



AMATEUR RADIO LICENCE FEES

**A Submission to the Ministry of Economic Development,
Radio Spectrum Management Group,
in response to the Ministry's:**

“2007 Radio Spectrum Licence Fees Review”

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Document History

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Introduction

Introduction: Summary

Overview

This Submission is made on behalf of NZART Council and is in response to the *Radio Spectrum Licence Fees Review* document that appeared on the Ministry's web page during February 2007 at <http://www.rsm.govt.nz/licensing/fees/2007-fees-review/index.html> and which invited a response.

Name of Organisation

The New Zealand Association of Radio Transmitters Incorporated.

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Past Submissions

March 2003

Submission sent to the fee's review for 2003.

January 2005

Submission sent to the fee's review for 2005.

Summary of Submission

The proposed “billing” system for amateur radio repeater licence fees in New Zealand is unworkable and a solution must be found.

Canada and the United Kingdom have moved to all-free-licences for radio amateurs.

New Zealand could do the same. The RSM’s new user-driven on-line SMART administration system is shaping up to be a very effective administrative tool. Eliminating repeater billing will remove a major administrative difficulty for the Amateur Service.

Justification for this change includes recognising:

- the unique regulatory non-pecuniary position of the Amateur Service as a “public good”
- the emergency preparedness of the amateur radio repeater and other communications networks in constant readiness to serve communities
- with voluntary experienced operators with their own terminal equipment, being nationally dispersed
- meeting the ITU-R Recommendation M.1042-2 requirements (see Appendix 3), and, by
- the lead already shown by Canada and the United Kingdom.

In effect, the taxpayer by paying the (approx) \$18,500 for the annual licence fees for repeaters would be recognising and ensuring the continuance of this emergency communications resource.

Background

A problem has arisen with the introduction of fees for amateur radio repeater licences and way they are billed. This problem is not of the radio amateurs’ making but arises from several reviews of the overall licence fees system by the Ministry of Economic Development (MED): Radio Spectrum Management Group (RSM).

Through the work of consultants the RSM has changed their fees-collection system to simplify and to lower their costs. Whilst this intention is all very worthy, the new process effectively transfers the fees-collection problem to the New Zealand Association of Radio Transmitters Incorporated (NZART), and to radio amateurs, returning to a system that was found in previous years to be unworkable.

This is against the advice provided to RSM by NZART in repeated formal submissions during the fees review processes.

Initial Suggested Solutions

There are two initial suggested solutions:

The **FIRST** relates to the concept of *some type of* “public good” type funding and it is believed this will require government consideration outside of MED / RSM / NZART. **The solution proposed can be successful as indicated by changes made in Canada and more recently in the United Kingdom.**

The **SECOND** involves an extension to the existing GURL applicable to the Amateur Radio Service (which by its terms does not extend to include repeaters, beacons and fixed links). Or an independent GURL applicable to the use of repeaters, beacons and fixed links.

Historical Perspective

How the two types of amateur radio licence were first established.

Many years prior to 1970, there was only one type of amateur radio licence in New Zealand, those being for persons. A group of radio amateurs built the first amateur radio repeater station on the Port Hills in Christchurch to extend the operational range of their VHF equipment. The repeater station was licensed as an amateur station in the name of trustees for the Christchurch Branch of NZART. The licence fee charged was the same fee as individual radio amateurs paid at that time and was paid annually by the Branch.

By the 1990's the number of repeater stations had risen to several hundred, spread from the Far North to Bluff. These repeaters had more than proved their worth to their local communities by supporting communications for many and various emergency purposes.

The standard licence fee was still being demanded for repeaters and was being paid in some local way, by Branches or by individuals. But significant problems had arisen and these became difficult to solve.

By **its** nature of the Amateur Service and emergency applications that use it, the repeaters had to be open for use by all licensed radio amateurs.

It is not allowable by law to "charge" in any way for the use of them.

By the ITU definition of the "Amateur Service", amateur radio is the only radio service that is "non-pecuniary".

The definition of the "*Amateur Service*" appears in the ITU International Radio Regulations.

The same words are echoed again in the Schedule 3, Paragraph 4, attached to the New Zealand amateur radio licence:

"1.56 *amateur service: A radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest."*

Repeaters are used by members of the local NZART Branch and radio amateurs who build and maintain them. Visitors who motored by, and also many other licensed locals who had contributed nothing towards the repeater installation, maintenance or annual licence fees used them because their "openness" allowed this. Thus costs were unfairly loaded on a few.

The proliferation of repeaters ensures a widespread country-coverage and the total repeater licence fees were becoming a significant cost. The refusal of some individuals to contribute to repeater expenses had arisen to become a significant and irritating factor. NZART asked the Administration of the day to eliminate the fee for repeaters in return for the community emergency communications resource facility they provided across their service areas. The Administration of the day was resistant when reviewing change of any sort.

During the 1990's, the RSM (under a different name at the time) declared that they had enough funds in hand to make a reduction of all radio licence fees across the board for all radio services. After discussions it was agreed that the Amateur Service licence fee would remain at the current level and

that individual radio amateurs would forgo a reduction in their licence fee. The cost of the licence fee for repeaters would reduce to zero. This was the first cross-subsidy for the Amateur Service.

So there became **two types of amateur radio licence**, a personal one for individual operators and one for “fixed amateur stations”, being for repeaters, beacons and fixed links. The annual fee for an individual’s amateur radio station licence and the “free” fee for repeaters were set into the radio regulations of the time.

To simplify matters further, part of the agreement was that new amateur fixed station licences would have a common licensing period and the same named licensee: NZART. Existing licences would be transferred to NZART when convenient. Today, most of the licenses are in NZART’s name.

