

## Полёт QRP птички... или Свобода работать QRP

Автор: Vlado Z35M

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В июньском номере американского журнала "CQ" за 2012-й год опубликована статья нашего одноклубника Vlado Z35M. В статье интересно рассказано об искусстве работы QRP из разных мест и в разных условиях. Автор упоминает RU-QRP Клуб и на примере своего участия в 2012-м году рассказывает основную идею нашей игры "Мороз -Красный нос". С любезного разрешения Vlado его статья в виде копий страниц журнала публикуется на нашем сайте.

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## Take It to The Field Special

*If you think HF hamming requires a dedicated room and a dedicated antenna, then you've never met Z35M, who has put together an ultra-portable HF QRP station and has operated from ... well... just everywhere.*

# Flight of the QRP Bird ... or the Freedom of QRP

BY VLADIMIR KOVACESKI,\* Z35M

**M**aking local and DX contacts, even having a small pile-up, is possible from just about anywhere (see photo A) with an ultra-light HF QRP setup weighing less than four pounds, including radio, battery, antenna, coax, a fishing rod as antenna support, ear bud, mini paddle, light ropes, paper log holder, and all wiring and cables (photo B; also see sidebar for detailed station description). A resonant low-mounted dipole in an inverted-V configuration or a quarter-wave wire vertical with a few ground-mounted radials may be used without an additional antenna tuner. The complete station can be packed in a small rucksack together with other non-radio stuff and needs only 15 minutes to set up at almost any location—the real “Freedom of QRP.”

The freedom of QRP may be compared to the freedom of a bird. *If there is enough space for a bird to land, there is enough space to accommodate an effective ultra-portable HF QRP station.* Bear this in mind when you hear complaints from hams that they have no possibility of installing antennas at their homes or other locations. An “Amateur Radio First Aid” kit may be offered, which includes going to any home or other location, setting up an ultra-portable HF QRP station, and making QSOs very shortly after arrival. Not the space, but the will and imagination of the operators are the factors that limit the possibilities of being on the air.

### From QRO to QRP

After nearly three decades of QRO (high power) amateur radio activity and close to 400,000 QSOs in the log, operating QRP has refreshed my interest in the hobby. My QRP station as a “free bird” has landed at many interesting locations. From all of them, without exception, I successfully set up a QRP station and conducted many QSOs. The same radio and antenna

WRA), near lakes (World Lakes Award), from other attractive or unusual places.

Follow the story of where the “QRP Bird” has flown and feel the freedom of QRP operation.

### A Family Summer Holiday (with XYL-Approved QRP Experiment)

The June 2011 special CQ “Take It to The Field” will be in my mailbox a day before our planned departure.



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*Photo B— My ultralight HF QRP portable equipment. See box at right for detailed listing.*

Albania, where I intended to be active on the air as ZA/Z35M/QRP. What a nice surprise! Most of the articles were about what I had been doing for the past two years and what I intended to do during my QRP operation in Albania. The special *CQ* issue was my companion on the beach together with my HF QRP setup. The family holiday with approved QRP activity of less than a week ended with a total of 781 CW QSOs on 40, 30, and 20 meters using a maximum of 5 watts into dipoles from the apartment, or with a wire vertical on a beach supported by a 5-meter (16-foot) fishing rod.

The highlight of the operation was my first activity from a nearby uninhabited island where at low tide I arrived completely on foot holding all of my QRP gear in my hands, high above my head (photo C). Once I was on the island, I installed a quarter-wave wire vertical for 20 meters supported by my fishing pole. I also set out six ground-mounted radials, with some of them running into the sea water. The radio setup worked on the first try (photo D) and I made a lot of contacts. The only problem was the strong wind threatening the antenna. In order to keep the antenna straight up, I moved the operation station close to the antenna base and held it with my

## Station Description

Elecraft K1 for 40/30/20/15m, 620 gr  
Battery 12V/0.8Ah with cable, 365 gr  
Link dipole for 40/30/20m, with 7m of  
Fishing rod 5m, 510 gr  
K9LU Bull Dog mini-paddle with mag  
Earphones, 11gr  
Paper holder, 70 gr  
Nylon rope, 30 gr  
Station total weight: 1986 gr

*Note:* The total weight may be reduced if you replace the K1 with a miniature radio (100 gr), smaller battery, etc. If you want to reduce the weight of all you must take care of reducing the weight of

ily had a coffee break in a nearby restaurant. The trip lasted a little more than one hour.

## From Mountain Summits

My interest in QRP portable activity was launched by the SOTA (Summits On the Air) activity in Macedonia. According to the rules of SOTA, that is growing in popularity, all radio equipment must be carried to the mountaintop by the hiker in a civilized manner. Also, the use of electric generators is forbidden. This means that a lightweight QRP radio setup is a must for SOTA activations.

I started to hike to nearby lower summits to get on the air. During this period I tested and refined my setup for more ambitious tours. Very soon, more summits were activated, too, including the high Golem Korab, with an altitude of 2864 meters. Also remarkable was the winter activation of Ljuboten at an altitude of 8195 feet. Hiking with radio and hiking are perfect companions.

