

THE PROPAGATOR

VOLUME 1, ISSUE 99

OCTOBER 1998

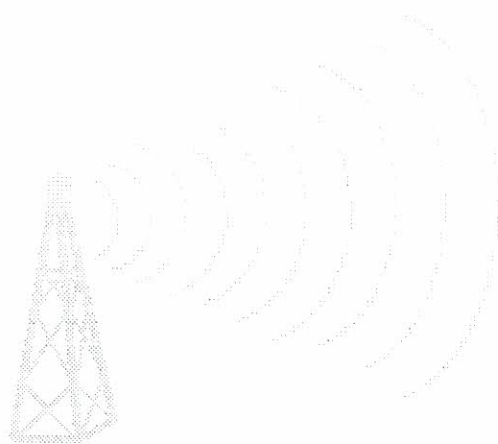
February is not that far away and thoughts should be turning to the field day at Wyong race course put on by the Central Coast club. For those who have attended in the past, I'm sure you would agree that it is a good day to be part of. As usual the club will be taking a bus to the affair, ably piloted by Ken VK2TKI. Ten dollars deposit is required by Ken by the close of the December meeting for a place to park your bum on the bus. The bus leaves Kens QTH at 5.30 am and the Baby Health Centre in Fairy Meadow at 6.00 am. Be on it or miss out on a great day.

Editor Steps Aside for Another

Hi there ! It's me again. I'm having another bash at the news letter after it being in the very capable hands of Ned AGV for the past 12 months. I'm sure you will all agree that he did a sterling job, not only

Don't forget the November annual auction

with its appearance but some of the thought provoking comment from within its pages. I hope that I can continue the excellent



IF YOUR ANTENNA PUTS OUT YELLOW RADIO WAVES, YOU HAVE A PROBLEM.

presentation that you have become accustomed too over the past year. Don't forget the efforts by our prolific contributors, and "I" hope it continues.

VK2AMW 50 years Since Issued

The committee would love to hear from any club members past or present with suitable ideas on how to celebrate this

monumental event. This call-sign has been made famous the world over by its members and we should be proud of it!

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VK2AMW 50 YEARS ON

The club call sign is fifty years old. By way of acknowledgment it was decided at the club meeting in September to operate as many bands as possible over Saturday 5/12/98 being closest to the day that the first contact by VK2AMW was made. At the next meeting, members of the committee will be going around those present to make a list of those members wishing to partake in the exercise. We will need to know which bands you would like to operate and which mode you would like to use. For obvious reasons we cannot double up at a particular time, so time slots will have to be organized as well.

You are not being asked to operate a six or ten hour stint, but what you feel comfortable with. Operators will be required to keep a log of contacts making a special note of stations that would like to receive a special QSL card to mark the event. Operators wishing to receive the QSL card will be required to send a self stamped and addressed business size envelope to the club's PO Box, so that

it can be posted to them. It must be made clear to the operator wanting the QSL card that they will not receive the card unless the appropriate stamped and addressed envelope is received, as the cost to the club could be enormous. Overseas contacts will need to send 2 IRC's.

An invitation will be sent to neighbouring clubs to attend an informal gathering at Sublime Point Look Out park. Bring your own lunch and equipment (if you want to operate). Meeting time should be around 11.00 to 11.30 am, and you can organize yourselves. Chat to some old mates or even some new ones. It will be a picnic atmosphere so don't be afraid to include the ex YL. There is nothing organized for the day, just turn up and make of it what you will. Go home when you feel like it. Not too late though as it can get cold up there late in the 'arvo.

There may even be a power supply and an antenna, (to plug into for 2 metres) that is mounted on a tower.

NOVEMBER ANNUAL AUCTION

Don't panic but it's nearly November and the thoughts of IARS members turn toward EQUIPMENT. What to do with the stuff they don't need, use or want any more and if they can exchange it for some more equipment that they would like, use or think that it would be of use one day. Here is your chance at the annual auction. All your goodies for sale must be booked in by 7.30pm on the evening of the auction.

I haven't asked Brian UBF yet, but I think he will be the official booker in-charge.

The official auctioneer will be the well known VK2 Don't Move or Riddle or you'll own it Denis McKay. If you want a laugh or some bargains, Get your body along to the auction in November.