It must be noted that the fee for repeaters was never “**free**” although it was listed as such in the Radio Regulations of the day.

Every individual personal amateur station licence fee had a small unidentified component included to cover the Administration’s cost for the licensing of all the amateur repeater stations. A difficult problem was solved and the Administration received the money it needed to meet its costs.

The problem was solved - until the RSM made a surprise announcement.

Free Licences for Radio Amateurs is announced

At the NZART Conference at Nelson in June 2002, the MED's Manager RSM, unexpectedly announced a “free annual fee” for the personal amateur radio licence.

No mention was made of any change to the repeater licence fee which was already known by all present to be “free”.

The announcement was welcomed with acclamation.

The (free) repeater fees were already covered in the fee paid by each individual amateur, so by announcing that the individual amateur licence could now also become “free”, the Ministry when making this announcement were indicating that the repeater fee would also remain at its zero fee status. There was no reason for anyone to suspect otherwise.

It was not until February 2003 at a meeting of NZART Council that the newly-appointed Manager of Radio Spectrum Planning at RSM, when answering questions about when the announced “free licence fee” was to become effective, made mention that “there might be a residual fee for repeaters”. No further details were given when questioned. This was the first exposure of the Ministry's intention to return to separate billing for repeater fees.

A formal NZART submission to the MED RSM in March 2003, in response to the Ministry's call for comment on a Ministry fees document, **pointed out the problems that would return** and a second submission in December 2004 reinforced the same stance.

By their very nature, repeaters and beacons are available to be used by all radio amateurs. If a fee is set for these devices, *the difficulty becomes one of fee-collection.*

The general thinking is: Why should a radio amateur, who already holds an individual free licence, make any contribution at all?

The Radio Regulations prevent any charge being made for “messages” passing through a repeater, should some method for charging be possible. A “user charge” is not possible from either a regulatory or from a practical sense.

By the very nature of amateur radio, there is uninhibited access to the input frequencies of repeaters by all licensees. There is a ban on the encoding of signals for general use so the idea of “closing” repeaters by requiring a secret encoded access signal for authorised access is at odds with the approach of free and open access. Such an access constraint would have serious repercussions at the time when a repeater is to be used for an emergency task.

The new situation does not fit with the “culture” of amateur radio and is administratively very difficult to make work. It has resulted in a form of cross subsidisation whereby NZART and/or its branches subsidise non-member amateur radio operators.

A new billing system

The MED RSM has reversed the billing system. The system that was working well was an individual annual invoice sent to each radio amateur for a fee payment, with “free” repeater fees (but the repeater fees were a component part of the individual licence fee).

This involved some 4700 annual invoices for the \$35 individual fee.

RSM concluded that costs could be slashed by switching the system over, by eliminating the 4700 annual invoices and billing on the number of repeaters, some 300 odd invoices.

Initially it was intended that, this cost could be further reduced by making it one invoice for a one annual lump sum payment for an aggregate of all these repeater fees.

This made an ideal system from the MED RSM’s viewpoint, but it presented major problems for NZART. It was in effect put in the position of taking on the Ministry’s fee-collection.

As at 21 March 2006, 38.81% of New Zealand’s radio amateurs were members of NZART. This is a very high proportion by international comparisons, but well short of the 100% of all licensed amateurs in New Zealand.

Legal authority for NZART to bill non-members for a contribution for repeater fees is not available either by way of Radio regulation, delegated authority or on moral grounds.

A parallel example **of the current situation** has been suggested: That Land Transport NZ makes all car registrations free but bills the Automobile Association for the running of the national vehicle fleet.

Amateur Radio Operators Response

The amateur radio community is vehement that the problem is back to the original “everyone uses repeaters - so who should pay the repeater fee?” and is made even more difficult now by the new problem: “how can any repeater fee be collected?”

There are now (as at March 2007) some 321 repeaters and similar assorted licences. With a \$50 fee per machine, the annual total is \$16,500. So the problem now and under the existing fee structure is how to collect (in round figures) some \$17,000 each year from licensees who each have their own individual “free operator licence”.

Should fees increase from this present review the problem simply compounds.

The amateur radio community has accepted the Nelson June-2002-announced “free” individual operator licence with appreciation.

The more recently exposed notion, of now having to find some \$20k each year for licence fees for repeaters can be best expressed as a “disappointing to say the least”. To say that it has received “no sympathy and no support” in the amateur radio community is accurate.

NZART has no mandate to act as a money-collector for these fees.

The view is also expressed that “if the MED saw fit to make the operator licence (with its in-built repeater fee component) free, why anyone should voluntarily contribute?”

The problem is clearly seen as being generated by the Ministry itself and the problem is not of NZART's making.

At its AGM in New Plymouth in June 2005, NZART Council decided that any bill received for repeater fees would not be paid. One consideration in arriving at that decision was that Council saw no reason for members of the Association to meet or to subsidise the fee for the many non-members who use the repeaters.

NZART through its members already heavily contributed to the repeater systems in many and various ways.

With the introduction of the present fees charging regime accounts for individual repeaters commenced. This caused considerable distress and expense to NZART who with the greatest of reluctance but with a view to preserving infrastructure agreed to fund repeater licences for a single year in order to explore options (namely the 2006-2007 licensing year). This year expires at 1 June 2007 this year and NZART does not have the resources to allow any extension on this. As a result there seems no alternative than to transfer licences back to individual branches so that they can determine their own ultimate fate.

There is no written agreement for NZART to receive accounts and that simply flows from licences being in NZART's name as requested by MED. Once licences transfer back to branches there will be no obligation on NZART to pay licence fees for the same, or to act as a counting-house for its accumulation, or to demand it from members or non-members.

