators chop up the DC power to control it but one makes a lot more radio noise than the other. Although a MPPT regulator makes a bit more of the power available to the batteries in my experience I have not seen one single MPPT regulator that is suitable to use near a HF radio.

It seems the manufacturers of MPPT (Maximum Power Point Tracking) regulators have only put in the electronics to do the switching and regulation. They have forgotten, or not bothered to put in the additional chokes and capacitors required to keep the electronic RFI inside their box to stop radio interference. The solar panel and battery cables become the radiating antenna for this noise.

I doubt there are any MPPT regulators that meet the Australian C-Tick EMC requirement when installed in a motorhome with typical wiring.

The local noise from a MPPT solar regulator on your HF receiver may equate to a distant station on your radio needing to increase their transmit power by 100 times or more for you to hear them. Not all that practical for the Austravel Bases to be 10,000 watts so you can hear them over your solar regulator.

PWM regulators (Pulse Width Modulated) control the power in a less aggressive way and generally produce little or no RFI on your HF radio. There are only a few manufacturers of this type of regulator remaining.

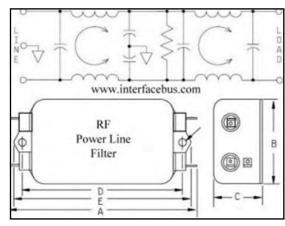
A lot said about the regulator that is not suitable and not much about the one that is OK.

For you to test your own noise you need to go to an electrically quiet location like the middle of a farmers paddock with no power lines, houses or sheds nearby. Un-plug all USB adapters, inverters etc, that may also make noise in your vehicle.

Now looking at your HF radio tune your antenna, view the dBV reading in free tune on an NGT, barograph on a 9323 or 2050 or S meter on a 4050 radio. Older radios it is difficult to evaluate noise just by ear as they do not have metering to look at.

Note the reading on each channel, then remove one of the wires from the solar input on your regulator. This shuts off the charge and hence the noise. Re-do the noted readings. If you have no difference you are very lucky but all vehicles I have looked at so far have a significant noise drop with the regulator off.

If you are designing a new solar system or changing a regulator and you wish to use your HF radio receiver seek out a PWM regulator for this purpose. Plasmatronics still manufacture suitable quiet regulators and they may become available through Austravel.







I have encountered a number of members now who have purchased new phones and tell me they can't get Out-n-About back on their new phone.

Sadly for most of us this is a DOB problem (Date of Birtle)

Sadly for most of us this is a DOB problem (Date of Birth) and we just don't know how to engage the new technology. Anyway to keep it briefall that is required is that you first log your new phone into your old Google or iTunes account. You will need your Gmail account name etc and your password for that account. This is the hardest part and has nothing to do with Austravel so we cannot help you there.

Once your new device is logged onto the world you can go to the appropriate play store, find Out-n-About and go through the motions. The system knows you purchased it before so it **will not** charge you again to download the app.

Once installed open Out-n-About and put in the network name Austravel followed but your selcall number then your Out-n-About member pin. Do the same for the friends you wish to add.

Of course you have all recorded your personal pin numbers for the Out-n-About app. There is provision for this in the back of the Out-n-About manual. If not contact me, Kim (7880) on 0427983329 or email:

telcallplus@austravelsafetynet.org.au and I will get the data base to send them to you again.





THE BIG CAMERA MUSEUM OF PHOTOGRAPHY

More than 1700 cameras on display

Open 9 > 5 every day except Wednesday & Thursday

Great Eastern Hwy. MECKERING (08 9625 1335)

Many of us will remember the good old days when radio conditions allowed regular use of our higher channels which gave us good solid signals even over short to medium distances.

Well the good news is it will happen again, but not for a year or two yet.

For a radio signal to travel further than line of sight or around the curvature of the earth it must be refracted (bent) by either the troposphere in the case of VHF and UHF or by one of the layers of the ionosphere for HF communications.

