

ANTENTOP

ANTENTOP 02 2010 # 014

ANTENTOP is **FREE** e-magazine devoted to **ANTENna's**
2-2010 Theory,
Operation, and
Practice

Edited by hams for hams

In the Issue:
Antennas Theory!

Practical design of HF Antennas!

Underground Antennas!

EH- Antennas!

TV- Antennas!!

QRP Transceiver!

And More....

**UA6HJQ Experimenters with
hand- held**



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**EH- Antenna 160- m
UA1ACO**



EDITORIAL:

Well, my friends, new ANTENTOP – 02 -2009 come in! ANTENTOP is just authors' opinions in the world of amateur radio. I do not correct and reedit 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 02 –2010 contains antenna articles, description of antenna patent, QRP- Stuff. 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

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

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Editorial

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Antenna Theory

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Aperture Antennas - Part I : 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- 15
- Now I want to present to you one more very interesting Lecture - it is **Antenna Noise Temperature and System Signal-to Noise Ratio**.
- The performance of a telecommunication system depends very much on the signal-to-noise ratio (SNR) at the receiver's input. The electronic circuitry of the receiver (amplifiers, mixers, etc.) has its own contribution to the noise generation. However, the antenna itself is a significant source of noise... .

HF- Antenna Practice

Grounded and Underground Antennas

- 2 Just a Chapter from the book: Alpert, Bulatov, Runge: Antennas of the Third Reich: Published by Ministry of Defense of the USSR, Moscow, 1948. (Circulation: 300 copies). 16- 21

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- 3 Some information about Underground Antennas from a Russian Forum at www.cqham.ru 22- 23

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Credit Line: Radio 1951, # 4, p. 39 32

Simple design of a Conical Windom Antenna



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Design of a Directional Antenna for the 430- MHz

- 18 **Vertical ZL- Beam Antenna for 430- MHz: by Vladimir Polyakov, RA3AAE, Moscow** **68- 69**

I would like to make a simple directional antenna. After I had observed lots variants I stopped at ZL- beam with two elements with active feeding. The antenna looked very attractive for me. This one at its small sizes (only $\lambda/8$... $\lambda/10$ in length) was practically the same parameters as 3- element YAGI.

- 19 **Simple Ways to Increase Communication Range of a Hand- Held Radio: by Igor Lavrushov , UA6HJQ** **70- 73**
- Several simple tips to increase the communication range of a hand- held radio with help of anything near by...



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Just a description of the patent