Repeaters will become unlicensed and by law will shut down. It will very quickly become a huge issue in many areas of New Zealand especially in those communities with high levels of AREC activity.

Discussions within the amateur radio community since the new “free” operator licences took effect have completely eliminated the idea of any possibility that a “voluntary” donation scheme would, or could, raise \$20k in any one year. Although the first year has been paid by NZART, the medium to long term funding is unsustainable at these or higher levels.

It is government policy that radio services, the Amateur Services included, are expected to cover their own RSM costs. RSM advises that if the Amateur Service was to receive everything “free”, then so would the surf life-savers, ambulance services, rural fire etc. expect all their radio licences to be free. In addition, comments have been expressed to RSM by overseas administrations about the difficulties in fending off claims for “free licences” by services that make reference to other services with all-free fees. These other services, (the surf life-savers, ambulance services, rural fire etc.), will be licensed in the Mobile or Fixed Services with quite different licensing rules.

Solution

Since it is unlikely that a return to a fee's a fees based personal licensing system with "free" repeater fee licenses is possible, the solution is the extension of the GURL to cover all of the repeaters beacons and fixed links operated in the Amateur service.

Even **if** this was limited to those **repeaters, beacons and fixed links** in the "exclusive" 144-148 MHz (2 metre) and 430-440 MHz (70 centimetre) bands it would substantially address NZART concerns.

The present fees

Schedule 6 of the Radiocommunications Regulations 2001 (replaced in 2005) sets the current licence fees. These are now shown in one category:

OA1 Beacon, repeater or fixed link:

Engineering certification fee \$300, Annual administration fee \$50

RSM Cost Allocation Study

The Radio Spectrum Management (RSM) Group, Business Services Branch, of the Ministry of Economic Development released to the public a paper summarising the rationale behind the costing model to be applied to the up coming rates review for 2007. This paper was released in early February 2006, with a reply date of 9 March 2007.

The paper sets out in various spreadsheets the costs associated with the Amateur Service, namely the **Amateur (Radio and Spectrum Licenses) OA1 Beacon, Repeater or Fixed Link**.

Each spreadsheet details costs in the areas of:

Interference Investigation
Compliance Monitoring
Radio Licensing
Crown Management Rights
Engineering Costs
Engineering Fees

Proposed Annual Fees

As stated in the Introduction of the paper (Radio Spectrum Licence Fee's Review) this whole review of the fees is based around the "user pays" approach to fee setting, with no cross subsidies. Further the "user pays" follows both Treasury and Audit New Zealand's guidelines on fee setting. In other words this is normal government practice of the day to pass all administration, maintenance back to those groups or individuals using the radio spectrum.

The Introduction also states three options for this cost recovery:

Option A - direct adjustment of fee based on unit costs (pure cost recovery).

Option B - variable adjustment across fee categories; and

Option C - even adjustment across fee categories (half way between the current fee and unit costs).

The paper states that Option B and Option C are the long term fees strategy to be adopted by the RSM Group.

It would appear that whatever approach is taken here in either Option B or Option C that costs associated with the Amateur Service will increase over time, as a more level playing field is established and the "true" cost of the amateur service is realised.

Currently all New Zealand amateurs pay a zero fee for their annual licence. There are some costs associated with licence issuing, callsign issuing and the like, but these are handled by NZART and these costs are excluded from this paper. It is worthy to **highlight** this fact as RSM make no mention of third party interest groups such as NZART's role.

The concern here is that the cost of the annual fee for Beacon, Repeater or Fixed Link is proposed to increase depending on the option A, B or C above.

The paper proposes a new fee which is shown below (only one will apply). The assumption is that there is no increase in the current engineering fee. The current Fee for Engineering is \$ 300.00

Current Fee for Licence \$ 50.00

Proposed Fee Option A - \$ 300.00

Proposed Fee Option B - \$ 75.00

Proposed Fee Option C - \$ 200.00

Summary

The "billing" system for amateur radio repeater licence fees in New Zealand is unworkable and a solution must be found.

Other counties have moved to all-free-licences for radio amateurs.

Four solutions present themselves:

Solution ONE: relates to the concept of some type of "public good" type funding and it is believed this will require government consideration outside of MED / RSM / NZART. The solution proposed is supported by changes made earlier in Canada and more recently in the United Kingdom as examples.

Solution TWO: as NZART has now taken over the role of examinations, callsign issuing, and frequency management within the amateur service as examples, this has lessen the workload on the RSM and therefore no increase in fees is warranted.

Solution THREE: involves an extension **of the GURL** applicable to the Amateur Radio Service (which by its terms does not extend to include repeaters, beacons and fixed links).

Solution FOUR: if an increase in fees is required, the best of the options A, B and C, then NZART would have to support the less costly solution of Option B.

NZART prefers option ONE.

Appreciation

The opportunity to make this submission on this very important topic is appreciated.

A meeting could be arranged for further discussions and before any decisions are made if considered to be necessary.

Respectfully submitted,

Bruce Douglas (President NZART)
Mark Gooding (Councillor NZART)
NZART Administration Liaison Officer[s]

Appendix 1: Amateur Radio Nation-wide Repeater Network

New Zealand radio amateurs have established a nation-wide network of repeaters. These are detailed in the annual *NZART Callbook*. The network represents a large investment of capital, time and expertise by volunteers. It is professionally managed by volunteer experts.

The entire network is available for AREC purposes and is used for emergency and search and rescue work by experienced voluntary operators using their own terminal equipment. It is regularly exercised.

These repeaters meet the requirements of Recommendation ITU-R M.1042-2 (see Appendix 3).

That Recommendation includes the words: “*that administrations encourage the development of amateur service and amateur-satellite service networks capable of providing communications in the event of natural disasters*”. Through volunteer effort and resource such a network is up-and-running in New Zealand.

