

THE MUSE



-----DECEMBER 2025-----

The newsletter of the MUSICK POINT RADIO GROUP (INC.) NZART BRANCH 86
Incorporating The Society for the Preservation of Amplitude Modulation (SPAM)
and **Green Radios On The Air (GROTA) News.**

Musick Memorial Radio Station, Bucklands Beach, Auckland. Call Signs ZL1ZLD, ZL1ZLF.
BRANCH 86 NZART NET- TUESDAYS, 7.30PM, 145.775 MHz, Musick Point Repeater (ZL1HK). All welcome!
SPAM WEB SDR Remote Receiver - <http://spamnz.zapto.org:8901/>
MPRG KIWI SDR Remote Receiver- <http://musickpoint.ddns.net:8073/>
Musick Point Website- <https://musickpointradio.org> Webmaster-Neil ZL1NZ.
AM Nets- Fridays ZL6AM (SPAM) net at 8.30PM, 3.850MHz, Wednesdays ZL1ZLD at 11.30Hrs, 7.125MHz
Museletter Editor- Martyn, ZL3CK.

Meeting- Second Sunday of the Month (Except May-Third Sunday, to avoid Mothers' Day)

NEXT MEETING- THE FAMOUS MP BBQ! Sunday DECEMBER 14th @ 1pm.

H NIGHT MONDAY DEC 8th at the station -first session starts at 7.30PM. PIZZAS Provided!

NEW YEAR'S DAY POTA at Musick Point- From 9 am, hope you can come, bring a picnic.



The location of an AM modulated CW transmitter!- the Hokitika aeronautical beacon "HK" on 311KHz.
If you are lucky you can still copy this on an SDR or your ARC-5 beacon receiver...

From the Chair

Activities at Musick Point have really picked up recently. Attendance every Sunday is great and everywhere you look, someone is busy with a project or experimentation of some sort. Naturally, there is always time for a cup of coffee, but that is not as bad as it sounds, because that is where a great deal of discussion takes place, some of it often meaningful and even related to amateur radio.

Seen on the internet: "My boys are all taking a week break from electronic devices. This morning, I introduced myself to them and showed them around our home, then I took them outside and showed them the big bright light in the sky."

Friday nights, too seem to gradually be attracting a growing number of interested members, and this is a satisfying result to an idea that started maybe six months, or more, back. Occasionally, there has been only two of us but we just get on with some organising, cleaning and tidying or attending to something that need doing. This last Friday night saw six of us at the point and it was a very enjoyable evening having so much activity there for a change.

To steal ideas from one person is plagiarism. To steal ideas from many is research

As is our 'tradition' I expect that we will be having our December general meeting with a couple of sausages, etc., to wrap up the year. That will be on Sunday 14th December at the usual time. Whatever happens on that day, I look forward to seeing you all there. Look for more information somewhere in this newsletter.

I was told that after a vasectomy I wouldn't have children any more. Imagine my shock when I got home and they were still there.

Keeping it short, this month, so I will wind it up by wishing you all a very Merry Christmas and a Happy New Year. Take care on the roads, even if you are just going to the local shops. Have a great time with family – I will – and I look forward to seeing you at the club as usual, in the future.

That's it for now, until next month:

73, and call CQ

David, ZL1DRV

Musick Point Radio Group News-

Our Next Meeting will be the Christmas BBQ. Sunday December 14th at 1PM.

Please RSVP to the editor martyn.seay@gmail.com so we know how much food to supply.

"H" Night- Monday December 8th, starting at 7.30PM.

The rules are attached to this newsletter below. We will gather at the station and Pizzas will be supplied!

Please RSVP to the editor so we know how many Pizzas to get!

All our club days seem to be getting busier with a good turnout on the Sundays as well as the Wednesdays and Friday evenings. Steady progress has been made making the station tidy and more businesslike in anticipation of visitors from the Conference next year. H night is coming up on a Monday this year: we hope to see a few at the station and looking for a good turn out on the air too.