SOCOG GRABS 70CM'S FOR THE GAMES

As you have no doubt heard from one source or another, SOCOG has been looking at the 70 cm band for its communications during the Olympic Games/ Paralympic Games. This is true. However, due to the efforts of the WIA and others the impact on the Amateur radio fraternity will be minimal. The most important part being that the band will be returned when it's all over. For the details, check out Radio and Communications November issue or the ACA literature.

There is a separate page in this issue of the propagator that is the frequency chart for the remote version of the FM900 that many of you bought from the club.

The next issue should contain some modification tips for paket and how to get rid of the channel change bip.

If you have internet capabilities, have a look at the web site

<http://>

www.members.com

/Mr_S/

THE TOWER OF POWER

The editor I.A.R.S.
PO Box 1838
Wollongong 2500
Dear Sir,

I write this letter to explain why I may NOT be able to read the next issues of the PROPAGATOR.

Firstly as you all know, the club has a very good repeater site at Bulli Tops and the site has just been upgraded. As you all know I help out where ever possible. Well with this upgrade it was my task to retrieve all the tools used for the upgrade from the top of the tower!

After many trips to the 150 foot level with equipment it was said that the tools would weigh in at about 200Kg's. This would have not been a problem to me as I'm used to carrying heavy weights! My biggest problem is I DONT LIKE HEIGHTS. So I came up with a plan to make it VERY easy to remove all this equipment.

Firstly, on one of my trips up the tower I saw that there was a pulley wheel that had been used for pulling up aials etc, and tucked away in the bush was an old barrel. So I got my brain working and started to haul the barrel to the top of the tower and started to load ALL the tools into it. This was done in record time. It was now time for me to descend the tower for the last time. I got to the bottom and grabbed for the rope. Well as said before the tools weighed in at about 200Kg's and as you all know I only weigh about 75Kg's. To my surprise and the

weight of the barrel, I left the ground in RECORD quick time. I forgot to let go the rope. I met the barrel at the 75 foot level coming down, (this will explain the fractured skull and broken collarbone). I continued my rapid ascent until the fingers of my right hand were two knuckles deep into the pulley wheel.

Fortunately, by this time I had regained my presence of mind and was able to hold onto the rope in spite of my pain. At approximately the same time however, the barrel of tools hit the ground and the bottom fell out of the barrel.

This meant that I now weighed MORE than the barrel. So I started my descent in rapid quick time AGAIN meeting the barrel at the 75 foot mark (this will account for the lacerations to both legs and lower body). I hit the ground with an almighty BANG breaking both ankles, and other injuries. Fortunately only three vertebrae were cracked, but UNFORTUNATELY I also let go the rope. There was now nothing to stop the barrel on it's descent. I was lying there in pain watching the empty barrel coming at me.....

I hope you will forgive me for NOT reading this issues!!!!!!!!!!!!!!!!!!!!

BRIAN FARRAR VK2UBF.

WEFAX FROM SATELLITES

I am in the process of having a go at picking up WEFAX images from the various satellites orbiting the earth. Once I get a receiver that will pick the tones and such like up, I should be able to get images like the one on the following page.

If you want to have a go, I beleive that the versatile Hamcom decoder will do the trick for you, along with a copy of JVFax, available

shareware around the traps.

The next couple of pages has some interesting stuff on them for frequencies and a good web site to visit to find out things about satellite imaging. I just printed them directly of the Web whilst on the guys web site. If you have an interest in this or the Hamcom modem, I will reprint the circuit in the next Propagator.

M S R's home page.

VK2ASR

Remote Imaging in Australia

Weather Satellite Status: as of 14th September 1998.

NOAA-10 APT - off. HRPT - off. Met 2/21, Met 3/6, Met 3/5 not working.

NOAA - 12 APT - 137.50 Mhz Ch 2, 3 & 4 working HRPT - 1698 Mhz. Ch 1, 2, 3, 4 & 5 working.

NOAA - 14 APT - 137.62 Mhz Ch 2, 3 & 4 working HRPT - 1707 Mhz. Ch 1, 2, 3, 4 & 5 working.

NOAA - 15 APT - 137.50 Mhz Ch 2, 3a, 3b & 4 working HRPT - 1698 Mhz. Ch 1, 2, 3a, 3b, 4 & 5 working.

RESURS 01/4 APT 137.30 Mhz or 137.40 Mhz working

GMS - 5 APT 1691 Mhz working.

