

Make nature your shack (Vers. 5)

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HAM RADIO 2022



World Wide Flora & Fauna
in amateur radio



Make nature your shack!



HB9BIN, Juerg (George)



My CV

• Date of birth	April 9, 1955
• Profession	PhD in economics, now retired
• Licensed	September 3, 1976
• ARRL DXCC Honor Roll	Phone – Mixed (wkd all 360 DXCCs)
• DXCC Challenge band points	wkd 3058 (160 up to 6 meters)
• First SOTA activation	October 4, 2010
• SOTA ranking	worldwide no. 2
• Total summits activated	2'958 (unique summits: 1'409)
• Total wkd WWFF-Refs	200
• Now → Promoting HBFF	getting a HBFF-Ref. for each SOTA summit in a HBFF area
• Ham Radio 2014	I started with the SOTA Information Sessions

Activation at the Slovak-Ukraine Border

- Date: Sep. 25. 2017
- Ops: HB9BIN, HB9DST, OM6AN
- SOTA-Ref. UT/CA-357
- Name: Косматец
(Kosmatets)
- Look at the camaras!

In Memoriam



Contents

- **Motivations**
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- **Logging**
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Goals

- To motivate you to make nature your shack
- To give you a survey of the different outdoor programs
- To show you why some programs are more popular than others

**Making nature your shack
is always a great adventure,
regardless which program
you are using!**

Motivations

- Experience outdoor adventures
- Only poor antennas possible at home
- Electrosmog (PLC)
- Getting away from everyday stress
- Travelling and exploring foreign countries
- Handling your own pileup (e.g.new WWFF-Ref. on 40 M)
- An alternative to a Morse Code learning program (FT4/8)
- Collecting awards
- Maintaining or your weight and fitness



Impressions of nature



Impressions of nature



Worked All Swiss Lakes (WASL)

WWFF-Ref.

- HBFF-0087
- Caslano Floodplains of National Importance
- Canton Tessin (TI)

WASL-Ref.