One of the restored Collier and Beale 941 receivers has been temporarily connected up for the next Friday night SPAM net- we hope it will be a bit easier to use than the existing one. The audio isn't very good on the station's 80Mt. C & B 941 and as it doesn't have any AGC is tricky to use at night. The huge changes in signal strength are shown up vividly, requiring constant adjustment of the RF and IF gains.

Three 941's were purchased from an auction last year ex. the late Phil McGeckie's estate, and they look 'as new'. One has gone to Bruce ZL1BLB, and the other two are now at the station. Therefore given the total production of the 941's has been estimated at 50, we have accounted for 10% of the total production!



Collier and Beale (Wellington) 941SWB Receiver, beautifully restored by the late Phil McGechie.



Musick Point's vintage console with three C & B 941's

NZART 100 years Conference 2026-

Planning for this momentous event is now well under way. The cost has been set at \$295 for the whole weekend including meals. Not a bad deal these days and it will be subsidized by NZART as well. So please try to get there. It's the only centenary of NZART we will ever be able to celebrate!

The location at the Waipuna Lodge Conference Centre has been looked over again by 3 of the committee and more details about the displays and meals have been clarified. We are expecting at least three commercial displays, including RWB, our most valued sponsor over many years. There will be space to park the AREC mobile unit out the front of the Promenade room.

There is separate room which is ideal for the NZART 100 Centenary display. This will be presented by Craig Crawford ZL3TLB who is the NZART historian. Craig is to give a talk on the history on the Saturday too. He will be launching his NZART Centenary book which is to be part of your conference package.



The Clifton room at Waipuna where the 100 years of NZART and other historical interest groups' displays will be located.



Looking out towards the Pakuranga Basin, where the AREC mobile unit will be parked..

Aeronautical Non- Directional Beacons (“NDBs”)

These old AM transmitters are slowly becoming extinct as victims of the GPS in the aeronautical world. There are still a fair number around New Zealand nevertheless. Over the last few years the restoration of an ‘ARC-5’ type ‘long wave’ receiver (See below) has allowed the reception of many of them here in Auckland, in the middle of the city no less. The aerial used is just the 80 Mt. inverted vee, which presumably works as a “flat top” with the coax acting as the vertical. For some reason it works.

A list of the beacons received at the editor’s QTH is below. There are still a few that are maritime beacons intended for shipping. A few of the transmitter sites have been visited over the years, including the old Westpoint and Whitford beacons during flying trips in the past. The Godley Head site still has an intact transmitter shed. The transmitters were designed for continuous operation over many years and most will be 40 years old now. The call sign is usually 2 letters in New Zealand, but 3 letters in most other countries including Australia. The transmitter identification (“Ident”) is in morse, by amplitude modulated carrier. However, some have only one sideband, and some are ‘modulated’ by a second, keyed transmitted carrier 1KHz off the carrier frequency. So no modulator required. The NZ beacons are all 1KHz tone, but the Australian ones have an 800Hz tone- which makes picking them out easy!

Old decommissioned Maritime beacons recorded in Post office information include The Brothers, Puysegur Point, Baring Head, Godley Head, (The hut is still there) Cape Reinga, and Stephens Island.

There were a couple of beacons atypically located just above the BC band, Ohura (“OH”) now extinct, and Taumarunui “TM” which is still transmitting on 1635KHz. This latter beacon was even heard clearly one night while in the air in Western Australia many years ago.

So if you want a new Dx challenge, try beacon hunting! You might learn some morse code too.



Visiting the Westport beacon last year. “WS” on 278KHz.



The Hokitika Beacon "HK" on 311KHz. At the historic original Hokitika airport, now closed, One of New Zealand's first airlines, West Coast Airways, operated from here in 1935.



An original unrestored Aircraft Radio Corporation (ARC) Beacon receiver, obtained from Dr. Brian Clarke, Sydney, Australia. Model is a BC-453-B, 180-550KHz. The small plate below the dial would normally be replaced by a special connection box for the NDB compass mounted in the pilot's instrument panel. Tuning is by Bowden cable to the pilot's radio control head.

