

**Verbal submissions by the New Zealand Association of Radio Transmitters (Incorporated)
to the North Shore City Council Planning Hearing of 24 November 2006**

1. The proposed plan change was brought to the attention of the Association in May, when it was sent a copy of the agenda for a December 2005 Community Board meeting. Since the consultation period was well past, the Association made no contact with the Council at that time.
2. The proposed rules of Plan Change 18 are unacceptable to this Association, since they will cripple future installation of effective amateur radio operation, particularly high frequency (HF) operation in North Shore City.
3. No consultation was held with the amateur radio group. This was an inexplicable and most unfortunate oversight. Clearly the amateur radio antennas and supports were not an issue for the Council, otherwise those issues would have been known to those involved with the plan change preparation, who would then have been aware that there were issues over which consultation should take place.
4. There is **no** evidence or background of community concerns, arising from the amateur radio service, which has now been caught up in solutions which have been developed to resolve different concerns. Your planner has told me this.
5. The flexibility inherent in the Radiocommunications Act and the Radio Regulations, designed to provide an unregulated environment for technical self-training and enhancement of the radio art through the amateur operators license, should not be permitted to be defeated by local authorities that do not understand or make adequate provision for the needs of amateur radio licensees within their boundaries when effecting their land use planning. Where consistent with the safety of the community, local authorities should accommodate the needs of amateur radio licensees through serious exploration of less burdensome alternatives to arbitrary control by blanket height restrictions and zoning restrictions.
6. District plans continue to try and manage activities and not effects, the North Shore City Council among them. This leads to an overly prescriptive approach where councils seek to micro manage amateur radio antenna installations activities by rules that are poorly written or result from little or no knowledge of the effects on the amateur radio service caused by the rules they seek to create.
7. Councils and planners sometimes take extreme views when dealing with the notion that the amateur radio service requires installation of effective antennas.
8. There are wild variations as to how this impacts on radio amateurs around the country. The problem is largely process driven and often results from councils seeking to respond to a perception, often without any foundation, of public demand and necessity for the creation or retention of an "ideal" landscape, albeit urban or rural.

9. Council must develop a more pragmatic approach to allowing amateur radio operators, themselves all part of the vibrant community of North Shore City, and who contribute very much to the economy of the city through their competence in many fields, not just in radio technology but in commerce, industry and trade, in education and medicine, in the defence establishment, in emergency communications, and many other fields. There very involvement in amateur radio is threatened by the obdurance (and I use that term in the meaning of imperviousness to persuasion) demonstrated in the planners report, which does not enter into any discussion of the needs of the amateur radio service. The planners report is completely biased towards the control mechanism of micro-management of antenna installations, and shows no recognition of those real and essential needs. Without effective antennas the amateur service cannot exist. **Why should North Shore City Council wish to take actions which are so demonstrably contrary to the continuation of amateur radio? Is it the intention that North Shore City should become the only locality in New Zealand which effectively disallows amateur radio.**

10. There are major differences between the radio networks of the network utility operators and the operations in the amateur service.

Network communications operators use mainly distributed networks operating in the ultra high frequency bands (UHF) bands, and operating through sites such as cell-phone sites, gathering and concentrating data, with multiple data, video and voice systems which stream from local collector nodes over point to point links feeding into trunk services, just as the land line telephone system does throughout the system of local lines feeding local exchanges, which are then connected to major exchanges, and onwards through trunk lines to destinations, using high capacity systems.

The television and radio broadcasters systems use high power transmitters in elevated locations to transmit omni-directionally to viewers and listeners. In hilly localities the coverage can be problematic, and infill in shadowed areas is provided by local low-power repeaters.

Amateurs, on the other hand, operate over mainly on a one to one basis, fund their own installations, are only permitted to communicate with other amateurs, and not being permitted to pass third party traffic, do not generate any revenue. Clearly the distributed network technologies available to the network operators are neither available to the amateur service nor financially possible. The network operators are able to fund the network technologies of the distributed network. There are absolutely no similarities between the communications systems of the network operators and the amateur service. This raises the question then of why these differing systems, with entirely different requirements in terms of the gain performance and frequency of operation of antenna installations, should be subject to the same rules imposed by the territorial local authority?

11. The planners report, in its consideration of the amateur radio service appears to be predicated entirely on the assumption that rules which can be applied to the network utility operators without undue duress can be applied equally to the amateur service. Such assumption is entirely bereft of any basis of reason or fact, and demonstrates a complete lack of understanding of the differences between between the amateur service and the other users and suppliers of radio-communication services. Regrettably it is the view of this Association that the proposed plan and the planners report are hostile to the amateur service.

12. In respect of the issue of emission monitoring and testing, it is very encouraging to note that the submissions of NZART, of a number of its branches, and of many individual amateur radio operators have been accepted, and that the information provided in the submissions has been confirmed through consultation with the NZ National Radiation Laboratory.

