

## **HUNTING LIONS IN THE AIR (HLITA): An Introduction to amateur radio and Lions Club participation**

### **Introduction**

Hunting Lions In The Air (HLITA) is an international Amateur Radio/Lions Clubs International contest that combines interaction between amateur radio operators and Lions clubs on a world-wide basis. It takes advantage of Post Office permission (where this is permissible) that allows non-radio amateurs (Lions) to speak on the air to other non-radio amateurs (other Lions) under the supervision of a licensed radio amateur. The contest is run in January of each year on the weekend closest to the birthday of Melvin Jones, the founder of Lionism

### **What is Amateur Radio?**

Radio amateurs are people with an interest in radio technology and communications as a hobby. Amateur Radio is the only hobby in the world to be governed by an international treaty and like Lions, radio amateurs follow their hobby for a combination of self development, international communication, service to the community in the form of providing emergency communications and fellowship in the sharing of knowledge and meeting of new friends. Strict rules apply “on the air” and the promotion of politics, religion and business interests are forbidden; the latter by law through the rules and regulations laid down by the Post Office.

### **Becoming a Radio Amateur**

In South Africa, becoming a radio ham is simple process and involves a three-hour examination that tests knowledge on the regulations governing the hobby and the theory of radio, antennas and propagation. Even if your maths is rusty or you don't have any at all, the exam should not be a problem. Twice a year, most Radio Clubs run courses for interested persons and the South African Radio League (SARL) sets and conducts the examinations on behalf of the Post Office. The process in other countries of the world is similar with varying degrees of difficulty.

Once the exam has been passed, you will be entitled to a restricted license (a ZR prefix in South Africa) that allows you to operate on VHF amateur frequency bands at 50 MHz and above (FM commercial radio stations broadcast on 88 to 108 MHz so don't talk there if you want to keep your license!). For a full license (a ZS prefix), the amateur has to pass a Morse test at 12 words a minute but no longer has to use Morse on the air unless he or she wants to. Many people never get to the Morse test because of the perceived difficulty of learning. Modern methods of learning have to a large degree taken the difficulty away and the student can be on the air at respectable speeds (20 words/minute) after a short period of study and practice.

### **The Call sign**

The radio amateur call sign is made up of a prefix and a suffix. The prefix identifies the country from which the radio amateur is calling and the suffix is a personal ID for that radio ham. For example, my call sign is ZS6RAD. The ZS identifies my country of License; South Africa, while the 6 identifies the region within South Africa. The suffix is RAD and that is me and no-one else in the ZS6 call area of South Africa. This personalisation can be extended to clubs, for example, the Lions Club of Midrand has the call sign of ZS6LCM and White River Lions have WRL. What about the other Southern Africa country prefixes? Namibia is V5, Botswana A2, Zimbabwe Z2 and Mozambique C9. Swaziland is 3DA0 and Lesotho 7P8.

### **Operating opportunities**

The full license opens up the whole world to the radio ham and it is on five of the original six HF bands that the Hunting Lions contest is run. The bands are 80 m, 40 m, 20 m, 15 m, and 10 m and those of you who remember the old valve short-wave radios on which we used to listen to BBC,

Hilversum, Voice of America and LM radio will recognise the way the bands are expressed. 80 m is 3600 kHz (kilocycles in the older terminology) 1 Hz being a frequency of 1 cycle per second.

The ability of the radio amateur to contact other stations on these bands is based on how the radiation from the sun affects various layers in the earth's atmosphere. 80 m and 40 m are called night time bands for world-wide communication while 20 m, 15 m and 10 m are called daylight bands. The 20 m band is the most popular amateur band because of all the bands, it is least sensitive to changes in the atmosphere and can be open most of the day and night to somewhere in the world. Some of you will remember the beautiful signals from the commercial 19 m band and how they were least affected by summer static.

In talking to other radio amateurs around the world, South African radio hams will change bands as the day changes. At 03:30 in the morning we'll be on 160 m using Morse code to overcome the static problems and by 06:00 we'll be on 80 m or 40 m using Morse code or voice to talk to the United States, Europe or Australia and New Zealand. Hawaii also comes through nicely on 40 m and on 20 m as will the United States over the Pacific Ocean and Australia.

As the day warms up, USA and Canada amateurs go to sleep. New Zealand, Australia, Japan and Asia follow and by midday hams from India, Russia and Europe are being heard on the 20 m and 15 m bands. If the sun has been especially active, the 10 m band will open and signals that would normally go through the atmosphere into outer space will be reflected back to our aerials by sun-ionised layers in the upper atmosphere. All of a sudden, in the early afternoon, the 10 m band is alive with voices calling in delight at the opportunity to talk to friends on a band that rarely opens when the sun is inactive.

Come late afternoon or early evening, the 10 m band tends to close down and all has gone quiet. The 15 m band is also starting to close and only the strongest stations are being heard. On the popular 20 m band however, it is business as usual and activity starts to pick up as hams in South America and then on the Eastern seaboard of the USA start to wake up. The progress of the rising sun across the USA is followed by increasing ham activity from the US Mid-West and from central Canada. Finally, amateurs from the western American seaboard are heard as the 20 m band begins to quieten down. The night time band of 40 m is now in full swing and if you are able to stay awake long enough you will be able to talk to Japan or Hong Kong or Korea on the 80 m band around midnight or in the early morning.

