
1296 MHz sced from KM17

Posted by sv1eex - 2009/06/17 09:58

Hello all.

I am looking for interested hamradio ops in 1.2 GHz testing from any #.

My system includes an IC-910 with 1.2 GHz module (10W TX), heliax coaxial and 33 el. tonna yagi. May operate from KM17tw (that's where is my QTH) or portable.

73 de sv1eex - Nikiforos

Re:1296 MHz sced from KM17

Posted by neazoi - 2009/06/17 11:48

Hello sir,

Nice system you've got there!

Personally I have not got a 1.2GHz system but a 10GHz system, but another member may be interested to make a QSO with you.

Re:1296 MHz sced from KM17

Posted by neazoi - 2009/06/17 11:49

I am looking for 10GHz QSOs in Greece and Europe but I am missing a final part in the chain, a WR90 flexible waveguide 20-50cm.

If anyone has that part for sale please let me know.

Re:1296 MHz sced from KM17

Posted by sv1eex - 2009/06/17 11:58

Thank you vy much for your kind reply!

I wish I had the time to make/buy a transverter for the 10 GHz band that really seems really interesting (like all the rest of the microwave bands). I hope that in time I will obtain one and will try.

There is some recent information about licencing on use of this band from SV land here(Greek language):

<http://62.103.213.195/10Ghz.htm>

The use of the band in Greece for the hamradio ops is on a secondary basis, unfortunately.

73 de sv1eex

Re:1296 MHz sced from KM17

Posted by neazoi - 2009/06/17 12:06

Thanks for the usefull info, really interesting for the Greek members!

You cannot buy many equipment on 10GHz. Usually the equipment is homebrowen in 10GHz and up.

I have sent my transverter project at Dubus for publication. It will be published on 3rd or 4th issue of 2009. After the publication at the magazine I will make it available in the Greek Microwave Group site in the projects section.

It is a transverter than anyone can build, like a puzzle. You do not need expensive PCBs and materials to build it, I think it is really interesting.

Re:1296 MHz sced from KM17

Posted by neazoi - 2009/06/17 12:18

I have sent also an email to the person in charge, maybe they will let us put the relevand form in the GMG website, in order to be available for the Greek members to download it.

Re:1296 MHz sced from KM17

Posted by neazoi - 2009/06/17 12:29

It will be also great to put a link of your website here, in the GMG site, as it is very interesing website. Just click on the "Submit WebLink" menu after you login to the site.
Put a link of the GMG to your site too if you like, we will appreciate this.

Re:1296 MHz sced from KM17

Posted by sv1eex - 2009/06/17 13:08

UFB!Thank u vy much fer info!

I will be looking fw to seeing the design.

I had in mind the DB6NT transverter <http://www.ssbusa.com/mkutv2.html> but homebrewing is fun and wallet saver :)

73!

Re:1296 MHz sced from KM17

Posted by neazoi - 2009/06/17 13:12

you can see a picture of mine here <http://neazoi.com/lab/dsc01149.jpg>
but this is ages ago, it has been much inproved sinse then.

Yes the one that you show is a classic transverter, all in one.

I have seen it in many constructions but I prefer making one on my own the way I want it :)

Note: Transverters are lossy and bad compared to direct conversion equipment.

There are ways to make direct ssb modulators/demodulators for 10GHz, that are far better than transverters. See http://www.microwave.gr/index.php?option=com_content&task=view&id=80&Itemid=104 for more info. They are more complex though...

Re:1296 MHz sced from KM17

Posted by sv1eex - 2009/06/18 06:42

TU fer info!

My antenna info fer 1.2 GHz band: <http://www.ukw-berichte.de/English/ukw-docs/pdf/antennas/00621E.pdf>

I am also looking for the 55 elements version (one day!) 2x stacked scenario at 19.9wl each....

<http://www.ukw-berichte.de/English/ukw-docs/pdf/antennas/00618E.pdf>

73!

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Re:1296 MHz sced from KM17

Posted by neazoi - 2009/06/18 06:53

Sir,
Have you built this antenna by yourself?
If so it would be nice to see some plans of it.

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Re:1296 MHz sced from KM17

Posted by sv1eex - 2009/06/18 07:46

TU fer reply!

No, it is not hm...it is the Tonna 1296 MHz 35 element antenna.

My hm was unfortunately broken during transportation not long ago.

For designing and homebrewing my yagi antennas I use the fb program by VK5DJ called Yagi Calculator. I have already working beams for 2m/70cm that operate very well.

I would be more than happy to provide any assistance in designing such solutions! I have also made a quad for 1.2 Ghz but I was not so happy with the tests that showed significant side lobes also that I couldn't explain.

73!

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Re:1296 MHz sced from KM17

Posted by neazoi - 2009/06/18 07:55

This is very interesting,

I am currently interested in antennas designed/printed on PCB.

At above 1GHz these become more practical and easy to make. You can also make many different sizes and shapes inductors that you would not be able to do with conventional antennas.

I do not know any software to design and simulate such antennas, do you know any?

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Re:1296 MHz sced from KM17

Posted by sv1eex - 2009/06/18 08:53

Yes the whole sector is also very interesting to me!

What comes in mind first is some fractal antenna implementations that seem to be of reasonably small sizes and with really wideband properties.

Unf, I have not come across any software that designs such antennas yet but there are plans around the internet.

73!

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Re:1296 MHz sced from KM17

Posted by sv1eex - 2009/06/18 09:03

Just for the record here is a very interesting Ph.D. thesis on the subject

<http://nemertes.lis.upatras.gr/dspace/bitstream/123456789/323/1/138.pdf>

It is in Greek and since it is put on the open archives library (<http://openarchives.gr/view/87895>) I presume that there is no problem with authorization from the creator for a quick reference to his fb work.

The subject is " «μ»-Ä. ÄÄÄÉ¼-½É½ °μÁ±¹½ ³μÉ¼μÄÄ±Ä !Á¬°Ä±», A study on printed antennas of Fractal geometry"

73!

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Re:1296 MHz sced from KM17

Posted by neazoi - 2009/06/18 09:15

Ah yes,
now that is a nice document. I (sw3ora) have cooperated with Professor Kalivas in the past and he is an excellent scientist.

I was thinking of a freeware software to make the job easier.
Agilent ADS is just too complex. Sonnet is a good option but it is not free (in it's full version)

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