Here's a list of NDB's and their status, as of November 2025.

KHz	Name	Iden	Place	Received	Marine?
210	Appleby	AY	near ?Nelson	Never heard	
214	Invercargill	NV	Invercargill	Never heard	
218	Ohakea	OH	Ohakea	Never heard	
226	Kereikeri/Ferry	KK	Kerikeri	Just gone?	
226	Ferry	FY	Lake Ferry	never heard	
230	Taupo	AP	Taupo airpt	copied @home	
234	Titahi Bay	TY	Titahi Bay	Never heard	
238	Kaitaia	KT	Kaitaia	copied @home	
242	Paraparaumu	PP	Paraparaumu	copied @home on a good night	
246	Wairoa	WO	Wairoa	Never heard	
254	Waiuku	WI	Aka Aka	gone by 2025, was copied @ home	
254	Ashburton	AS	Ash. Airpt	never heard	
258	Palm Nth	PM	Palm Nth Apt	Never heard	
260	Norfolk Island	HF	Norfolk Island	copied @ home on a good night	
262	Woodend	OD	Nr Chch	Never heard	
272	Lord Howe Island	LHI	Lord Howe Island	copied @ home on a good night	
274	Gt Barrier	GB	Claris	gone? Was copied at home	yes
278	Westport	WS	westport airfield	copied @home	
282	Rotorua	RO	Rororua Ap	Never heard	
286	Cape Campbell	CC	Cape ca	heard Picton SDR	yes
298	Wellington	WN	Wgtn AP	gone? Have heard@ home	
302	Oamaru	OU	Oamaru AP	Never heard	
307	Griffith	GFH	Griffith NSW	Copied SDR	
310	Hokitika	HK	Hokitika AP	copied @home	
314	Miranda	RD	Near Ardmore	gone by 2025, was copied @ home	
322	Chatham Isd	CI	Tuuta	copied @ home on a good night	yes
326	Whangarei	WR	Onerahi	copied @home	
334	Whitford	HD	Near Ardmore	gone by 2025, was copied @ home	
338	Swampy	SW	Nr. Dunedin	Never heard	
342	Blenheim	BM	Blenheim AP	heard picton SDR	
346	Gisbourne	GS	Gisb. AP	never heard	
346	Manapouri	MO	?	Never heard	
350	Tauranga	TG	Tga AP	copied @ home	
350	Surrey	SY	Near Whangarei	gone by 2025, was copied @ home	
354	Kaikoura	KI	Kaikoura AP	Copied SDR	
358	Napier	NR	Napier AP	Never heard	
358	Newlands	NL	Newlands Wellington	copied @home	
362	Mosgiel	MI	Near Tairei AP	Never heard	
362	Whakatane	WK	Wh. AP	copied @home	
366	Springfield	SF	Near Whang	copied @ home	
366	Woodburn	WB	Near Blenheim	Never heard	
366	Timaru	TU	Levels AP Timaru	Copied SDR	
378	Henley	HL	Near Dunedin	Copied SDR	
382	Wanganui	WU	Wang AP	copied @home	
389	Grafton	GFN	Grafton NSW	Copied SDR	
394	Berridale	BE	Near Dunedin	Copied SDR	
395	Port McQuarrie	PMQ	NSW	copied @ home on a good night	
402	Tontouta?	TUT	New Caledonia	copied @ home on a good night	
412	Honiara?	HON	Solomons	copied @ home on a good night	