## From Castles

Searching for additional attractive places to activate, I discovered the World Castles Project. My first WCA activation was conducted from the castle of Skopsko Kale in the center of the city, Skopje. I took all my equipment in my hands, the fishing pole to it, and went to the castle. Upon arrival I made a quick inspection of the best place for erecting the antenna. I used the radio gear. The most convenient was to use the castle walls as a support of the fishing pole. I attached the pole to the frame of the bicycle, and the antenna was held by the castle stairs. All this attracted some visitors, but the pile-up was going on. I made a lot of contacts in the log over a period of

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station may be deployed in any convenient place in the hotel room. The biggest challenge is how to erect an effective antenna.

When the conditions and time permit, installing a full-size outdoor antenna is the best solution, but when this is not possible, then a lot of combinations can be made using different types of indoor antenna configurations. I have tried using a quarter-wave wire for 20 meters in an inverted-L configuration, using a 2.5-meter (8-foot) fishing rod segment to hold the bottom half of the wire, with the second half of the wire running almost horizontally, attached to the upper part of the closet door. For the counterpoise, I used one-quarter-wave wire radial bent on the room's floor. Other types of wire antennas spread out in available space may also be used to radiate reasonably strong signals to make some radio contacts. In these conditions it is necessary to use a good antenna tuner.

## From Home

I have a permanent QRO radio setup at my home, but very often I use it with the power turned down to QRP levels, or I put my portable QRP station on an operating desk and tune it into a single-element multiband dipole. The enjoyment is always greater when using the station that is specifically dedicated to QRP work. In some of the major DX contests I decided to work QRP in S&P (search-and-pounce) mode and often was surprised at how well it worked. Sometimes I even succeeded in holding a frequency for a while to call "CQ Test" and to receive responses. To attract more attention I prefer to use "/QRP" after my callsign.

On a few occasions I have operated my QRP station from the balcony of my apartment. Each January the RU-QRP Club organizes a QRP contest called "CQ Moroz" (Red Nose). The aim of this operating event is to encourage the participants to operate from outdoor sites in winter conditions. I took part in this interesting operating event by working from the balcony, where the temperature was below freezing. It's not easy to



*Photo C— Destination: an uninhabited island along the A way to access it was on foot through shallow water at lo above my head.*

rod attached to the balcony fence and two quarter-wave wire radials running across the fence and then continuing close to the outside wall with ends attached to nearby windows.

## From a Parking Lot

In September 2009, I was preparing the new light link-dipole antenna (see below) for my planned activation of the highest summit in Macedonia. I finished the antenna project late in the evening, the day before the planned activation, and decided to test it in real portable conditions from a parking lot near my home. The radio was set up in the front seat of the car and the link-dipole was

of the antenna without any pro

## Near a River

In the spring of I took a sack with radio gear and a pole to the side of the car for a 20-mile hike along the Vardar River, Macedonia. I was unsure where to set up the radio than

I chose structure of a playground as a place to sit and erect in inverted V. Its center supported a fishing

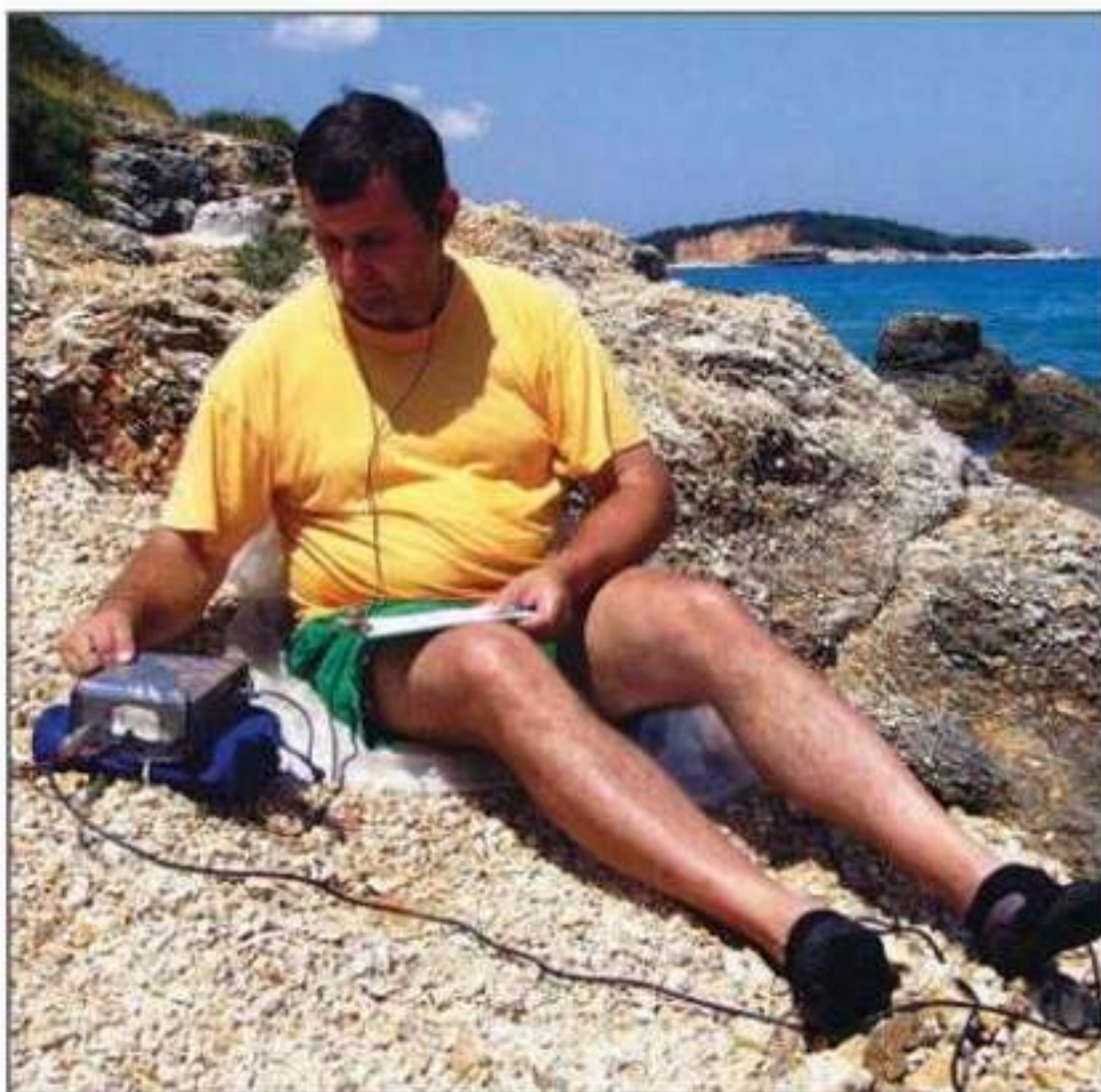
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*Photo D-- After wading to the island (see photo C), I quickly was on the air.*