These are the conditions of which the radio ham operating the HLITA contest must be aware and it is his or her expertise in recognising the changes in propagation that makes winners and losers in the competition. That, and the quality of the equipment he or she is using.

### **The HLITA contest**

As a competition, HLITA is ideal for introducing inexperienced radio hams to contesting. At the same time it is challenging to the more experienced hams. It is also a great opportunity for fellowship and socialising on a National and International basis. For the radio ham, the contest can be as cut-throat as any 48 hour international contest or as laid back as you want to make it. For the Lion, keen to make contacts with other clubs and find opportunities for twinning and future liaison, the contest is a must.

Having said this, HLITA is also a difficult contest since it combines knowledge of the best time and band for radio propagation with having to find an opportunity to sleep and even say hello to the family. The latest rules have a number of changes that purists will frown over but the majority will, I think, be pleased. So, what has changed?

To begin, the contest is now a 48 hour contest; a standard that is accepted in the Amateur community as it gives everybody, conditions permitting, a chance to work and to be worked, by anyone else in the

world at least once any time of their day. You don't, of course, HAVE to work for all 48 hours unless you are a multi operation or superman!

For the purpose of the contest, which is for members of Lions Clubs to exchange greetings and salutations between each other, the use of the Single Side Band mode or SSB is the obvious choice. CW or morse code is there for those who enjoy this mode of operation. The points distribution has changed to give greater emphasis to the importance the Contest Committee places on contacting other Lions Clubs.

The station ZS6LCM of the organizing club Midrand, has replaced the US Melvin Jones Memorial Station W7YU. W7YU, located in Arizona close to the birth-place of Melvin Jones has not been heard for a couple of years and ZS6LCM has been introduced as an alternative until another station in the US can be established to replace W7YU.

The points for contacting the organizing station ZS6LCM (Lions Club of Midrand) on each band are increased in proportion to the ease of contact: easy for South African stations but less so for DX stations. Finally, the multiplier. This has caused much confusion although it is fairly straight-forward to work out. To simplify matters, the multiplier is now the number of Lions stations worked (counted ONCE irrespective of how many times they have been worked on other bands). The emphasis will hopefully encourage contestants to seek out other Lions Clubs

As an example, a single band station that has worked 500 contacts, including 30 Lions Club stations, will score 18 600 points ( $[470 + (30 \times 5)] \times 30$ ). It will find itself losing to the club that has worked 450 contacts and 35 Lions station prefixes for a score of 20 650 points ( $[415 + (35 \times 5)] \times 35$ ). Scoring is based on 1 point for each non-Lion contact and 5 points for each Lions club.

Hunting Lions in the Air is a Lions Project of District 410B in South Africa and an excellent opportunity to develop international social activity and twinning.

### **First find your Radio Ham!**

Preparing for Hunting Lions is a straight-forward process but, as in most things, easier said than done. Contact has to be made between the Radio Ham and the Lions Club. If you don't know anybody, look in your telephone directory for the South African Radio League/Lions District Office and get some names of radio hams/Lions Clubs in your area. Once a connection has been made, the radio ham(s) and Lions should meet to find common ground and discuss the rules to ensure familiarity. Better still, induct him or her into your Club!

### **Competition Rules**

Fortunately the rules are a bit simpler than in previous years and essential differences put into the 2000 and later rules are explained above. We must make sure that we as Lions understand the process of logging contacts during the contest and the scoring process that follows. When we need help, because of the amateur radio terminology, we'll ask for it, won't we? The rules may be downloaded from the Internet at

<<http://www.sarl.org.za/public/contests/lionita.htm>> and <<http://www.midrandlions.org.za>> and from the District 410B website at <<http://www.geocities.com/lions410b/>>

### **Scoring and Administration**

Don't leave the radio ham to work out the score. Lions do the scoring and the score sheet administration. It is after all our competition and the scoring is not difficult. The Radio Ham is opening his radio station to the Lions club for the day or is moving his equipment to an alternative venue for our advantage, so let that be the limit of his responsibilities. A Lion may even become a

radio ham or a radio ham may become a Lion.

### **Organise your Club members for the Weekend**

Organise a club roster for Lions to be there while the radio amateur is operating. Do the logging; on paper or preferably on computer using a conventional spreadsheet like Lotus, Quattro Pro, Excel or any one of a number of specially designed logging programmes. Arrange food and refreshment and above all, be supportive of the efforts being made by the radio hams on behalf of Lionism and your Club. Arrange at least one club member to be there at all times to speak to Lion members across the world and be prepared to keep notes of what is said and get the names right first time. There is nothing nicer than in the following year to remember who's who and to use their name straight away. Also there is also no better opportunity for twinning clubs and increasing international co-operation. First prize is to have Cabinet and Club Board members visiting the station and speak to the other clubs.

### **Get the scores in on time!**

Completed score sheets should be channeled to: Local Co-coordinators if these exist or to the email address below or posted direct to the Lions Club of Midrand. Remember, no prisoners will be taken for lousy unclear un-scored score-sheets! Extra time has been allocated for this and logs should be dated not later than the end of February following the contest

Midrand Lions Club's address is

PO Box 1548  
Halfway House  
1685  
South Africa

Yours in Lionism and 73

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