

ANTENTOP

ANTENTOP 01 2008 # 010

ANTENTOP is **FREE** e-magazine devoted to **ANTENna's**
Theory,
1-2008 **Operation, and**
Practice

Edited by hams for hams

In the Issue:
Antennas Theory!

**Practical design of HF-VHF-
Antennas!**

Home brew Technique!

P.A.!

QRP!

And More....

Micro Key UA6HJQ



UA6HJQ Antenna
EDITORIAL:

Well, my friends, new ANTENTOP – 01 – 2008 come in! ANTENTOP is just authors' opinions in the world of amateur radio. I do not correct and re-edit your 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!

ANTENTOP 01 –2008 contains antenna articles, QRO and QRP articles, technical topics. Hope, it will be interesting for you.

Our pages are opened for all amateurs, so, you are welcome always, both as a reader as a writer.

73! Igor Grigorov, VA3ZNW

ex: RK3ZK, UA3-117-386, UA3ZNW, UA3ZNW/UA1N, UZ3ZK

op: UK3ZAM, UK5LAP, EN1NWB, EN5QRP, EN100GM

Thanks to our authors:

Prof. Natalia K.Nikolova
N. Filenko, UA9XBI
Boris Popov (UN7CI)
Valentin, RZ3DK
Igor Lavroushov UA6HJQ
Aleksandr, RZ3AIX
V. Polyakov, RA3AAE
N. Kisel, UA3AIC G4AYO
Yaroslav Zhukov, UA1TAT

And others.....



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Mailing address:

209- 5879 Bathurst Str., Toronto, ON, M2R1Y7, CANADA

Or mail to: igor.grigorov@gmail.com

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Welcome to ANTENTOP, FREE e - magazine!

ANTENTOP is **FREE e- magazine**, made in **PDF**, devoted to antennas and amateur radio. Everyone may share his experience with others hams on the pages. Your opinions and articles are published without any changes, as I know, every your word has the mean.

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 8-10 month or so. A whole issue of ANTENTOP hold nearly 10 MB.

A little note, I am not a native English, so, of course, there are some sentence and grammatical mistakes there... Please, be indulgent!

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Email: antentop@antentop.org subject: **igor_ant**

73! **Igor Grigorov**, VA3ZNW

ex: UA3-117-386, UA3ZNW, UA3ZNW/UA1N, UZ3ZK, RK3ZK

op: UK3ZAM, UK5LAP, EN1NWB, EN5QRP, EN100GM

<http://www.antentop.org/>

Preview: Some articles from "cooking" issue will be pasted for preview on this site, others no. Because, as I think, it must be something mysterious in every issue.

Publishing: If you have something for share with your friends, and if you want to do it **FREE**, just send me an email. Also, if you want to offer for publishing any stuff from your website, you are welcome!

Your opinion is important for me, so, contact if you want to say something!

I have a big collection of pictures, I have got the pictures and stuff in others ways, from **FREE websites**, from commercial CDs, intended for **FREE using**, and so on... I use to the pictures (and seldom, some stuff from closed websites) in ANTENTOP. **If the owners still are alive**, please, contact with me, I immediately remove any Copyright stuff, or, if it is necessary, all needed references will be made there.

and, they will do this work, and we will see lots interesting articles there.

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Editorial

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Radiation from Infinitesimal (Elementary) Sources : By Prof. Natalia K. Nikolova

- 1** 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. **5- 21**
- Now I want to present to you one more very interesting Lecture - it is a Lecture [Radiation from Infinitesimal \(Elementary\) Sources](#). I believe, you cannot find such info anywhere for free! Very interesting and very useful info for every ham, for every radio- engineer.
- Radiation from an infinitesimal dipole. Duality in Maxwell's equations. Radiation from an infinitesimal loop. Radiation zones.*

Receiving Antennas

Atmospheric Current: Practical Experiments: By V. T. Polaykov, RA3AAE, Ph. D in technical science

- 2** **22- 25**
- The Article describes some experimenters that prove the mysterious current from the Broom Antenna

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Expedition Two Element Antenna for the 20-meter Band: By N. Filenko, UA9XBI

- 3** The antenna was designed for using at DX- peditions. Antenna consists of two elements- mast in height 10 meters and in diameter 30-50-mm (it is reflector) and a dipole for the 20-m (it is driver). **26- 28**

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- 5** Rectangular shown at [Figure 1](#) has good parameters and not so sensitive to height (that is very important for low amateurs HF-ranges) compare with dipole. Upper horizon wire is broken by a nut insulator at it's center. Due to a small height the antenna is suitable for 80- and 40-meters Band. **30- 32**

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19	<p>As usual, at a Vacuum Tube PA an output tube is matched with antenna with help of a p-circuit. It is refer to use switching inductors or variometer. This matching circuit can work from 3- 30-MHz without switching inductors. The circuit is widely known among radio amateurs of 9-0 amateurs region of Russia.</p>	69



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QRP Transceivers and PAs from Accessible Part.: By Igor Grigorov, UA3ZNW (*pdf), 38 pages.