antenna was an inverted-V hanging on a tree limb, with the ends attached by tiny ropes to nearby branches. I managed to make 17 CW QSOs with European stations in not-so-good propagation conditions. Some of them were also operating with QRP power and some were also portable. The antenna was practically invisible to the other visitors and nobody even noticed that I was making radio contacts.

I've even tried (once) operating from the bicycle itself. I consider bicycle mobile the ultimate operating challenge. My goal was not to create a permanent bicycle mobile setup, but only to test it. To avoid grounding installation problems, I decided to use a half-wave 20-meter dipole wound on a 4.5-meter (14-foot) fishing rod attached behind the seat at an angle of approximately of 45 degrees to the ground. The radio, bat-

was more than enough to claim successful bicycle mobile operation on HF.

## From a Vacation Apartment

Last summer I installed a half-size G5RV multiband dipole at 9 meters from the collective three-story building where I have my holiday (vacation) apartment on the north shore of Ohrid Lake. In July I took part in the QRP Marathon organized by the international QRP club "Club 72" and succeeded in making more than a thousand QRP contacts and won on the 40-, 30-, and 20-meter bands. I used my battery-powered Elecraft K1, manual antenna tuner, and Morse paddle. To have the feel of a back-to-basics operation the logging was done by pencil and paper. The best surprises were the two-way QRP contacts with Japan on 20 meters and the



*Photo E-- A link of antenna with different segments switched in and out by pulling or detaching segments.*

inverted-V dipole as a vertical antenna. It was not difficult to use a small plastic bottle in the first few trees of the branch. The next step was to use a 100V power line insulator of the vertical antenna and to lift it up. The ends of the ropes were attached to the insulator. When using a vertical antenna, it was then placed on the ground. It created an effective antenna for the need for an antenna. It was 10 meters from the ground. It gave a full view and at the same time a radio contacts. It was a good experience.

## On Foot, In a Forest

In September 2011 I made 20 CW QSOs on 20 meters while operating from a forest. The first time from Vodno at 1066 meters. To achieve this, I used a portable setup plus a manual antenna tuner. The antenna was a half-wave wire supported by a rope attached to a side branch. It was a one-quarter-wave antenna on the ground. A 20-meter dipole with a 14-foot fishing rod straight up on the ground. The second leg dragging the QRP station was





*Photo F— No need for wading here ...  
ating along the shore of Ohrid Lake  
Macedonia, near my summer*

use it on a permanent basis. I have al  
ations from a small boat and from m

### Isn't 5 Watts Too Much?

Some QRP enthusiasts think that 5 w  
and they often go *QRPp* with output p  
I often operated with power of 1 watt  
was surprised that this works and on n  
ed my expectations. One of my regu  
summits was conducted with output  
and I managed to make 52 QSOs ov  
a low-mounted inverted-V dipole.

### And Finally ... From a Zoo

While on a short visit to the city of Bit  
ed to try to make a first World Zoo  
activation from my country. After a  
negotiations with the Bitola Zoo direc  
up my HF QRP station inside the  
place to install the quarter-wave wi  
battery-powered radio on a desk, an  
CQ on 20 mete running only 3.5 wa  
quickly developed and I managed  
stations in a period of an hour. I never  
ly from the bird's nest," but this tim  
the bird's nest—in the cage—as  
once again.