The ability of the ionosphere to refract (bend) signals back to earth is influenced by particles and radiation emitted by the sun. Solar activity varies in approximately 11 year cycles and the number of sunspots visible on the suns surface is a good indicator of potential HF radio propagation, although sunspots do not directly cause changes in the ionosphere.

Another indication of solar activity is solar flux which is a measurement of the amount of radio noise emitted by the sun. Solar Flux has been at quiet sun levels of around 60 for many months and the consequence of this is that often our lowest frequency (around 3MHz) Channel 1 is the only option for communications over distances of 50 to500km.

Unfortunately at 3Mhz, the absorption in lower levels of the ionosphere is high — especially during daylight hours. Atmospheric noise from lightning and local noise from devices like power supplies and Plasma TV's is also normally higher at low frequencies.

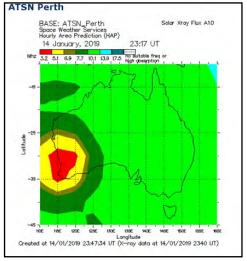
To make things even worse still our mobile antennas are also very inefficient at these long wavelengths.

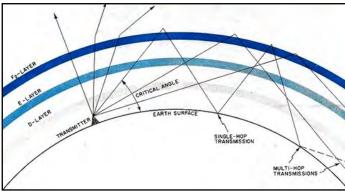
The result is that signals from mobile stations at lower frequencies are often weak and noisy. Remember though that conditions do vary from day to day and even during the same day so it is always worth

trying beacon calls starting a channel or so higher than "usual". If the higher channels are "open" it will result in much better signal to noise ratios. i.e. clear strong signals.

The expectation is that the "official" sunspot minimum will occur in the first half of 2019 and conditions will improve over the following few years with a maximum around 2023 -2024.

The predictions are that the next solar maximum will be less intense than average but still more than adequate to allow for the regular use of channels 5 and above.







TET-EMTRON

HF Radio Antenna Parts and Supplies

- Cable & Connectors
- Mobile
- Wire Antennas
- Feed Systems & Baluns
- Parts
- CB Antennas
- Broadband HF
- Verticals

Contact: Mark Rawlings

Austravel Member:

Selcall 6622

Lot 25 Brand Hwy. Dongara W.A.

Ph: 0455 463 452

Glenn Strkalj	5050	NSW
John Cameron	5247	NSW
Brad Kark	2261	NSW
Kenneth Beer	1470	QLD
Ray & Gayle Cooke	7506	QLD
Ross & Kathy Breckenridge	5278	QLD
Peter Hancock	1317	SA
Stephen Priestly	0286	VIC
Leigh & Clrissa Bell	1974	VIC
Mick Neville & Deb Bevis	1620	VIC
Rob & Robyn Boyd	0069	VIC
John Pavlic	3976	VIC
Manfred Bartz	2718	VIC
Russell Bond	0070	VIC
Wytze Kylstra	0075	VIC
Maurice Bersan	6211	WA
Lachlan & Jacquelin White	7031	WA

Tony Webb	1858	WA
Shane & Trish Gardner	7123	WA
Gary & Vicki Browne	1420	WA
Kevin Cochran	5599	WA
Dianne McMurray	6356	WA
Scott McCoy	6121	WA
Stuart Forster	3510	WA
Garry Kelly	2708	WA
Katie Euston	2401	WA





Out and About 4 x 4 Club

4 Wheel Driving, Camping, Social events, Meetings

For all enquiries or membership questions,

Email president@outandabout4x4club.org.au

Or secretary@outandabout4x4club.org.au

Come to our next meeting: Tuesday November 20, 7:15pm Beechboro Scout Hall, Lot 17 Lord St, Caversham 6055 WA. Find us on Facebook
Out and About 4x4 Club Inc







Four Wheel Drive Western Australia (WA 4WD Association INC.)