Green Radios On The Air- report for 27 Nov. 2025 from Kelvin ZL3KB-

This month we report on some trials we carried out on the effect of forest trees on surface wave propagation, but first a quick report on some "sea wave" trials done today. In the past we have had variable success in getting from Kaikoura peninsular to Christchurch, 150km, using the WS48 set manpack radios. As the path is all sea, the theory says it should be just possible, and at times it has been. This time, however, for some reason we had no luck, maybe due to SSB QRM and static crashes. Notwithstanding that 'failure' (sorry Bryan) we turned our attention to the north and attempted a contact from Kaikoura to Hugh ZL2ASB in Wellington using a WS48set, again 150km. After some false starts, netting to the right frequency and getting the set to work we did manage a 2way CW contact that was 599. One lesson we did learn from this – when attempting a weak signal contact, it is best to start with a plain CW carrier, maybe with some morse to differentiate it from QRM, and get all stations netted to this. If you can't hear the other's carrier, it's probably time to go home! Hugh's CW sig was strong, so we feel a phone contact is still possible. More work needed on another day.

Trees or No Trees?

When choosing a site for our ground wave trials, we are often confronted with a nearby stand of trees or forest, and question what its effect would be on our HF surface wave propagation. In an attempt to answer this, we setup an experiment, **see map**, where a receiving station R1 with spectrum analyser was placed on the edge of a pine forest, and the received signal was measured from a transmitter at 850m 'line of sight' position T1, then the transmitter moved to a position at the same range 'behind' the forest T2, just a few meters from the forest edge.

The results are shown in the table, giving the difference between 'no forest' and 'forest' to be approx. 13dB. This is quite an attenuation, and would result in the effective range being cut by approx. three quarters. In some ways we would expect the forest to have a significant effect as the vertical nature of the trees will probably absorb our vertically polarized wave.

As a comparison, we repeated the experiment a few days later, with a longer range of 2.8km, again measuring the received signal via a clear path from T1 and an almost total forest path from T2. This produced a very different result, with the 'no forest' to 'forest' difference being only 9.5dB !

It is always good to sense check, so we plugged the numbers into the ITU ground wave prediction calculations, using 'average to poor soil' parameters for the T1-R1 path because the ground is all sand, and 'average soil' for the T1-R2 path because this was farmland. Flabbergasted, we were amazed how close the result came to our measured figures, going some way to vindicate our 'clear path' measurements.

But we are still left with the difference between the two trials – why is the longer-range result showing much less attenuation from the forest? Is there some 'hoping over the trees' effect going on, related to the Frenzel zone, or maybe skirting around the forest edge? No large reflective objects were in the vicinity. Maybe skywave, such as NVIS, but the signals had no QSB, and surely 2.8km is not much different to 0.8km?

Having said all this, the difference between results is only 3.5dB, and from past experience, getting field measurements to within a few dB is always a challenge.