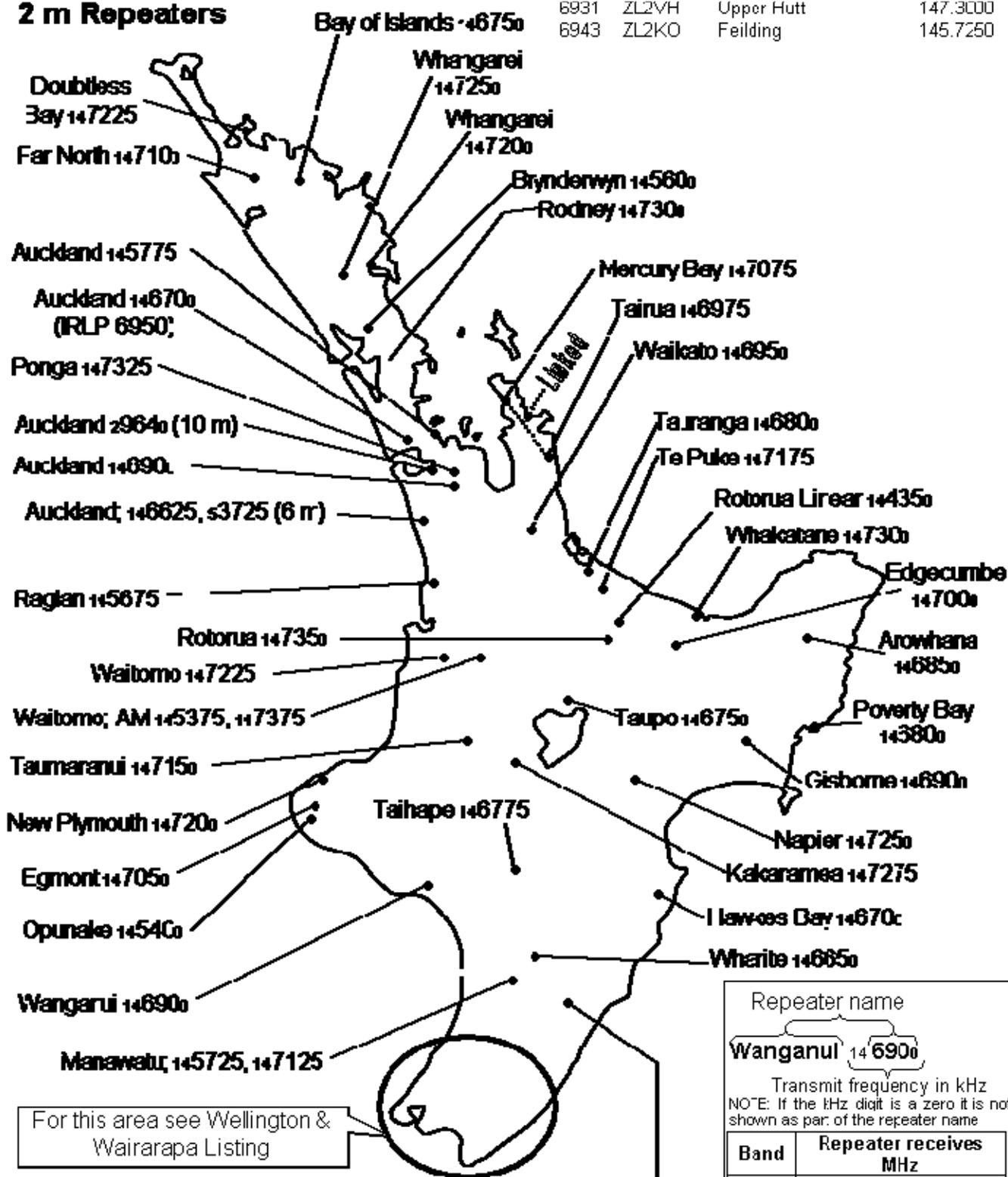
The only thing lacking to assure its continuing effectiveness is the resource to meet the annual licensing fees.

The maps following are examples, three of the seven that appear in the 2005-2006 NZART Annual Callbook. A copy of the Callbook can be provided on request.

North Island Amateur Radio 10 m, 6 m & 2 m Repeaters

IRLP Nodes @ 27 May 2005 from <http://www.irlp.net/>

6493	ZL1TN	Howick, Auckland	432.7000
6549	ZL1IS	Waikato Repeater	146.9000
6793	ZL2AS	Hastings	147.4750
6920	ZL2SH	Wairarapa/Manawatu	146.8250
6931	ZL2VH	Upper Hutt	147.3000
6943	ZL2KO	Feilding	145.7250



For this area see Wellington & Wairarapa Listing

0 100 200 km

Taranua Voice & Data 145675

Repeater name	
Wanganui 146900	
Transmit frequency in kHz	
NOTE: If the kHz digit is a zero it is not shown as part of the repeater name	
Band	Repeater receives MHz
10 m	Low -0.1
6 m	Low -1
2 m	Low -0.6 High +0.6 for transmit 147025 to 147375

Wellington & Wairarapa Amateur Radio 10 m, 6 m, 2 m, 70 cm, 32 cm & 23 cm Repeaters