DIRECT DIAL PHONE CALLS FROM YOUR HF

This is a standard feature which has always been available to financial members of the Austravel Network. Your Telcall+ subscription (separate to membership fees) allows you to make a connection directly dialled from your HF radio to any Australian mobile or normal landline phone.

However, if your Telcall+ subscription is not current, you cannot make direct dial radio phone calls, or use other Telcall+ features through the Austravel Safety Net system of bases.

Your call attempt will hang up immediately and you will receive, on a suitable radio, by page call message "PHONE ACCESS DENIED". For older radios your call attempt will also hang up and you will hear the selcall data sound which is the attempted delivery of the information message. This phone access denied message has recently been added to the Telcall+ system. You can of course still make H.E.L.P. (4357) or red button calls without a Telcall+ subscription.

When you pay your Telcall+ subscription and the information is received by the Telcall manager your service will be resumed virtually immediately through all bases.

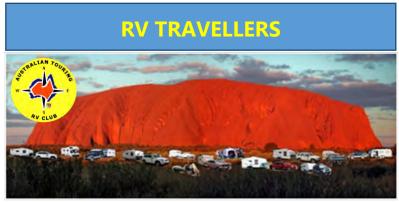
Nearly all radios including some very old models, can use this direct dial phone service. You need to use your specific radio operator manual to guide you through the process of making a phone call. Phone interconnect is available through all Austravel Safety Net bases. Don't forget to use beacon calls on correct base channels to select best base and channel to make your phone call through.

- Do you enjoy travelling and being out doors?
- Are you planning to see Australia?
- Would you like friends to contact as you travel?
- Join other like-minded people for a great time at our get-togethers.
- We have National, State and Regional rallies all over Australia.
- Club e-magazine, The Traveller, issued bi- monthly.
- Friendship list of members all around Australia whether it's for socialising or if you need a helpful hand.

DO YOU WANT TO JOIN AUSTRALIA'S ONLY TOURING CLUB FOR CARAVANS, MOTORHOMES AND CAMPERS?

Club website <u>www.atrvc.org.au</u> for updated information on joining, events, travelling information and breaking news.

Contact us: **Mobile:** 0458 220421 **Australasian Touring RV Club Inc.**(ARN0038452P)





Members Market

MEMBERS...GOT SOMETHING TO SELL?

LOOKING FOR THAT THING TO BUY?

CONSIDER YOUR CHANNEL CHATTER NEWSLETTER "MEMBERS MARKET"

Austravel Social Media Pages



https://www.facebook.com/au



https://twitter.com/Austravel



Trouble with Austravel Social
Media pages Facebook or any
questions?
Send me an email, I am happy
to help.

My email address is; pimdomen@icloud.com

WHY WAS IT CALLED A WIRELESS?

Many people have pondered why a wireless was called "wireless" when on looking inside an early radio it was seen to be full of wires running everywhere.

Seemingly the term "wireless" came about because the device sending a message, and the device receiving the message, where not physically connected. Previous senders and receivers (telegraph or telephone) were connected by wires, and this was the first method of communications by means that were "wire-less" hence the name.









4050 D **HF SDR** outback traveller pack



- Advanced fully software defined architecture
- Intuitive and user-friendly touch scree interface
- Wireless operation voa iOS, Android & Windows devices
- Selcall / Telcall
- SMS—Pagecall
- Multiple Self ID's
- Wi-Fi Adaptor
- 2019 Auto tune HF antenna with internal GPS receiver
- Address books

Designed and built in Australia for the world's harshest conditions, Barrett HF equipment thrives in the outback and has the track record to Prove it. The Barrett "Outback Traveller Pack" should be considered as standard equipment for anyone travelling in remote areas.

Utilising the "free to air" nature of HF communications, the "Outback Traveller Pack" provides access to essential safety and emergency services with no ongoing call charges.



The Barrett 4050 D handset app supports iOS, Android and Windows devices for wireless voice and radio control.

www.hfradiosales.com
Ph: 07 3118 5265
For all sales enquiries



4050 D

noeuvres.