The RIG discussion group may be found on the 80 meter amateur band. If you are not able to join this group you may send questions and/or comments to either of the e-mail addresses given below.

The RIG radio net may be found between 3660 Khz & 3670 Khz (+/- QRM) @ 0930 GMT (1730 EST) Lower Side Band on Wednesday evenings. The band is very noisy at the moment.

Control station VK2AAE Andy.

Images	Cornucopia	Palimpsest
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E-mail contacts:-

- Andy = andrews@lisp.com.au.
- Mike = msr@batemansbay.com

Other interesting sites:-

• http://www.rig.org.uk	Remote Imaging Group UK
• http://www.noaa.gov	NOAA Home site.
• http://www.drimg.com/	Dallas Remote Imaging Group
• http://www.websites.noaa.gov/	NOAA Web Sites

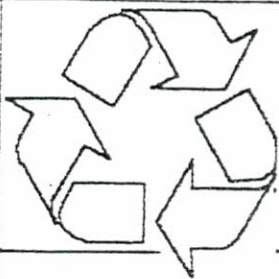
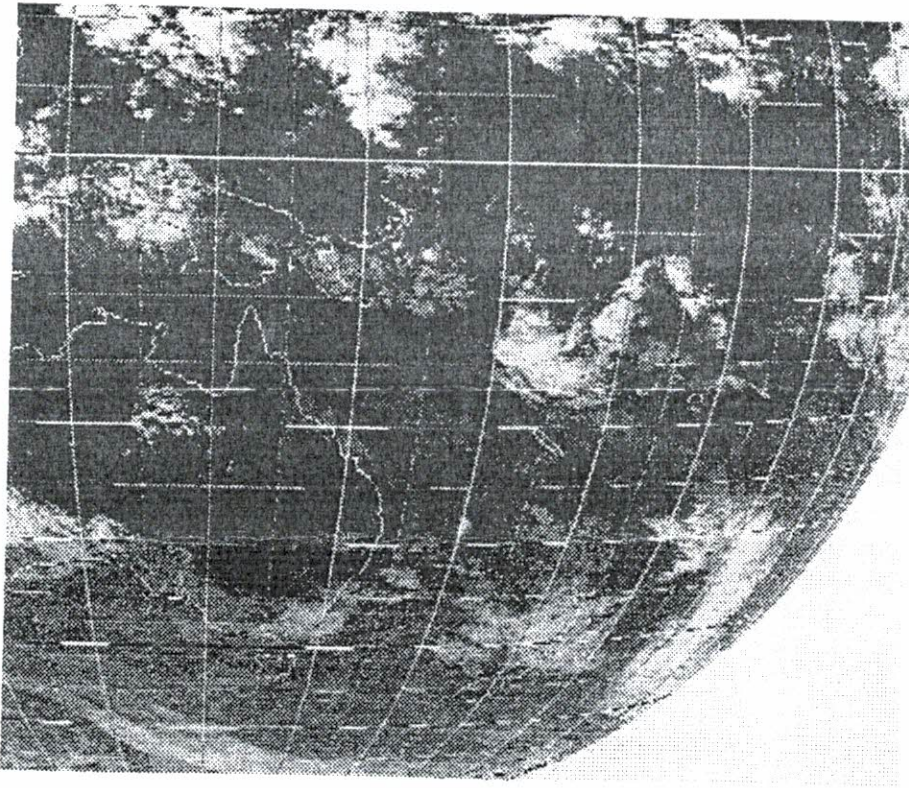
Images and satellite information kindly provided by Mr Arthur (Andy) Andrews VK2AAE

Web page design by VK2ASR with some hindrance from VK2DRY

Authors note - Please read it!

The object of this page is to assist RIG members, and anyone else interested in imaging from satellites and other remote signal sources. Whilst every effort is made to ensure that the information herein is accurate and correct, no responsibility whatsoever can be accepted for any problems or damage however caused as a result of using this information. *Copyright* subsists on all material





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REPEATER REPORT - 3/11/98

Well, looking back through previous Propagators, shows that I haven't submitted a Repeater Report since November of last year! A year has gone past & a hell of a lot of stuff has happened to the IARS's Repeater systems.

One thing that has been different to previous years is the amount of time I have spent "dealing" with NTAC. (NTAC stands for the NSW Technical Advisory Committee, which handles Repeater, Beacon & Link licences for the VK2 Division of the WIA). My time is somewhat limited, as is most people's, but I feel I have had to "waste" a lot of it writing letters to NTAC, just to get them to perform their elected duties, like the processing of Repeater applications.