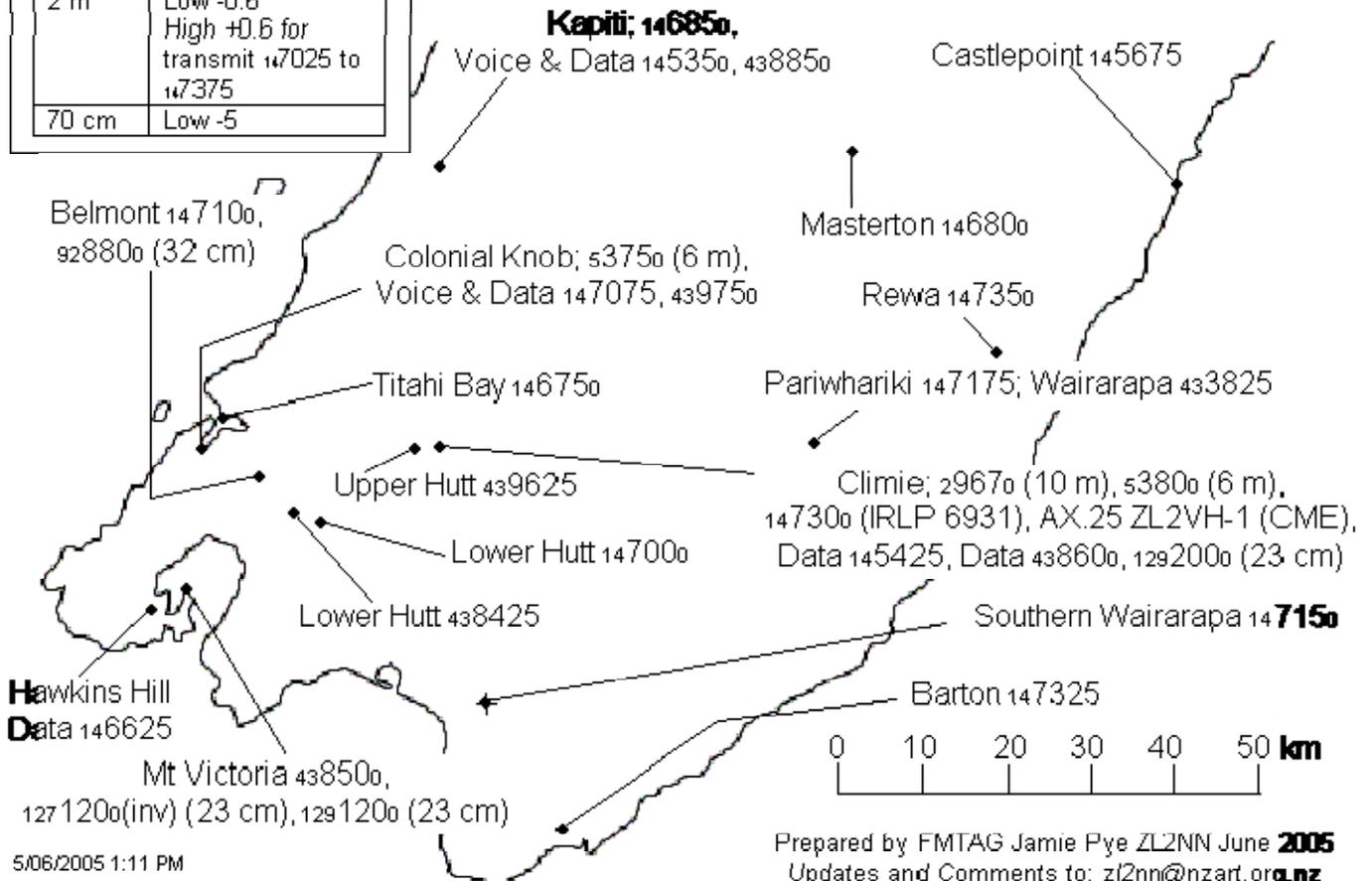
IRLP Nodes @ 28 May 2005 from <http://www.irlp.net/>
6931 ZL2VH Upper Hutt 147.3000

Repeater name

Masterton 14 6800

Transmit frequency in kHz
NOTE: If the kHz digit is a zero it is not shown as part of the repeater name

Band	Repeater receives in MHz
6 m	Low -1
2 m	Low -0.6 High +0.6 for transmit 147025 to 147375
70 cm	Low -5



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IRLP Nodes @ 28 May 2005 from <http://www.irlp.net/>

