

VHF UHF MW
NEWSLETTER
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Please distribute this newsletter to all in your society dealing with VHF up matters and satellites !

PREPARATION FOR THE 2005 CONFERENCE

At the moment the next conference is still one year away, but you will be aware that it takes in your organisation and later in IARU a lot of time to process conference proposals.

You, therefore, will have to start preparing your contributions for Committee C.5. Our preparatory meeting in Vienna this year is a very good starting point. Did you already check the "action points" ?

At the moment the following items (a.o. !) will require your attention and contributions:

- Only EDI logs acceptable for IARU R1 contests ? Deletion of listeners sections
- New recommendation for digital audio ?
- (Still) Better text for MS procedures ?
- Microwaves bandplanning (Satellite segments, influence of CEPT ECA footnote EU35)
- Amendment of RoP of our committee concerning a vice chairman (I have already asked OE1MCU to create a draft text)
- Need for propagation coordination ?

50 MHz bandplanning

(An action point of PA2DW)

At our Vienna meeting we discussed digital modes in the 50 MHz band on the basis of a contribution from the REF. We concluded that " *further consideration needed to be given to details of designated frequencies for machine generated modes* ".

PA2DW would draft a proposal for a new bandplan for 50 MHz, based on the required bandwidth of MGM's like PSK31.

Dick did send me the following:

During the interim meeting in Vienna, the French delegation asked for a better solution for PSK31, as French amateurs only access to the 50.2 - 51.2 MHz segment of the 50 MHz band.

They proposed 50.385 Mhz for PSK31, although the IARU bandplan mentions 50.250 Mhz as the centre of activity for PSK31. Although 50.250 Mhz is within the range of the French allocation, it is in a narrowband MGM segment, the 2700 Hz MGM range of the bandplan.

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50 MHz bandplan proposal for study and discussion

Frequency (MHz)	Maximum bandwidth	Class of transmission	Usage recommendation
5000050100	500 Hz	Telegraphy, MGM	50,000 – 50,080 Beacons 50,090 Telegraphy centre of activity
5010050300	2700 Hz	SSB, MGM	50,100 – 50,130 Intercontinental telegraphy/SSB 50,110 DX calling 50,150 SSB centre of activity 50,185 Crossband centre of activity 50,200 MS centre of activity SSB 50,260 - 50,290 FSK441 50,270 FSK441 calling frequency

Satellite allocations

(An action point of G3VZV, our satellite coordinator)

At a meeting of the IARU AC a discussion took place on worldwide EXCLUSIVE use by amateur satellites of (parts) of the amateur/satellite allocations. At that meeting it became clear that the situation in the different Regions was not fully taken into account by the satellite advisor. The Region 1 representatives promised to take this subject to the Region 1 VHF/UHF/MW Committee which could at its Vienna meeting discuss the matter. We did and Graham, G3VZV, prepared after the meeting a discussion paper which was forwarded to the Region 1 EC meeting in April in Sofia.

For your information the document is reproduced here. You are invited to discuss it with your satellite experts and inform Graham about your position. We then can in Davos come to a formal position:

Background

Historically, most amateur satellite activities have taken place using the amateur bands 144MHz and 435 MHz. The heavy terrestrial use of these bands has led to the decisions to ensure that the amateur satellite service has had exclusive use of the 145.8-146.00 part of the 2 meter band and that other uses of the **435-438 MHz** "space" allocation are heavily restricted by IARU Region 1 bandplanning arrangements. Note that many Region 1 countries only have access to 432-438MHz in total. On the 1240-1300MHz band the space allocation of **1260-1270 MHz** (uplink only) has also been reserved for exclusive satellite use.

Outline bandplans have been developed for the higher bands but until recently, there have been few if any amateur satellites active there.

Proposals

There have been recent changes to the amateur microwave allocations and the need to make it easier for amateurs to use the same or similar equipment for both terrestrial and space communication has been identified. It is proposed to develop new bandplans where the same or adjacent frequencies are used for both activities. These notes have been prepared on the basis of a Region1 "perspective" and it is understood that this needs discussion with the other two Regions as their allocations and needs may differ.

- That the existing arrangements for **145.8-146 MHz** remain as "amateur -satellite exclusive"
- That **435-438 MHz** remains basically amateur satellite exclusive but sharing with low power wideband digital terrestrial reuse accepted on a secondary non interference basis.

- That **1260-1270 MHz** is an uplink only for satellites but could be shared as with 435 MHz as interference to receivers on satellites is unlikely.
- That the bandplans for **5.6GHz and above** should be modified to allow full sharing by both services as antenna directivity will prevent mutual interference becoming a problem.

Conclusion

These initial proposals are produced without intending to represent any IARU policy but intended as the basis of discussion in future IARU and AMSAT fora

Satellite activities in Region 1

Recently, G3VZV, our Satellite coordinator, together with other active amateurs, was engaged at Estec and he wrote this report (the photo shows him coordinating a 2,4 GHz RX antenna) :

SSETI Express

During the past few months a team from AMSAT-UK has been working with the Education Office of ESA to help provide S band downlinks for the SSETI Express satellite which is due for launch in May 2005. SSETI stands for "Student Space Exploration and Technology Initiative" and they have been short of RF "experts". The 437MHz transceiver has already been developed for them by DF2FQ and our addition of a 2.4GHz transmitter will enable us to use the satellite as a single channel U/S transponder. The satellite should have a 3 watt output and will use the same S band amplifier as is already being used to good effect on Amsat Oscar Echo.



Obviously there is very little other space qualified hardware being used so it is quite a big challenge for the University teams from all over Europe to produce payloads that will survive the launch and the space environment.

As well as providing the S Band hardware, AMSAT-UK members have provided "mentoring" for the students about RF, orbit data, tracking and all the facets of satellite operations with which we have become familiar over the years.

After a "Workshop" session at ESA's ESTEC facility in the Netherlands in late November, we provided a demonstration of AO51 voice reception on 2.4GHz with a miniature groundstation using just the patch feed from the G3RUH dish assembly. With a DB6NT downconverter, a couple of PP3 9volt batteries and a small VX1 2 meter handheld good signals were heard from the satellite. Interestingly a good number of the students and even some ESA staff members expressed interest in becoming amateurs.

Further information on this project, including a webcam in the integration cleanroom, is currently available at www.sseti.net

Beacon frequencies

It seems that almost all 435 MHz and 24 GHz beacons have been moved to the new frequencies. The main problem, however, is that our beacon coordinator, G0RDI, has not got that information from the societies.

PLEASE SEND HIM YOUR LATEST INFO ON THE 435 MHz and 24 GHz BEACONS IN YOUR COUNTRY

Microwave Allocations

In some countries the administration still is at work implementing the WRC2000 decisions. At that WRC our amateur allocations above 70 GHz changed dramatically. Please check with your administration if they have implemented those WRC2000 decisions

In the meantime CEPT has amended the 76 GHz allocation by adding footnote EU35 to the European Common Allocations table. Experience learned us that societies need to watch (and possibly lobby for) the national implementation of such a footnote. Otherwise we will have problems in setting up our bandplanning