



Amateur Television in the UK - Hamradio 2015 update

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UK overview

- About 100 active ATV operators
 - Mainly centred around repeaters
- Migration to digital happening but still a lot of FM around
 - DVB-S 2 and 4 Msymbols
- 35 active repeaters
- 2 new ATV bands since HAMRADIO2014!





7 1-72 MHz and 146MHz!

- The new UK ATV bands!!
- UK regulator has released on temporary license
 - We must do something different!
 - Very impressed with RB-TV experiments
- RB-TV DATV is in the band plan 😊
 - 25 watts ERP only ☹️
- 117 Kms best DX using DVB-S @ 333ks
 - MPEG-4
- You may not be able to tx
 - but we need listeners!





70cms: 430 - 440 MHz


- Very “busy” spectrum
- Military is primary user
 - And they DO use it
- 437 MHz is accepted as the UK 70cms DATV frequency
- In the RSGB band plan
- 2 Msymbols $\frac{1}{2}$ or $\frac{3}{4}$ FEC
- Many repeaters have a 437 MHz input
- Not used for repeater output!
- THE ATV DX band
 - We work many F stations
- But where are the rest of Europe?
- Use dxspot.tv for co-ordination

23cms: 1240 – 1325 MHz

- Most popular band in UK
 - Analogue and digital
 - Activity on repeaters and simplex
- 1249 MHz Repeater inputs
 - Mixed ATV & DATV
 - Keep FM for as long as possible
- Mixed ATV & DATV outputs
 - 1300 – 1325 MHz
- CAA primary user
 - Difficult to get NoVs
 - 1 year plus delays



13cms: 2310 – 2440 MHz

 Spectrum release program means we lost 40 MHz in 2015

 2010 – 2340

 2390 – 2450

 Mainly FM repeater operation

 Not a major ATV band in UK



6cms: 3400 – 3410 MHz

 The UK 3.4 GHz band is 10 MHz wide

 3400 – 3410 MHz

 8 MHz allocated to DATV!

 4 TV repeaters licensed for DVB-S

 2 Msymbols (2 MHz)

 3 on air

 Performance is better than 2.3 GHz!

 Quieter RF band







 Higher antennae gains

 Easy to rx with C band LNB

 A lot of surplus equipment



9cms: 5.6 GHz

-  A new band for ATV in UK
-  Very cheap FM gear available!
 -  2 watts Tx for <100 euros!
 -  Quad copter down links
-  1 UK repeater has an input
 -  GB3KM




3cms:

BATC

 Quiet band – not used much

 No DATV

 Band split in 2 segments

 10,100 – 10,250 &
10,350-10,500 MHz

 TV repeaters in lower and
upper segment

 All analogue







 No changes – yet...

 Only time before bottom 150
MHz goes???















UK TV repeater status

-  35 operational with primary outputs on 3 bands
-  All in shared bands
-  Digital repeater output only policy on 23cms
-  Must keep FM inputs!
-  No real experimentation with linking
-  Details for all UK repeaters at www.ukrepeater.net












The future of ATV



-  All ATV bands are under pressure
-  We must become more spectrally efficient
 -  Allows ATV to co-exist
 -  Presents a modern image to regulators and public
-  Digital ATV is the future
 -  RB-TV will get us new bands
 -  But we need standards
 -  All BATC projects = DVB-S
-  You must engage with national society and the regulator
-  We need more international co-operation
 -  Contests / technology
 -  We are the ATV community!

The BATC



-  950 members worldwide (30% non UK)
-  Publishes CQ-TV in e and paper format
-  Represents ATV on UK committees
-  Supports projects such as Digilite
-  Runs BATC shop for hard to get parts
-  Annual convention - CAT15
-  Active ATV community online forum
-  Supports DXSpot.TV
-  Runs ATV streamer



BATC.TV



- The internet portal for amateur television
- No adverts!
- Most UK ATV repeaters are streamed live
- 16 international repeaters from VK, USA, NL, ON and Argentina.
- Stream your repeater here free of charge
- Free members streams
- ISS and conferences etc

A screenshot of the BATC.TV website interface. The top navigation bar includes the 'BATC.TV' logo (ATV streaming portal) and the 'FORUM' logo (For all the latest ATV news). On the right, there are login fields for 'Username' (g8gtr) and 'Password', along with 'Forgot login?' and 'Login' buttons. Below the navigation, a message states: 'To stream your ATV repeater here free of charge, please [Contact Us](#) today!'. The main content area is split into two columns. The left column shows a video player for stream 'GB3HV' with a play button and a 'Watch >>' button. Below the player is a dropdown menu for 'GB3HV [streaming]' and a 'Multi screen selector' link. The right column is a chat window titled 'Chat Messages' with an 'Online' list showing 'guest336' and 'guest859'. The chat log shows messages from users like G8adm, AC5JW, G8DPH, and #says#. A notice from the stream owner restricts chat to logged-in members. At the bottom, there is a section for 'Home Counties Amateur Television Group' with details about GB3HV's location and frequency.