6184 ZL4DM Dunedin 147.4250
 6285 ZL2KS Blenheim MARL 432.7000
 6900 ZL3TMB Christchurch 147.2000

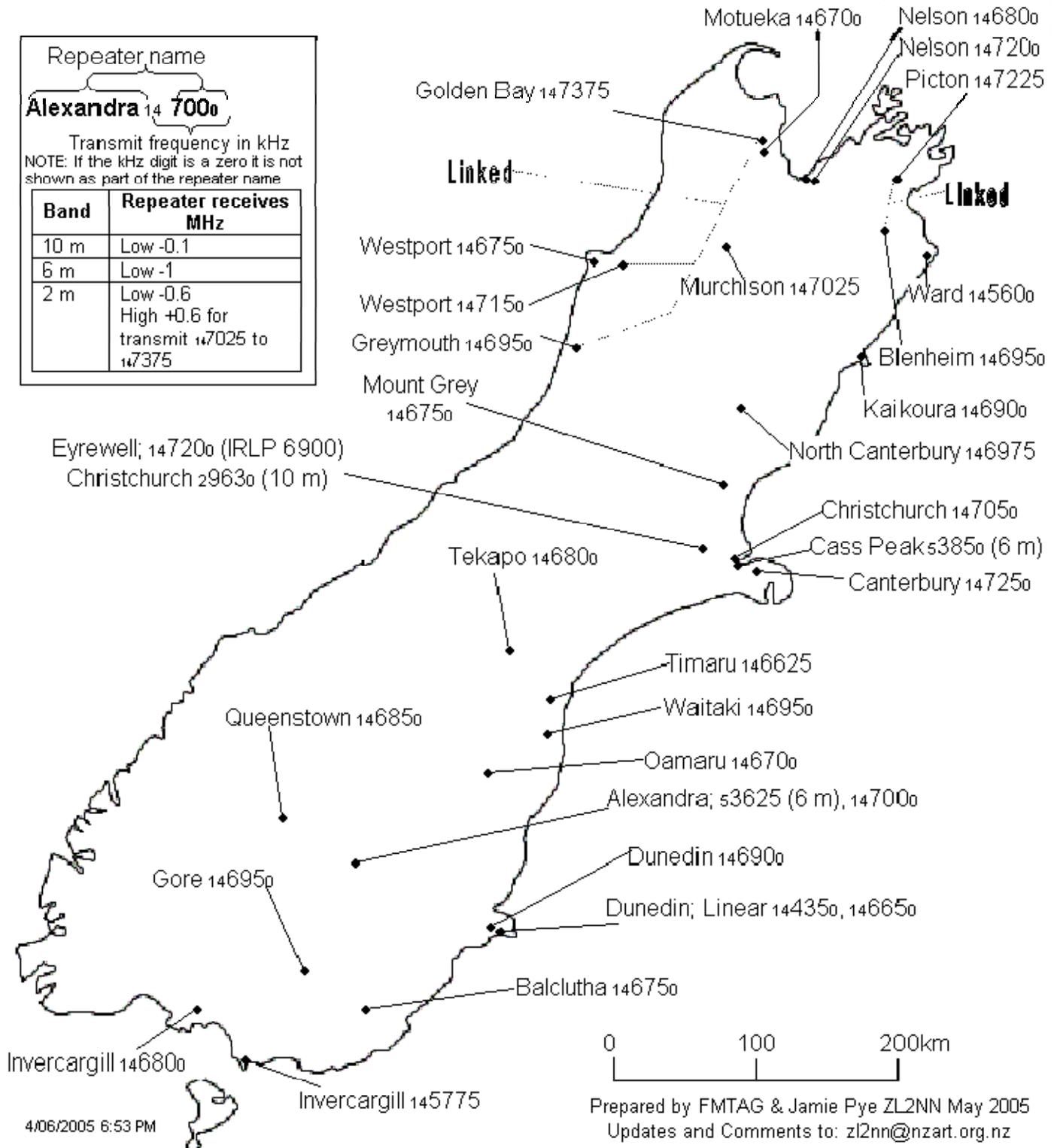
South Island Amateur Radio 10 m, 6 m & 2 m Repeaters

Repeater name

Alexandra 147000

Transmit frequency in kHz
 NOTE: If the kHz digit is a zero it is not shown as part of the repeater name

Band	Repeater receives MHz
10 m	Low -0.1
6 m	Low -1
2 m	Low -0.6 High +0.6 for transmit 147025 to 147375



4/06/2005 6:53 PM

Prepared by FMTAG & Jamie Pye ZL2NN May 2005
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Appendix 2: AREC (Amateur Radio Emergency Communications)



Amateur Radio Emergency Communications:

AREC - Who are they?

Origin

AREC was established by New Zealand's national amateur radio society, the New Zealand Association of Radio Transmitters Inc., NZART, following the Napier Earthquake in 1932. Amateur radio had a very significant communications role in the days following that quake.

Purpose

AREC has qualified operators available with suitable equipment to provide reliable communications to meet any emergency communication requirement anywhere in the country.

Tasks

Communications have been provided for thousands of events since 1932. Searches, natural disasters, civil emergencies and total or partial loss of telephone communications have benefited from AREC assistance.

Support

The parent organisation, NZART, provides assistance with finance, advice and administrative assistance when called upon. Special station identifiers for AREC stations are made available by the Ministry of Economic Development. These unique "E" call signs give priority over other stations using the frequency bands allocated to amateur radio operators in the radio spectrum.

Organisation

There are eighty AREC Sections in New Zealand, each with a Section Leader. AREC Sections are attached to an NZART Branch. The Sections are organised into four geographical groups each with an Area Manager. There is a National Director with a Deputy and a Secretary.

All members are Volunteers

All members of AREC are unpaid volunteers, radio amateurs drawn from all walks of life and from all professions. The word "amateur" only means that they are unpaid. The goal is to provide and to always achieve communication service of the highest professional standard.

What do they do?

AREC has developed from being just an alternative means of communication to also being regarded by the organisations using its service as Communications Advisers and Managers.

AREC Mission Statement:

To be the preferred provider of Emergency Communications to New Zealand Emergency Services

Equipment

Modern equipment worth millions of dollars is available throughout the country for emergency use. Much is privately owned by its users. More specialised radios and other items are pooled for emergency use. Items not available from commercial sources have been designed, developed and constructed by AREC members.

Exercises and Training

AREC services are available to some sporting events for training in message-handling and to bring safety and security to the sporting participants and spectators. Donations from sporting organisations are used to upgrade and to maintain AREC communications equipment.

Finance

The only regular funding for AREC is a small grant from the Police Department each year.

Communications vehicles

Many AREC districts have specially modified vehicles fully equipped with communications equipment and maintained for ready response in an emergency.

Communications conditions

Different areas in the country have different needs. Communications facilities are tailored to the local requirements. VHF hand-held transceivers are used in the field with repeaters in most areas. Special light-weight portable cross-band repeaters are being increasingly used. HF radio is extensively used to overcome geographical conditions.

Future equipment and training

There is strong commitment to upgrade the standard of equipment and the training of operators. Seminars and special courses take place all over the country. A modular training system has been developed. National and local procedure manuals and guides have been prepared. Closer and more direct contact with 'client users' is encouraged.

Who are the 'clients'?