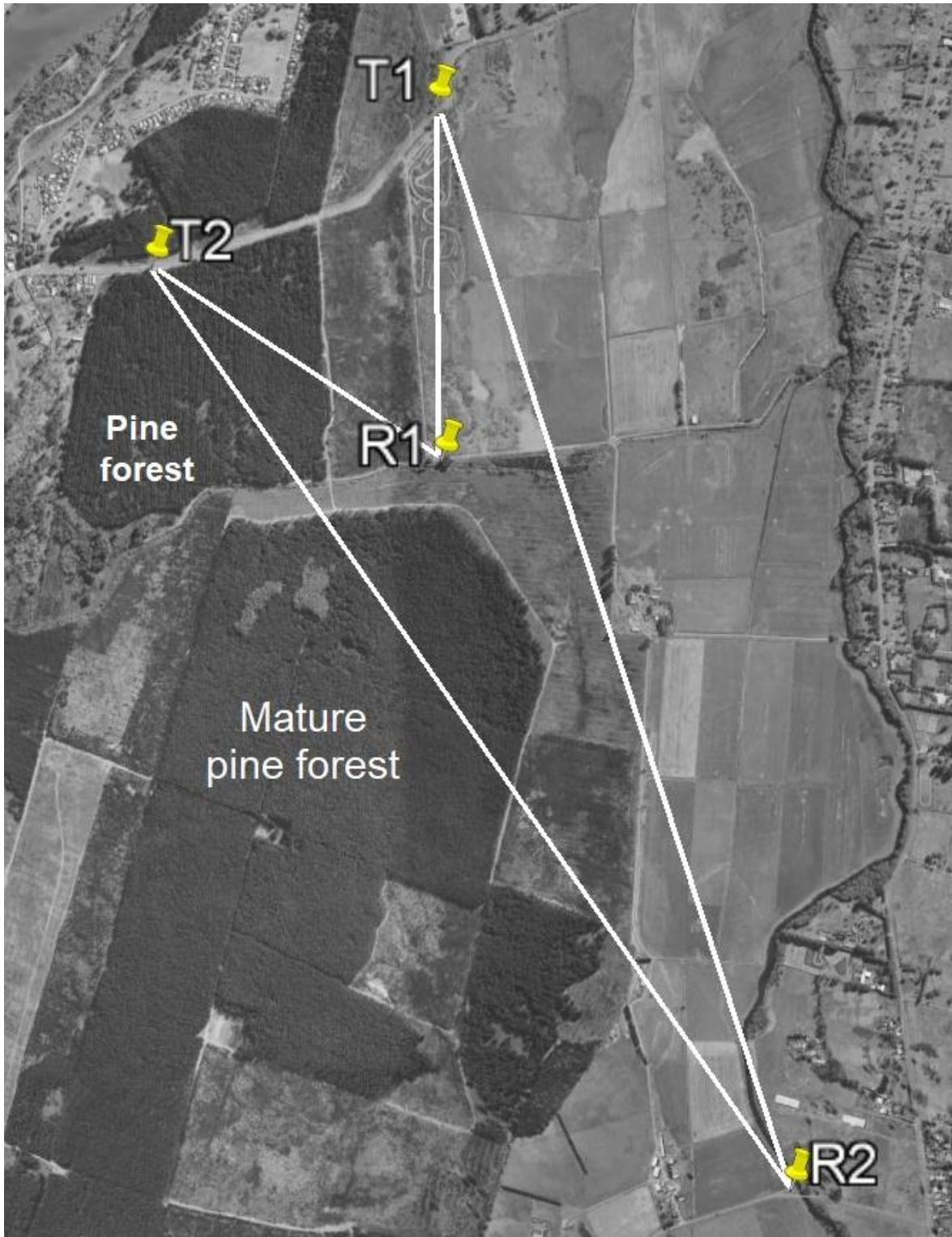
Two more conclusions come to mind; experiments don't always give expected results, and "don't measure something twice, the results will never agree". I guess that doesn't fit with the "measure twice, cut once" theory!

The next experiment will be to measure the effect of a nearby tree on the radio's whip antenna and its effect on the radiated power.

For those interested, our apparatus was a TinySA spectrum analyser receiver with 3m vertical whip and counterpoise. The transmitter was a WS48 on 7MHz with 3m vertical whip and counterpoise.

Measurements were taken on CW (1W) and AM carrier (0.3W), which agreed but for clarity only the low power results are shown in the table.

RX position	Path		Difference
	T1 (No forest)	T2 (With forest)	
T to R1 Distance 0.85km	-70.2dBm	-83.2dBm	13.0dB
ITU Calculated received power	-71.1dBm =Average to poor soil		
T to R2 Distance 2.8km	-83.2dBm	-92.7dBm	9.5dB
ITU Calculated received power	-83.5dBm =Average soil		



Map of forest trials.



Kelvin ZL3KB trying not to be swamped by the waves at Kaikoura. (Comments have been made about the non-green earplug...



Hugh ZL2ASB on the beach in Wellington. Looks unseasonably calm too!

Received from Mike VK4MIK-

AM and CW on ANZAC Day event on Saturday April 25th 2026-

I have included the info that NZ hams may be on 7.125 AM for the above event. Hopefully it will see our fellow hams involved as the event runs all day.

When we made contact last Anzac day you said it would be on the list of events - is this still correct ? (YES!)

Can you also alert NZART to the event please. (It will be done!)

Thanks.

Mike Patterson VK4MIK.