DXSpot.TV

BATC

 Initiative to enable ATV DX

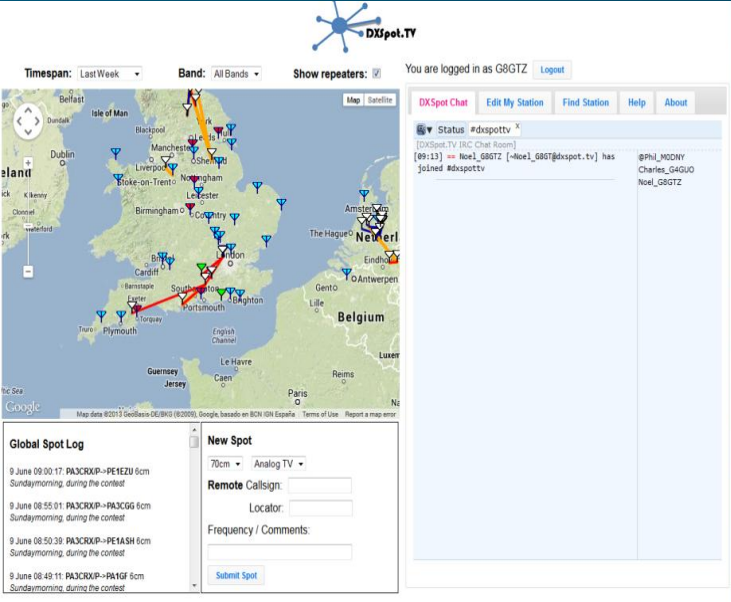
 Dxspot cluster just for ATV

 dedicated dx chat line

 Interactive maps showing ATV station and repeater locations

 Being re-written right now!






 Available to all ATV operators





The screenshot shows the DXSpot.TV website interface. At the top, there is a navigation bar with 'DXSpot.TV' logo and user information 'You are logged in as G8GTZ'. Below the navigation bar is a map of Europe with various locations marked by blue and red icons. The map is titled 'DXSpot.TV' and includes a 'Map' button. Below the map is a 'Global Spot Log' table with columns for 'Time', 'Callsign', and 'Frequency'. The table contains several entries for 'PA3CRXP' and 'PE1EZH' on '70cm' frequency. To the right of the map is a 'New Spot' form with fields for 'Remote Callsign', 'Locator', and 'Frequency / Comments'. At the top right, there is a chat window titled 'DXSpot Chat' showing a message from 'Noel_G8GTZ'.

ATV activity weekend 12/13th September









-  Not a contest – just a weekend of ATV activity
-  All bands from 50 MHz to 24 GHz
-  Digital and analogue modes
-  Repeater and simplex contacts
-  See the BATC forum for more info

-  Let's make it an international weekend!
 -  Already is in NL






CAT15 - Sept 5/6th 2015

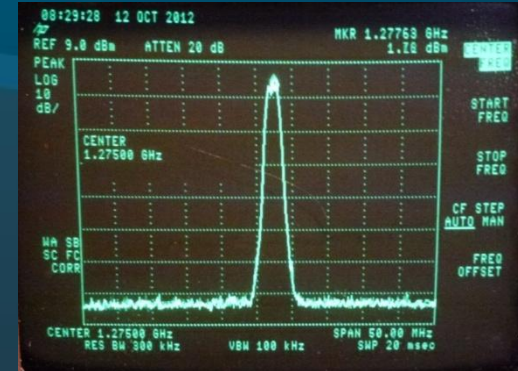
-  2 day program including talks and demos
-  Test and measurement area
-  Members flea market and demo area
-  RF and specialist traders
-  Presentation of BATC RB-TV awards
-  Finningley Amateur Radio Club
 -  Just off the M180 & 5 minutes from Robin Hood International Airport
 -  Come and join us!

ATV is alive and well in the UK!



 DATV is happening

 Old bands are under threat but we are gaining new ones!



A screenshot of the BATC website. The top navigation bar includes 'BATC TV ATV streaming portal' and 'BATC FORUM For all the latest ATV news'. A login section is visible with fields for 'Username' (containing 'johaz') and 'Password', and a 'login' button. Below the navigation is a chat window for 'GB3HV' with a video feed of a woman and a list of chat messages. At the bottom, there is a forum post titled 'Home Counties Amateur Television Group' with details about a new stream location near Farnham in Surrey.



The cover of the CQ-TV magazine, No. 246, December 2014. The title 'CQ-TV' is in large blue letters. Below it, the text reads 'New Band, New Mode, New Award...'. At the bottom, it says 'Reduced Bandwidth TV is here!' and features an image of a television circuit board. The BATC logo is in the top left corner.