

NZMAA Policy on RC field to field spacing

February 2008

Ref: "How close can Flying Sites Be" Presented at the 1993 NZMAA AGM

For many years now the NZMAA has maintained that the minimum field to field spacing shall be 8 Km. This has arisen from the old limit of 5 miles that was arrived at in the 1960's. As a result of the increased numbers of RC modelers, and urban sprawl near large cities, this figure has been under pressure. In 1993, this was examined theoretically and verified by practical tests, as being the "gold standard" distance at which it is extremely unlikely that interference can occur. However, it is also known, and was practically verified in 1993, that much closer spacing could be tolerated with some restrictions.

By 2006, the urban sprawl and noise pressures have increased and many clubs, especially in the Auckland area, find this severely restricting. Clubs should always first explore other means of sharing, including "split" pegboards, however, it is accepted that this may not always be effective.

As a result, the NZMAA policy is now; that while 8km spacing is desirable, it may be reduced to 5 Km with the following restrictions and precautions:

- a. The use of very low-cost, older AM, or any poorly-maintained sets is not permitted
- b. Flying towards the other field should be restricted as much as practicable.
- c. Practical tests shall be carried out to demonstrate there is no interference. (See below for the test method)
- d. While testing can ensure a fair measure of peace of mind, it is not practicable to exhaustively test all combinations of transmitter, receiver, frequency, and propagation variables.
Therefore the clubs must accept that there is always some small possibility of interference.

For information, the new limit of 5 Km is a little more conservative than some other countries. i.e. the MAAA specifies 4 Km, the BMFA specifies 2 miles and the AMA/MAAC specifies 3 miles, while the South African MAA specifies 5 Km.

Test Method.

At Field "A" choose a commonly used channel (40MHz is suggested) and fly several circuits at a reasonable maximum height, and distance, towards Field "B". At Field "B", turn on a transmitter on the selected channel, plus another two transmitters on adjacent, and the next adjacent channels (i.e.; if 40.77 is in use on Field "A"; transmit at Field "B" on 40.77, 40.75 and 40.73. Or 40.77, 40.79 and 40.81.)

Verify that no interference is observed.

Take great care to co-ordinate the operation of transmitters at Field "B" via mobile phone contact, as it is essential that these transmitters can be turned off immediately if any interference is observed

The use of a PPM system at Field "A" is essential, as the visual effects of minor interference can be masked by a PCM system.