In the last 12 months I have written about 10 letters/FAXes to them & had innumerable phone calls, producing hours of frustration. I make no apologies for my directness in this matter. They have stuffed us around no end & I am sick of the politics of who's right & who's wrong. The feeling I get from dealings with them is that we in the country, (ie: outside of Sydney) count for shit, we don't know what we are talking about & they sure think that they do.

The problem is not with the VK2 Division of the WIA, just with NTAC. Many individuals on the VK2 Council have been helpful with my dealings with NTAC, unfortunately a few others have not. The two main issues with NTAC that have caused the headaches, have been in the application of the licence for our 6675 Rptr at Mt Boyne & recently with the allocation of the Rptr frequency pair of 6850 to the Coffs Harbour Club.

The 6675 application took 5 & a half months for NTAC to process, then 2 weeks for ACA to issue the licence. This period of time to process a relatively simple system is totally unacceptable. We finally got our licence after many many letters & FAXes were sent. I won't bother to go into all the details, it is now "water under the bridge", but it does concern me when I hear that the NTAC Chairman apparently said that it'll take 12 *%#@* months for an IARS Rptr application to be processed next time!

More recently, the concern is the way NTAC have handled the application & apparent allocation of the 6850 Rptr frequency pair to the Coffs Harbour area. NTAC have chosen to ignore our concerns over interference from operators on the north coast having their signals "channelled" down to our 6850 Rptr over the summer months. We first noticed the problem late last year, with "one-sided" conversations annoyingly tying up our Rptr for hours on end.

Our Rptr at Maddens Plains stands no more half a klm from the Pacific Ocean & radio signals from unknowing operators using the Coffs Rptr, were travelling beautifully down over the water path into our Rptr.

(Mind you, the Coffs Harbour Rptr has now been operating unlicensed for almost 12 months & that is a whole different story.)

At the time of writing (3/11/98), we have just received another letter from NTAC/WIA which I will most certainly be replying to. Certain allegations have been levelled at us, more particularly myself, which I have written proof are fabrications. The writer, the VK2 Division Secretary has, in my opinion, has had the proverbial "wool pulled over his eyes". Anyway, suffice to say, we are not going to give in trying to protect our Rptr from interference from other users. God knows we have fought long enough to remove Pagers & commercial services from interfering with our Rptrs.

Now onto our Rptr situation...

VK2RMP - Maddens Plains (6850 & 8725)

This site is presently undergoing MAJOR changes. Both the 6850 & 8725 Rptrs are being replaced with new higher-powered 50W Philips Base Rptrs (FM 814 & 815's). Also linking is being upgraded. Presently, the plan is to link 8725 into 8225 (at Knights Hill), allowing northern operators access to the Goulburn & Canberra systems. (The WIA is keen to link north through them & onto Gosford &/or Newcastle. I also know that the Hunter Branch are going to propose an entire Brisbane to Melbourne link circuit at the next Conference of Clubs on the 14th of November).

We are also planning to link both 6975 Saddleback & 6675 Mt Boyne to 6850. The idea is that a mobile operator will basically be able to drive from Gosford to Narooma using the same "system" the whole way. We will be using an LIU-3 Commercial Link Interface unit for all this linking & it is a very simple matter to then join the VHF 6850 linked system to the 8725 UHF linked system. The joining of the 2 systems would be at selected times & remotely controllable. The talking clock, voice idents & WIA Broadcast RXers will also be part of this expansion.

VK2RIS - Saddleback Mtn (6975)

This Rptr & antenna system is being upgraded as well. The Rptr will also be changed to a Philips 50W Rptr/Base. The antenna system is to be dramatically increased in height as we have gained access to the newest tower at Saddleback. We will need to run two lots of heliax, both about 200' long. We will be running a split antenna system, that is RXing on one antenna, TXing on the other. We have been changing all 3 of our 2m Rptrs across to split antenna systems, 6975 being the last to be changed. As noted above, the plan is to link this Rptr with 6850 & 6675 Rptrs.