Replied in the affirmative. We could activate Musick Point on 7.125 AM if there's interest.

Free Amateur Radio Buy, Sell and Wanted website-

See "ZL Ham Ads" at- <https://ZLham.net.nz>

"The Machine", the FAMOUS MPRG Blog is found at- <https://MPRG.zlham.net.nz>



Ferrite & Iron Powder
cores available at:
intelec.nz/passives

FINAL FINAL-

IF you have got this far through the newsletter, please don't forget **to RSVP the editor** if you are attending "H" night or the Christmas BBQ at the station- if you want food that is!

Minutes of the General Meeting of the Musick Point Radio Group

November 9th, 2025 Commenced at 1302.

Present- As per attendance book

Apologies-ZL1DRV

Minutes of October 2025 G.M.-

Accept as distributed- Moved-ZL4ROB Seconded-ZL1EC. / Carried unanimously.

Matters Arising- Nil

Finance- ZL1DL- No significant outgoings. A few Subs and donation (ZL1WOT)

Accept financial statement as presented - Moved-ZL3CK Seconded-ZL1TOF / Carried, unanimously.

Correspondence: Nil

General Business-

Stuck car in ditch Friday- ZL1DL to notify Iwi. Risk of re-locking gate.

Western beam rotator now back in operation. ZL1DL to get rust converter for tower.

Sunday 14th December will be the annual BBQ in lieu of meeting. See you there! ZL1DL is hoping someone will volunteer to help with coordination this year! RSVP's to be requested in next MUSEletter.

"H" night Monday 8 Dec at the station from 7.30-10PM.

AREC- Rob- Nat'l exercise 23/11, 2 outstations (ICP) and 2 at MP (EOC). VHF/UHF simplex.

100Y Centenary NZART Conference- progress of organizing committee discussed.

Meeting concluded at 1340.

Minutes taken by ZL3CK.

"H" NIGHT CONTEST, DECEMBER 8- RULES_

Band- **80 METERS** / Mode- **Amplitude Modulation**, Phone only, that is a carrier and sidebands.

Time- **7.30 to 10PM**, 5 half-hour periods

Work individual stations once in each period, unless they are able to change radios, and operate in another category, E.G. use a ZC1 for 15 minutes then change to a modern radio for 15 minutes.

There will be a special event station **ZL6H**, first contact is worth 5 points.

Transmitting Categories-

Vintage - radios of all valve, in the signal path.

Hybrid - Radios with some valves, at least in the final stage.

Modern - solid state, DSP etc. SDR - Radios that are fully software defined, Flex, K3 etc.

Home Brew - where Tx, Rx, or both have been fabricated in the home workshop.

QRP - less than, or equal to 5 watts carrier power.

Exchange a signal report and type of equipment you use, E.G. '59 ZC1'. Suggest you use the following extensions when calling, and claim the points for each station worked-

/V = vintage 3 points

/H =Hybrid 2 points

/M= Modern 1 point

/S= SDR 2 points

/w=Homebrew 2 points

/Q=QRP 3 points

Working ZL6H 5 points (first time worked only : then claim points as for type of station ZL6H is...
for example 1 point for a modern 6H)

Points will be awarded for each station contacted, based on the equipment THE STATION YOU CONTACT uses.

Suggested calling frequencies: QRP 3750 and QRO 3850, giving older receivers a chance to hear weak signals.

Short Wave Listeners (SWL) section-

Points awarded will be the same as for transmitting stations, i.e. determined by the type of transmitter the station you hear is using. Use the appropriate multiplier for your style of receiver. Remote receivers please use Modern category.

SWL Category multiplier:

Vintage: All tube line up in receive path. Multiplier 2.0.

Modern: Any solid state receiver. Multiplier 1.0 SDR: software defined
receivers e.g. Soft Rock, SDR play etc. Multiplier 1.5

Please send logs to Rob Carter, ZL2IW rob.zl2iw@gmail.com with a summary of your equipment used and category you wish to be in.

Good luck on the night, and *most of all-have fun!*