It is, however, very discouraging that the same diligence expressed by the obtaining of independent expert technical advice in the matter of radio frequency emissions has not been applied to investigation of the essential needs of the amateur radio service in respect of antennas and their supporting structures. We strongly believe it is incumbent on the planning report to provide sound independent expert advice to the hearing where the technical issues and concepts are beyond the expertise of those presenting the report. Radio-technology is a very complex subject.

It is manifestly evident that due consideration has not been given to the submissions of NZART, a number of its branches, or the many individual amateur radio operators.

13. Amateur radio antennas and their supporting structures are open structures with very small solid surface areas. They are composed of thin wires and/or rods and slender structural elements. As such they never create a continuous surface obstructive to the passage of light. Due to their minimal area, amateur antennas and their supporting structures, in all instances, cast only slight shadows. For this reason they should not be controlled by the same rules for set-backs and recession planes as are applied to buildings which have bulk, and which generate shading. There are thousands of trees throughout the City which generate far more shading and bulk than any amateur radio aerial or antenna installation ever has; where is the public concern over these?

14. Referring to the planners report;

The mounting of HF Yagi antennas on residential buildings is not a satisfactory arrangement. Such antennas are almost exclusively mounted on masts, and to suggest that they should be building mounted is impracticable. Some relief has been provided through the "private pole aerial" concept, but the proposed limitation of height to the zone maximum, which is 8 metres in the residential zones, where most amateur operators reside, is far from acceptable for amateur radio operators.

Page 14 14.3.4 No 20/1

Discussion 1.8.1

The refers to changes to take account of the importance amateur radio operators to civil defence. There is no evidence of such changes in the report, which appears to be misleading on this point.

One wonders what these changes could be. Could this matter be elaborated please.

Page 21 14.5.2.4 Nos 20/7, 20/8 and 20/9

These submissions were made to seek relaxation from the strict controls which are applied to buildings to prevent undue dominance, and excessive shading.

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shadows. For this reason they should not be controlled by the same rules for set-backs and recession planes as are applied to buildings which have bulk, and which generate shading.

Page 25 Para 4 makes the statement that the proposed rules are relatively restrictive, This is a gross under-statement. The rules are considered to be extremely restrictive, when compared with the rules adopted by councils cited in the NZART submission. I can only but wonder why the Council need to make rules which are so egregious to the amateur radio service.

Page 26 1.17.1 Discussion. The recommendation for the private aerial poles is an acceptable concept, however the height limitation is excessively restrictive. It is the contention of the Association that the height limit of 8 metres in the residential zone is so restrictive that it is tantamount to a ban on amateur radio activity, particularly on the HF bands. We find this height limitation to be quite outrageous.

Page 28 1.19 Discussion

The strong objections to 14.5.3.2.1(a)(i) have come about as a result of the poor definition of antenna in Page 37 of Plan change 18. This is discussed further below in conjunction with 14.5.3.2.1(a)(ii)

Page 30 1.19.8 Yards 14.5.3.2.1 (a)(iii)

Yard controls for dwellings and other building should not be imposed arbitrarily when aerials and antennas and in particular wire aerials, and their supporting structures create little or no shading, and have little bulk.

Page 31 Numbers of antennas

The strong objections to 14.5.3.2.1(a)(ii) have come about as a result of the poor definition of antenna in Page 37 of Plan change 18.

To anyone involved in radio technology an aerial and an antenna are synonymous, aerial being in more common usage in the United Kingdom, with antenna in more common usage elsewhere. Both words have identical meanings. "Antenna" is becoming more common word in New Zealand.

The council definition is quite different to the customary usage of the language. The definitions are poor, and not in customary use and not in line with radio-technology practice. That has caused much confusion and consternation among the radio amateur fraternity.

In Summary

15.
 - ▶ NZART believes believe that the proposed rules are arbitrary, capricious, and will adversely impact their members by, among other things, preventing their effective use of the radio spectrum that they are legally licensed to use.
 - ▶ NZART seeks a comprehensive re-assessment of the proposed Rules controlling antennas and supporting structures for amateur stations, and more generally covering antenna installations for short-wave listeners, on the grounds that the proposed rules are contrary to the Radio Communications Act; and are arbitrary, capricious, and an abuse of discretion, and arguably not in accordance with law.

16. **The Council is urged to :-**

- ▶ acknowledge that the amateur radio service should not be threatened by egregious proposed rules, designed to resolve completely separate issues,
- ▶ direct the planners to remove the application of the Plan Change proposed rules to amateur radio stations, from the proposed change,
- ▶ enter into full consultation with both the amateur radio community and independent expert advisors into the needs for and of effective antennas,
- ▶ only then prepare, consider and adopt rules applying to the amateur radio service.

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