VK2RUW - Knights Hill (8225 & 29.620)

8225 Rptr has been operating well, unfortunately it has been suffering from occasional pager interference. The pager is on 148.8125MHz, but there maybe a UHF link causing the problem, not the VHF TXer. We're about to inform ACA of the problem. This Rptr & link to Goulburn & Canberra has been operating almost perfectly for about 2 & half years now. It shows how the use of good quality commercial gear can greatly reduce your break-downs at these rather remote & distant sites.

We have had one problem, though it wasn't the gear itself. The Link TXer was occasional failing. It got worse over the last month or so until it stopped working about a week ago. The Link radio was brought down to the work bench & after much head-scratching, it was found the problem was the X-tal, not the radio. It is temperature sensitive. It works when warm but fails when cool. I have tried being "physical" with it to stop it's failure, but it appears that we may have to buy another X-tal for it to be truly reliable.

The 8225 Rptr is earmarked to also be upgraded to a Philips Base/Rptr as well, but this won't happen for another 6 months or so as it is working so well anyway.

The 10m Rptr is still sitting here waiting for installation. It was finished over a year ago, but due to the poor sun-spot conditions, there wasn't much reason to spend time installing & maintaining it. It won't be long before it's installed. The plan is to link it to either a 2m or 70cm Rptr so the local users will be able to "talk to the world".

VK2RBT - Mt Boyne (6675)

Well this is the first time this Rptr has been written about. This is the Rptr that the IARS built, installed & maintains at the Mt Boyne Rptr site. Mt Boyne is located just north of Batemans Bay & services from Kiama in the north, down to Narooma in the south, to Canberra in the west. It has definitely "filled in the gap" between the existing Ulladulla & Bega systems.

The Rptr is a Philips FM814 Rptr/Base, running 50W to 2 VHF commercial high-band folded dipoles. It was installed in March of this year & apart from occasional tower rectification probs, has performed faultlessly for the past 8 months, which is a good thing considering it is about a 380km round trip to the site from Wollongong. The Rptr has a voice ident & DTMF remote control of all it's functions. This allows us to use a handheld here in Wollongong & control any function way down at Batemans Bay via the link system, not bad eh?

Since it was put on the air, it has been linked to our 6850 Rptr. As noted previously, this linking is soon to include 6975. This will help mobile users maintain contact from south of the Kiama bends through to north of Milton, that is, between 6850 & 6675's mobile coverage areas.

The cost of building, installing & maintaining of the Rptr, as well as paying the annual licence fee, has been totally offset by the number of operators on the south coast who have joined the IARS in appreciation of the installation of 6675.

That covers the voice rptrs. The IARS also presently has 4 packet digipeaters. VK2AMW-5 on 7575, VK2AMW-6 on 144.700, VK2AMW-7 also on 7575 & VK2AMW-9 on 144.925. VK2AMW-8 on 144.800 running 4800bd has been built & is planned for installation very soon. They are all Netrom Nodes & are very reliable. They are all built around Tiny 2 TNCs & Philips 828 radios.

With the finalisation of Rptr upgrades, the IARS will be the proud owners of what I believe, will be one of, if not the best, Amateur Radio Club sponsored Repeater, Link & Digipeater systems in Australia.

The inventory of eqpmt will read as follows:

- 3 x Philips VHF FM814 50W Rptr/Bases
- 2 x Philips UHF FM815 50W Rptr/Bases
- 1 x Spare FM814 & FM815
- 12 x Philips VHF & UHF FM828 25W radios (digis & links)
- 2 x Philips HF FM828 25W radios (10m Rptr)
- 1 x Philips LIU 3 Link Interface Unit
- 3 x VHF 6 stage diplexers
- 2 x UHF 6 stage diplexers
- 6 x DTMF Remote Control systems
- 5 x Packet Tiny 2 TNCs
- 2 x Talking Clocks (couldn't forget those)
- Assorted Power supplies, charges & battery banks
- 20 or so assorted antennas (dipoles, verticals, dual bands, beams)
- A total of over a klm of Heliax (LDF 4-50 & 5-50)

The above eqpmt produces 3 VHF Rptrs, 2 UHF Rptrs, 1 HF Rptr, 6 link radios, 5 Digipeaters, assorted Broadcast Links with access to 6 different commercial-grade high security Rptr sites. All this eqpmt was either donated or bought for very low "scrap" prices so has cost the IARS relatively little in comparison to the commercial value if this eqpmt was brought new (many 10's of thousands of dollars).