ROBOTIC VISUAL HORIZON



Westprint - Outback Maps, Books, Travel Guides and Navigation systems.

www.westprint.com.au 6 Park St, Nhill Victoria 0353911466

Bumblebees and Robotic Visual Horizon

What has a bee's brain got to do with unmanned aircraft? In 2010, by imitating the way a honey bee sees, Queensland scientists developed a robotic visual horizon that enables an autopilot to guide an aircraft through complex aerobatic ma-

Mr Saul Thurrowgood says bees can basically see behind themselves as well as in front, up, down, left and right. They can see in all directions and can see everything in the world all at the same time which greatly simplifies understanding you know, which way up you are and what, where trees are in the environment, where the ground is.

Australian scientists have developed a novel autopilot that guides aircraft through complex aerobatic manoeuvres by watching the horizon like a honey bee. Allowing aircraft to quickly sense which way is "up" by imitating how honeybees see, engineers and researchers at The Vision Centre, Queensland Brain Institute and the School of Information Technology and Electrical Engineering at The University of Queensland have made it possible for planes to guide themselves through extreme manoeuvres, including the loop, the barrel roll and the Immelmann turn, with speed, deftness and precision.

"Current aircraft use gyroscopes to work out their orientation, but they are not always reliable, as the errors accumulate over long distances," said Vision Centre researcher Saul Thurrowgood.

"Our system, which takes 1000ths of a second to directly measure the position of the horizon, is much faster at calculating position, and more accurate."

"With exact information about the aircraft's surroundings delivered in negligible time, the plane can focus on other tasks."

"We have created an autopilot that overcomes the errors generated from gyroscopes by imitating a biological system – the honeybees," says Professor Mandyam Srinivasan. "Although we don't fully understand how these insects work, we know that they are good at stabilising themselves while making complicated flight manoeuvres by watching the horizon."





PROSPECTING

2nd Course: 4th & 5th April (few spots remaining) Book Now: (08) 9250 33 88

REEDS PROSPECTING SUPPLIES

25B Helen St

Bellevue, Western Australia 6056

Phone: (08) 9250 3388

Email: reeds@reedsprospecting.com.au



THATS FUNNY!

DAUGHTER TO FATHER

"Dad there is something my boyfriend said to me, that I didn't understand. He said that I have a beautiful chassis, lovely airbags and a fantastic bumper".

Father's response:

"Tell your boyfriend that if he opens your bonnet and tries to check your oil with his dipstick, I will tighten his nuts so hard that his headlights will pop out and he will start leaking from his exhaust pipe"



AUSTRAVEL SAFETY NET Inc. HF Radio Allied Traders List



Connecting Austravel Members To HF Radio Sales / Service Providers'
(Last update April 2018)