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| 20 | <p>Book in English "QRP Transceivers and PAs from Accessible Parts " (*pdf), 38 pages is a translation of Russian Book "QRP Transceivers and PAs from Accessible Parts " (*pdf), 28 pages. Russian version was published by me (on my own expenses) in 1991, in Belgorod, Russia. I had printed 2000 samples of the book.</p> | 70 |
|-----------|---|-----------|

Of course, it was not best paper used for the book as well as not good quality of printing. The book describes kits which my own company ("Vibrissa") produced at the times. Naturally, the book was the manual for the kits. Were produced 400 kits of TST (Tube- Semi- conductor- Transceiver) near 50 of them were assembled by me for customers, 200 kits SQT (Semi- conductor- Quartz- Transceiver), near 30 were of them were assembled by me for customers, 200 kits of PA, near 60 were of them were assembled by me for customers. Of course, the book will be interesting for all amateurs, not only for QRP- fans

CQ- QRP- 03

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|-----------|---|-----------|
| 21 | <p>U- QRP- C was alive only 9 years, from 1986 to 1995. At the times the club had managed lots deals. At first were united QRPers from all former USSR. It was the base for recently QRP Clubs of the former USSR- for RU- QRP- C and for UR- QRP-C. At second, a new amateur code "72" was accepted in the ham World due to efforts of Oleg Borodin, former president of the U- QRP-C. At third, 3 nice QRP- magazines were printed out. One of the magazines, CQ- QRP # 3 is pasted to AntenTop Library. The magazine is in Russian, but the schematics are international understandable.</p> | 71 |
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CQ- QRP- 02

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| 22 | <p>U- QRP- C was alive only 9 years, from 1986 to 1995. At the times the club had managed lots deals. At first were united QRPers from all former USSR. It was the base for recently QRP Clubs of the former USSR- for RU- QRP- C and for UR- QRP-C. At second, a new amateur code "72" was accepted in the ham World due to efforts of Oleg Borodin, former president of the U- QRP-C. At third, 3 nice QRP- magazines was printed out. One of the magazines, CQ- QRP # 2 is pasted to AntenTop Library. The magazine is in Russian, but the schematics are international understandable.</p> | 72 |
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Book "Radio Antenna Engineering" by Edmund A Laport,

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|-----------|---|--------------|
| 23 | <p>Chief Engineer, RCA International Division, Radio Corporation of America, Fellow, Institute of Radio Engineers 1952</p> | 73-75 |
|-----------|---|--------------|

--- Scanned and Prepared by Dave Platt AE6EO---

About the book comment by Dave Platt AE6EO: "Radio Antenna Engineering is certainly of significant historical interest, and may be of practical use as well. Although some of the designs and practices portrayed in it have been supplanted in commercial service, much of its content can still be of significant value to amateur-radio operators and to those interested in the practical aspects of high-power radio operation in the lower-frequency RF bands..."

Just brief description, photos and schematic diagram.

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	Simple "PIC- KEY": By Mike Kislinsky, RX9CBI	
25	<p>This simple "PIC- KEY" provides sending Morse Code in two modes. First, that was written in the memory (four memory cluster), second, with hand jambic manipulator.</p>	78- 79
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26	<p>Transceiver SQT (Semiconductor Quartz Transceiver) firstly was described at book "QRP Transceivers and PAs from Accessible Parts." The book (in Russian) is at Antentop Free Library. The article is English translation of the Russian one. Shortly about SQT:</p> <p>DC CW Transceiver, X- tall VFO, VFO range up to 20 kHz (depenfs on used crystal), 50-Ohms Antenna, head-phone RX with sensetivity near 1- micro-Volt, Power Supply is 12-V, RF out is near 1-Wtts, any HF- amateur band or 2-3 amateur band (options, depends on used crystal), made on transistors.</p>	80- 93
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