As you can see, the Rptr Committee is justifiably proud of what we have achieved over the past years.

Till next time - RoB VK2MT.

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REPEATERS

<i>Call</i>	<i>Fx</i>	<i>Mode</i>	<i>Location</i>	<i>Linked to</i>
VK2RMP	146.850	VOICE	MADDENS PLAINS	VK2RBT
VK2RMP	438.725	VOICE	MADDENS PLAINS	
VK2RBT	146.675	VOICE	MT BOYNE	
VK2RIS	146.975	VOICE	SADDLEBACK MT.	FUTURE
VK2RUW	438.225	VOICE	KNIGHTS HILL	VK2RGN VK1RGI
VK2RUW	29.620	VOICE	KNIGHTS HILL	OFF AIR
VK2AMW-9	144.700	PAKET	MADDENS PLAINS	
VK2AMW-5	147.575	PAKET	MT BOYNE	
VK2AMW-7	147.575	PAKET	MT MURRAY	
VK2XGJ	144.700	PAKET	DAPTO	
VK2XGJ	439.075	PAKET	DAPTO	

CLUB MEETING ARE HELD THE SECOND TUESDAY OF EVERY
MONTH EXCEPT JANUARY @ 7.30PM IN THE SES HQ MONTAGUE ST
NORTH WOLLONGONG. COMMITTEE MEETS THE THIRD ~~TUESDAY~~
WEDNESDAY

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TREASURER	VK2TNK	ROB SKELCHER/ JIM CHRISTIENSEN VK2CAV
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	VK2ZLJ	JOHN LODDING
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EDUCATION LIASION	VK2TTH	TED HAWKINS 42572136
LIFE MEMBERS	VK2OB	KEITH CURLE VK2CAG GRAEME DOWSE
	VK2ALU	LYLE PATISON

FM 900 Remote

	RX	TX		RX	TX		RX	TX
01	146.625	146.025	34	144.625	144.625	67	145.450	145.450
02	146.650	146.050	35	144.650	144.650	68	145.475	145.475
03	146.675	146.075	36	144.675	144.675	69	145.500	145.500
04	146.700	146.100	37	144.700	144.700	70	145.525	145.525
05	146.725	146.125	38	144.725	144.725	71	145.550	145.550
06	146.750	146.150	39	144.750	144.750	72	145.575	145.575
07	146.775	146.175	40	144.775	144.775	73	145.600	145.600
08	146.800	146.200	41	144.800	144.800	74	145.625	145.625
09	146.825	146.225	42	144.825	144.825	75	145.650	145.650
10	146.850	146.250	43	144.850	144.850	76	145.675	145.675
11	146.875	146.275	44	144.875	144.875	77	145.425	145.425
12	146.900	146.300	45	144.900	144.900	78	146.450	146.450
13	146.925	146.325	46	144.925	144.925	79	146.475	146.475
14	146.950	146.350	47	144.950	144.950	80	146.500	146.500
15	146.975	146.375	48	144.975	144.975	81	146.525	146.525
16	147.000	146.400	49	145.000	145.000	82	146.550	146.550
17	147.025	147.625	50	145.025	145.025	83	146.575	146.575
18	147.050	147.650	51	145.050	145.050	84	146.600	146.600
19	147.075	147.675	52	145.075	145.075	85	147.400	147.400
20	147.100	147.700	53	145.100	145.100	86	147.425	147.425
21	147.125	147.725	54	145.125	145.125	87	147.450	147.450
22	147.150	147.750	55	145.150	145.150	88	147.475	147.475
23	147.175	147.775	56	145.175	145.175	89	147.500	147.500
24	147.200	147.800	57	145.200	145.200	90	147.525	147.525
25	147.225	147.825	58	145.225	145.225	91	147.550	147.550
26	147.250	147.850	59	145.250	145.250	92	147.575	147.575
27	147.275	147.875	60	145.275	145.275	93	147.600	147.600
28	147.300	147.900	61	145.300	145.300	94	146.025	146.625
29	147.325	147.925	62	145.325	145.325	95	146.025	147.725
30	147.350	147.950	63	145.350	145.350	96	146.800	146.800
31	147.375	147.975	64	145.375	145.375	97	146.875	146.875
32	147.325	147.925	65	145.400	145.400	98	147.000	147.000
33	144.600	144.600	66	145.425	145.425	99	147.750	147.150