Watts Communications	Codan, Barrett, Icom, Bushcomm Antennas	Fyshwick ACT
	www.wattscom.com.au / sales@wattscom.com.au	02 6280 6416
Wes Follett	Codan, Barrett, Icom, Bushcomm Antennas	Deniliquin
	wfollett@bigpond.com /0412 885 817	03 5881 3189
Eacom Communications	Codan	Griffiths NSW
	www.eacomm.com.au / ian.blackburn@eacom.com.au	02 6964 2033
D.L. Communications	Codan, Barrett	Merimbula NSW
	dlcserv@hotmail.com	0418 280 270
Newcastle Pro Sound	Codan, Barrett	Newcastle NSW
	www.npsonline.com.au	02 4965 6899
Fettell Communications	Barrett	Port Macquarie NSW
	www.fettell.com.au	02 658 11341
Action Communications	Icom	Kingswood NSW
Action Communications	www.actioncommunications.net.au	1800 802 948
Karora Communications	Icom	Tuggerah NSW
Karera Communications	www.karera.com / sales@karera.com	02 4355 1599
Phoenix HF	Servicing most brands of HF	Kareela NSW
Communications		02 9544 6355
Independent	Servicing most brands of HF radios	Tamworth NSW
Communications	www.independentcommunications.com.au	02 6765 7555
Illawarra Communications	Codan	Wollongong NSW
mawarra communications	www.illcom.com.au / scott@illcom.com.au	02 4229 7300
Central Communications	Codan, Barrett	Alice Springs NT
	www.centralcomms.com.au / sales @centralcomms.com.au	08 8952 2388
Comspec (NT) P/L	Codan, Barrett	Alice Springs NT
	www.comspec.com.au / sales@comspec.com.au	08 8953 1903
Combined Comms	Barrett	Darwin NT
Solutions	www.combinedcom.com.au / info@combinedcom.com.au	08 8941 0644
ITS Communications	Codan,also servicing most brands of HF radios	Winnellie NT
115 Communications	info @itscomm.com.au	08 8984 4855
Territory Comms Services	Codan, Barrett, Scout	Tennant Creek NT
Torritory Commis Dervices	tcs@territorycomms.com.au	0418 814 978
hfradiosales.com	Codan, Barrett Sales Service (incl. Qmac) and spare parts.	Brisbane Qld.
On-Line Store	www.hfradio.com.au / email: sales@hfradio.com.au	0408 345 208
Mobile Communications	Codan, Icom	Brisbane Qld.
John John Hamilton Hamilton	www.mobilecomms.com.au	07 3373 2345
RF Technologies	Servicing most brands of HF radios	Brisbane Qld.
iti reciliologies	www.rftech.com.au / maxr@rftech.com.au	07 3279 7177
Kyle Communications	Codan, Barrett, Icom	Burpengary Qld.
Tyle Communications	www.kyle.com.au / kylecomms@specsafe.com.au	07 3888 7899
Miles Electronics	Codan, Barrett	Cairns Qld.
WINES LIECTIONICS	www.mileselectronics.com.au / john@mileselect.com.au	07 4035 1133
Poids Padiodata	Codan	Cowra NSW
Reids Radiodata	reidsradiodata@bigpond.com	02 6341 1544

AUSTRAVEL SAFETY NET Inc. HF Radio Allied Traders List



Connecting Austravel Members To HF Radio Sales / Service Providers'
(Last update April 2018)