Search and Rescue has undergone major changes with the formation of 'New Zealand Land SAR Inc.' for searches involving civilian search teams. AREC is an Associate Member and is represented on its Communications Sub-committee.

Civil Defence is being replaced throughout NZ by Emergency Management Groups. In most areas AREC has a commitment to assist with the reorganisation of communications for these groups and to advise and to help train personnel in the wide variety of communications methods now available. These new emergency groups will inevitably need additional equipment and operator resources from AREC.

Where are they heading?

Emergencies and the requirement for searches in New Zealand continue unabated. Satellite communications and GPS (global positioning systems) are increasingly used. The geographical nature of the country requires the highest standard of communications and the best technology. Every effort is made to ensure that New Zealand has the most modern and efficient emergency communications possible.

New directions

AREC embraces new technology for the best communications so the safety of the public and the many volunteers who give so freely of their own time is not disadvantaged. Amateur radio operators have been able to use and to adapt their own private equipment for emergency purposes. Changes in technology and in frequency allocations tend to now dictate the use of more specialised equipment. Amateur owned and operated equipment will still be used as communications back-up. New developments in technology bring new requirements for additional specialised resources and funding.

Welcome

AREC Sections and NZART Branches keenly welcome new members.

Web References:

The AREC Home Page:

This page leads to AREC Operating and Training information and the web pages of AREC Sections:

<http://www.nzart.org.nz/nzart/AREC/>

Award-Winning Performance – The Presentation Ceremony:

AREC was awarded the Inaugural New Zealand National SAR Award - 2001, at a presentation ceremony on the 1st of February 2002: <http://www.nzart.org.nz/nzart/AREC/natsaraward.html>

AREC Activities

AREC has provided the following Table, compiled from its records.

Interpretation of the Statistics Table:

This information is taken from the AREC database in *March 2006*. AREC has a web site for people to input their activity. This is then added to the AREC national database. The national database records information about AREC activations.

Access to input to the AREC national database is through the AREC web page.

“*Activations*” are the times that AREC assists either the SAR (Search and Rescue), CD (Civil Defence), the Rural Fire Authority or a training event.

A “*Training Event*” is a SAREX (Search and Rescue Exercise), a CDEX (Civil Defence Exercise), a sports event or an organised AREC training day. (Not all events are captured. A few Section Leaders sometimes miss reporting but this occurrence is low and it is expected that the statistics reflect about 95% of all activities.)

The “*Year*” is shown.

“*Area*” is shown as ZL1 = 1, ZL2 = 2, ZL3 = 3 and ZL4 = 4, meaning the AREC areas of Northern, Central, Midland & Southern.

“*Number of Activations*” is the times the AREC Sections in that area were activated, being any of the Sections within that area and could have been several activations by just one section.

“*Event Type*” is a coding given for the event.

“*Activity Type*” is shown as:

“SAR” is a SAR operation, not an exercise or training.

“SAREX” = SAR training.

“CD” = CD operation.

“Rural Fire” is a rural fire event where an AREC section has manned or supplied communications for a rural fire (the Rural Fire Service is a part of the NZ Fire Service).

“*No of Ops*” is the number of operators who were committed to that type of event in that area. For example ZL1 had 28 activations for SAR (i.e. searches) involving 38 operators and committed 220 voluntary man hours in doing so.

The entries with a “\$” sign indicate the total of estimated invested capital value of the resources committed to and used for that Activity Type in that area.

Year	Area	Number of Activities	Event Type	Activity Type	No of Ops	Total Man Hrs	SAR\$	CD\$	AREC\$	Private\$
2005	1	28	1	SAR	38	220	\$128,800	\$4,000	\$35,000	\$39,100
	2	10	1	SAR	20	290	\$12,200	\$0	\$11,000	\$2,800
	3	21	1	SAR	55	395	\$37,100	\$1,200	\$184,660	\$26,286
	4	3	1	SAR	10	32	\$18,000	\$200,000	\$5,000	\$16,000
Total SAR		62			123	937	\$196,100	\$205,200	\$235,660	\$84,186
2005	1	16	2	SAR Training	33	921	\$6,410	\$3,500	\$26,100	\$39,350
	2	4	2	SAR Training	16	209	\$23,400	\$0	\$2,000	\$0
	3	9	2	SAR Training	27	431	\$20,500	\$0	\$125,750	\$68,350
	4	2	2	SAR Training	10	136	\$15,010	\$100,000	\$10,010	\$8,000
Total SAR Training		31			86	1697	\$65,320	\$103,500	\$163,860	\$115,700
2005	1	0	3	CD	0	0	\$0	\$0	\$0	\$0
	2	0	3	CD	0	0	\$0	\$0	\$0	\$0
	3	1	3	CD	1	12	\$0	\$0	\$0	\$0
	4	0	3	CD	0	0	\$0	\$0	\$0	\$0
Total CD		1			1	12	\$0	\$0	\$0	\$0
2005	1	4	4	CD Training	10	98	\$0	\$6,000	\$0	\$0
	2	4	4	CD Training	20	55	\$2,000	\$3,500	\$1,000	\$10,500
	3	12	4	CD Training	38	151	\$0	\$0	\$25,300	\$4,500
	4	2	4	CD Training	34	60	\$0	\$120,000	\$0	\$4,000
Total CD Training		22			102	364	\$2,000	\$129,500	\$26,300	\$19,000
2005	1	23	5	Sports & Training	95	1469.5	\$16,600	\$0	\$55,500	\$105,500
	2	9	5	Sports & Training	72	785.5	\$0	\$0	\$10,100	\$43,250
	3	8	5	Sports & Training	49	625	\$0	\$0	\$141,600	\$251,320
	4	3	5	Sports & Training	21	402	\$2,000	\$100,000	\$18,000	\$27,015
Total Sports and Training		43			237	3282	\$18,600	\$100,000	\$225,200	\$427,085

