

ANTENTOP 01 2004 #005

ANTENTOP is FREE e-magazine devoted to ANTENnas

1-2004

In the Issue:

Practical design of HF Antennas!

Antennas Theory!

Tesla's Life!

QRP!

And More

UA9JKW Helical Loop Antenna



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Nicola Tesla

EDITORIAL:

Well, my friends, new ANTENTOP – 01 -2004 come in! ANTENTOP is just authors' opinions in the world of amateur radio. I do not correct and re-edit yours articles, the articles are printed "as are". A little note, I am not a native English, so, of course, there are some sentence and grammatical mistakes there... Please, be indulgent!

Now ANTENTOP is sponsored by microHAM, please, visit to microHAM's site at http://www.microham.com/

I believe, you find many interesting there!

ANTENTOP 01 –2004 contains huge antenna articles, and several historical articles. Hope, you will like it. Our pages opened for all amateurs, so, you are welcome always, or as a reader or as a writer.

73! Igor Grigorov, RK3ZK

ex: UA3-117-386, UA3ZNW, UA3ZNW/UA1N, UZ3ZK op: UK3ZAM, UK5LAP, EN1NWB, EN5QRP, EN100GM

Thanks to our authors:

Operation, and Practice

Theory,

Prof. Natalia K.Nikolova

Edited by hams for hams

Igor Zel'din, UR5LCV Vladimir Kuz'min, UA9JKW M. Chirkov, UL7GCC Alexei Rusakov, UA4ARL Oleg V.Borodin, RV3GM Ashhar Farhan

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And others.....



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Every issue of ANTENTOP is going to have 100 pages and this one will be paste in whole on the site. Preview's files will be removed in this case. I do not know what a term for one issue will need, may be 2-3 month or so. As I have counted, a whole issue of ANTENTOP will hold nearly 10 - 20 MB.

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Mailing address: Box 68, 308015, Belgorod, Russia Email: <u>antentop@mail.ru</u> subject: **igor_ant** and, they will do this work, and we will see lots interesting articles there.

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73! Igor Grigorov, RK3ZK

ex: UA3-117-386, UA3ZNW, UA3ZNW/UA1N, UZ3ZK

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http://www.antentop.bel.ru/mirror: www.antentop.boom.ru Editorial

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Antenna Theory

Basic Methods in Antenna Measurements: by Prof. Natalia K.Nikolova

Dear friends, I would like to give to you an interesting and reliable antenna theory. Hours searching in the web gave me lots theoretical information about antennas. Really, at first I did not know what information to chose for ANTENTOP.

Now I want to present to you one more very interesting Lecture - it is a Lecture about Basic Methods in Antenna Measurements. I believe, you cannot find such info anywhere for free! Very interesting and very useful info for every ham, for every radio- engineer.

Antenna Practice

Modern Military HF- Antennas of Com. Cars: by Igor Grigorov, RK3ZK

The basic types of military antennas, which for a long time were used on communication cars, were construed during and before the World War II. After WW-II researches for new antennas for communication cars was renewed. Below we shall consider two new type of car antennas which have appeared in army after the World War-II still are in use on modern communication car. There are magnet antennas and DDRR antennas, that began to be used for communication cars (under my information) rather recently - in the middle of 70s years of the 20 century.

Practical Design of Open- Sleeve Antennas for Upper HF-Ranges:: by Dmitry Fedorov, UA3AVR

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Just practical design of Open- Sleeve Antennas

Something about Antenna Tuning Units: by Igor Grigorov, RK3ZK

4 You should not think that an Antenna Tuning Unit (ATU) is a magic thing to do any antenna work well with your transceiver. At installation between the transmitter and feeder the ATU only does matching of output impedance of your transmitter with input impedance of your antenna feeder system. It means that ATU allows to the transmitter with output of 50 Ohm to work normally with antenna plus feeder having any input impedance.

Antenna Tuning Unit for 6-meters: by Igor Grigorov, RK3ZK

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For experimental operation on the 6-meters range some antennas for others bands with ATU can be used, especially if a radio amateur only starts to work on the "magic" band. Schematic of such ATU that does match any antenna of 10-20 meters to 6-meters is shown on Fig. 1. The ATU allows match a load of 15 to 1000 Ohms with 50- Ohms coaxial cable or with end stage of the transceiver. Efficiency is not less than 70 %.

UR5LCV's YAGI for Hams: by Igor Zel'din, UR5LCV

Antennas from here were designed and optimized by Igor Zel'din, UR5LCV, and design of the antennas were wrote in the book: HF- Antennas- 3, by I. Beketov, UR4LTX, I. Zel'din, UR5LCV, Kharkov, 1994.

10 years has gone from the publishing of the book, for this time lots of these antennas became well- known to hams of the CIS. Lots of these antennas are practically made and have shown full conformity to the theoretical parameters.

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QRP- Tales by Alexei Rusakov, UA4ARL/qrp

18 Continue from ANTENTOP-03-2003, #004 63 A QRP-QSO without an Antenna: by Oleg ("Master-72") V.Borodin, RV3GM 19 October 5, 2003. Robin, M5AEF, had an unique CW QSO with RX3BO 63 from Moscow at 17 meters using only 1 watt output. You say 'it is nothing especial for 17 meters', but what do you say, if you know that Robin did not use any antenna? A Simple SSB Transceiver: by by Ashhar Farhan 64 A dual-band transceiver with a crisp receiver and a clean SSB signal is 20 described. It started its life as an investigation of the excellent S7C receiver described in EMRFD. This transceiver was specifically designed to use components that are easily available in TV and Radio spares

receiver described in EMRFD. This transceiver was specifically designed to use components that are easily available in TV and Radio spares shops. The receiver sports an above average dynamic range, very clean signal and noiseless performance. Although the components are easily available, and every detail about making it is covered here, this is not a weekend project. The design is elaborate and invites improvisation.

History

The USA Patents of Nicola Tesla

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The Strange Life of Nicola Tesla

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Nikola Tesla is the true unsung prophet of the electric age; without whom our radio, auto ignition, telephone, alternating current power generation and transmission, radio and television would all have been impossible. Yet his life and times have vanished largely from public access. This autobiography is released to remedy this situation, and to fill this *black hole* in information space.

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