Goondiwindi	Codan www.goondiwindicommunications.com.au	Goondiwindi Qld
Communications	sales@ goondiwindicommunications.com.au	07 4671 3641
Linemaster Marine	Barrett	Maroochydore Qld.
Electronics	www.linemaster.com.au / sales@linemaster.com.au	07 5479 6851
TCQ Communications	Codan, Barrett	Mount Isa Qld.
	accounts@tcq.net.au	07 4743 4388
Capricorn Communications	Codan, Icom	Nth. Rockhampton Qld.
	www.capcom.com.au / sales@capcom.com.au	07 4926 1172
Beaney's Communications	Barrett. Icom	Rockhampton
	www.beaneys.com.au	07 4927 5049
	Codan,Barett	Roma
Advance Communications		
	sales@advancecomms.com.au (mobile 0418 987 356)	07 4592 1111
Comptel P/L	Codan	Toowoomba Qld.
	www.comtel.com.au / enquiries@comptel.com.au	07 4639 8999
Navcom Electronics P/L	Barrett	Townsville Qld.
	navcomadmin@bigpond.com	07 4771 2422
Norcomm P/L	Codan, + servicing of most brands of HF radios	Townsville Qld.
	www.norcomm.com.au / sales@norcomm.com.au	0408 722 833
Digital Radio Solutions	Codan, with service to most makes of HF	Adelaide S.A.
-	www.marktek.com.au / contact@marktek.com.au	0418 845 518
Electric Bug	Codan, Icom, Barrett	Adelaide S.A.
	www.electricbug.com.au / sales@electricbug.com.au	08 8346 9234
International Comms. Systems	Codan, Barrett, Icom, Wagner, Hawk	Port Adelaide S.A.
	www.intcomsys.com.au / intcomm@intermode.on.net	08 8447 3688
Marktek Installations	Codan , servicing most brands of HF	Adelaide S.A.
	www.marktek.com.au / mark@marktek.com.au	08 8250 2888
Northern Communications	Sevice of all brands of HF radios	Gawler S.A.
Northern Communications	phil.48@bigpond.com	08 8522 6081
HF Radio Solutions	Codan & Codan Auto Tune Repair	Renmark S.A.
nr Raulo Solutions	www.hfradiosolutions.com.au/ ivan@hfradiosolutions.com.au	0428 882 719
Desmond Communications	Codan, Barrett, Icom	Howrah Tas.
Desmond Communications	desmondcomms@dodo.com.au	03 6228 1331
M	Codan, Barrett, Icom,	Launceston Tas.
Marcom Watson	www.marcomwatson.com.au / info@marcomwatson.com.au	1800 630 611
Weeks Radio Communica-	Codan	Alexandra Vic.
tions	sales@ weeksradio.com	03 5772 1292
	Codan, Icom	Bairnsdale Vic.
Bairnsdale Communications	sales@bcomms.com.au	03 5152 4622
	Codan & Codan Auto Tune Repair	Geelong Vic.
Lara Electronics	www.laraelectronics.com.au/ sales@laraelectronics.com.au	0418 599 355
	Buschcomm Antennas, Multi Tap Antennas, 2nd. Hand HF	Melbourne Vic.
Bushcomm Online Store	www.bushcomm-online.com/ sales@bushcomm-online.com	03 9017 6777
Angus Communications	Codan, Barrett	
		Shepparton Vic.
	hofmann126.ph@gmail.com	03 5821 9155

AUSTRAVEL SAFETY NET Inc. HF Radio Allied Traders List



Connecting Austravel Members To HF Radio Sales / Service Providers'
(Last update April 2018)

South Eastern Communications	Sales & service of most brands of HF radios. www.secomms.com.au	Rosebud Vic. 0434 720 006
AA Radio Services	Codan, Icom, + service of most brands of HF radios.	Vermont Vic.
	www.aaradio.com.au / sales@aaradio.com.au	03 9264 8333
Earth 2 Ocean Communications	Barrett, Codan, Icom sales and service	Bunbury W.A.
	www.earth2ocean.com.au / sales@earth2ocean.com.au	08 9721 1730
Esperance Communications	Barrett, Icom + servicing of most barnds of HF radios	Esperance W.A.
	www.esperancecomms.com.au / service@esperancecomms.com.au	08 9071 3344
ACS Communications	Codan, Icom	Perth W.A.
	www.acs-marcomm.com / faith@acs-marcom.com	08 9277 4655
Allcom Communications	Codan, Icom	Perth W.A.
	www.allcom.com.au / allcom@allcom.com.au	08 9479 4997
Barrett Communications	Barrett	Perth W.A.
	www.barrettcommunications.com.au /infor-mation@barrettcommunications.com.au	08 9434 1700
Mobile Masters	Barrett (sales no service)	Perth W.A.
	www.mobilemasters.com.au / mail@mobilemasters.com.au	08 9492 1777
Transair Two Way Radio	Codan, Icom	Perth W.A.
	www.transair.com.au / transair@transair.com.au	08 9209 2225
RF Waves Australia	Codan, GME, Motorola HF VHF Repair & Service	Hammersley W.A
	www.rfwaves.com.au / email: cpg@rfwaves.com.au	08 934 271 161

Austravel Safety Net Inc. Members please note.....The purpose of this list of "Allied Traders" is to offer a ready reference which may provide you with a source of sales and/ or service assistance when travelling away or near your home location.

Please provide feed back to the "Channel Chatter" newsletter editor if you find information contained misleading or incorrect.

Allied Traders...please review your listing and advise the "Channel Chatter" newsletter editor of any listing detail that