2005	1	0	6	Rural Fire	0	0	\$0	\$0	\$0	\$0
	2	0	6	Rural Fire	0	0	\$0	\$0	\$0	\$0
	3	3	6	Rural Fire	6	26	\$0	\$1,800	\$2,500	\$2,000
	4	0	6	Rural Fire	0	0	\$0	\$0	\$0	\$0
Total Rural Fire		3			6	26	\$0	\$1,800	\$2,500	\$2,000
2005	1	0	7	Rural Fire Training	0	0	\$0	\$0	\$0	\$0
	2	0	7	Rural Fire Training	0	0	\$0	\$0	\$0	\$0
	3	2	7	Rural Fire Training	18	241	\$0	\$0	\$5,700	\$3,500
	4	0	7	Rural Fire Training	0	0	\$0	\$0	\$0	\$0
Total Rural Fire Training		2			18	241	\$0	\$0	\$5,700	\$3,500
2005	(National)	3	9	Administration	3	256	\$0	\$0	\$0	\$0
	0									
	1	1	9	Administration	1	60	\$0	\$0	\$0	\$0
	2	1	9	Administration	1	4	\$0	\$0	\$0	\$0
	3	0	9	Administration	0	0	\$0	\$0	\$0	\$0
	4	0	9	Administration	0	0	\$0	\$0	\$0	\$0
Total Administration		5			5	320	\$0	\$0	\$0	\$0
2005 Totals		169			578	6879	\$282,020	\$540,000	\$659,220	\$651,471

Appendix 3: ITU-R M.1042-2

RECOMMENDATION ITU-R M.1042-2

Disaster communications in the amateur and amateur-satellite services

(Question ITU-R 48/8)

(1994-1998-2003)

The ITU Radiocommunication Assembly,

considering

- a) Resolution 36 of the Plenipotentiary Conference (Kyoto, 1994);
- b) Resolution 644 (Rev.WRC-2000) concerning telecommunications resources for disaster mitigation and relief operations;
- c) the adoption of the Tampere Convention on the provision of telecommunications resources for disaster mitigation and relief operations by the Intergovernmental Conference on Emergency Telecommunications from 16-18 June 1998;
- d) ITU-D Resolution 34 (Istanbul, 2002) (WTDC-02) on telecommunication resources in the service of humanitarian assistance;
- e) ITU-D Recommendation 12 (Istanbul, 2002) (WTDC-02) regarding consideration of disaster telecommunication needs in telecommunication development activities,

recommends

- 1** that administrations encourage the development of amateur service and amateur-satellite service networks capable of providing communications in the event of natural disasters;
- 2** that such networks be robust, flexible and independent of other telecommunications services and capable of operating from emergency power;
- 3** that amateur organizations be encouraged to promote the design of robust systems capable of providing communication during disasters and relief operations;
- 4** that amateur organizations be allowed to exercise their networks periodically during normal non-disaster periods.

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Appendix 4: Canada - Amateur Radio Licence Fees

Canada – Amateur Radio Licence fees

Canada has adopted *free fees for life-time amateur operator licences with no annual fees for amateur repeater installations.* This policy was adopted about the year 2000.

The Canadian use of amateur radio repeaters for service in emergencies is similar to the New Zealand AREC experience.

A few typical instances where amateur radio repeaters were used intensively for a period of several days each have been supplied by Canadian amateur radio colleagues:

**February 1998 Western Quebec/Eastern Ontario ice storm
September 1998, Peggy's cove Nova Scotia Swiss Air flight 111
July 2000, Pine Lake Tornado in Central Alberta
February 2001, Pacific North West earthquake in British Columbia
June 2002, Red River flooding in Eastern Manitoba
August 2003, Forest fires in Northern British Columbia
July 2004, Flooding in Peterborough Ontario
June 2005, Flooding in Northern and Central Alberta.**

Appendix 5: United Kingdom - Amateur Radio Licence Fees

The United Kingdom – Amateur Radio Licence fees

The UK Administration is the Office of Communications, OFCOM. A document about *Wireless Telegraphy Act Licence Fee Proposals* dated 12 April 06 is on the web page at:
<http://www.ofcom.org.uk/consult/condocs/internetlicence/>

In Para 1.2, mention is made that amateur licences are to be free, with the added entry:
“*Amateur radio variations (e.g. authorising repeaters or internet gateway connections) Free*”

Neglecting once-only administrative charges, this makes it clear that the UK intends ALL amateur licences (with all variations) to be free.

This latest OFCOM document makes reference to the earlier OFCOM document of 14 February 2006 specific to their amateur licences at:
http://www.ofcom.org.uk/consult/condocs/aradio/statement/statement_amradio.pdf

That document outlines the history and intentions of the UK changes and indicates the OFCOM trend for ALL amateur licence grades to be free.

The 12 April 2006 OFCOM document has the following the proviso:

Para 2.7: “OFCOM is also considering whether it may be appropriate to introduce a fee for amateur radio notices of variation (used for instance to authorise repeater stations or internet gateway connections to amateur stations). Currently OFCOM does not charge any fee and does not anticipate a large number of variations to arise. OFCOM does not propose to introduce a new fee for this work, but if a significant increase in future work on variations arises, OFCOM may consider introducing a fee at a later date.”

This is a precautionary let-out and is seen as a necessary UK stance in the absence of any UK equivalent of the New Zealand “External Engineering” arrangement and NZART’s “Frequency Management and Technical Advisory Group”, FMTAG. These New Zealand arrangements very adequately provide for the coordination of radio installations at sites and are not a concern or a part of any licence-fee-setting considerations in New Zealand.