- HB-TI009
- Golfo Di Ponte Tresa
- Ponte Tresa



Get above the fog



Exploring foreign countries



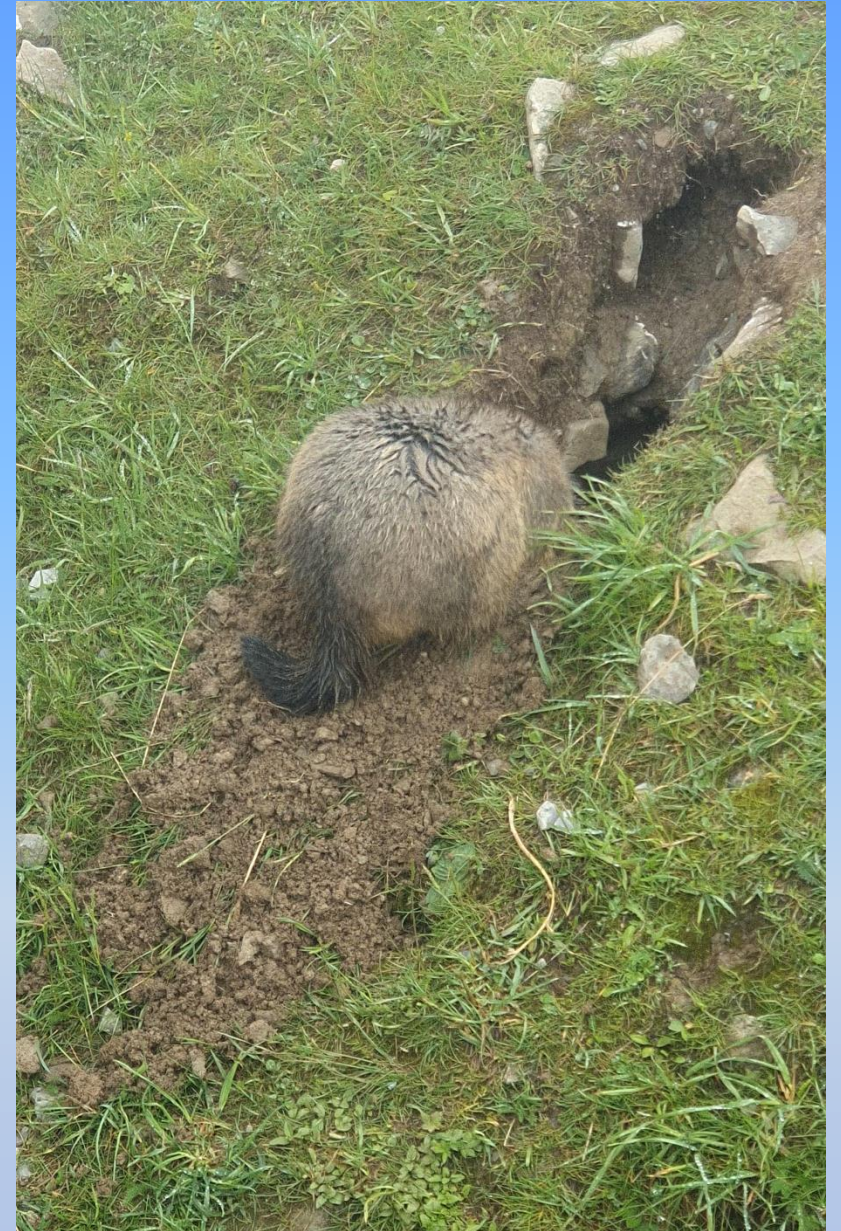
Encounter wildlife of all types



Encounter wildlife

Stanserhorn

- SOTA-Ref. HB/NW-015
- WWFF-Ref. HBFF-0294
- Altitude 1'897 MASL
- Cable car summit



Flora and Fauna



Unusual stories



Art found in the countryside



Programs for outdoor activities

- **SOTA** Summits on the Air (150 Meter Prominence)
- **WWFF** World Wide Flora & Fauna
- **WCA** World Castle Award
- **POTA** Parks on the Air
- **IOTA** Islands on the Air
- **ARLH** Amateur Radio Lighthouse Society
- **WLOTA** World Lighthouse on the Air
- **GMA** Global Mountain Activity (100 Meter Prominence)
- **HEMA** HuMPs (100 Meter Prominence)
- **SiOTA** Silos on the Air
- **National programs** e.g. Worked all Swiss Lakes (WASL),
VK Shires activations, HEMA, SiOTA, etc.

History of outdoor programs

2008	WWF established by the Russian Robinson Club (RRC)
2.3.2002	SOTA UK established
16.5.2005	SOTA Switzerland (HB9SOTA) established
18.9.2005	Establishment of the Swiss Castles certificate (DCS-SSD), and the Castles of the Insubrica Region certificate (DCIN)
2009	DLFF established
11.7.2011	First HBFF activation
Since 2011	Reorganization of WFF, WWFF established
1.4.2012	Reorganization of Global Mountain Activity (GMA)
14.12.2020	Start of the SOTA/HBFF project with C
Today	397 summits in 104 parks
Today	400 HBFF references

**Comparing with DXing
the outdoor programmes
have a young history!**

Comparison of outdoor programs

Criterion	SOTA	WCA	WWFF	GMA
Number of QSO	4	50	44	4
Position	25 meters altitude below summit	Within 1 km	In the corresponding area	25 meters altitude below summit
Operation from the car	Not allowed	Allowed	Allowed	Not allowed
Apartment / Fixed station	Not allowed	Allowed	Allowed (P2P)	Not allowed
Example of references	DM/BM-330	COTA: FBN-385 WCA: DL-03213	DLFF-0060	DA/BM-546

SOTA vs. WWFF

Parameter	SOTA	WWFF
Reference format	Country (ITU-Prefix), Region, 3 digits e.g. HB/LU-024	Country/Region (ITU-Prefix), 4 digits e.g. HBFF-0030
Location of radio gear	Within the activation zone	Within park borders
Number of QSOs	4	44 - but national restrictions
Duration of the activation	No minimum	No minimum

SOTA vs. WWFF

Parameter	SOTA	WWFF/HBFF
Frequency requirements	No set limits	At least 2 bands, 20 m preferred
CQ call	CQ SOTA – and the reference from time to time	CQ FF – and the reference from time to time
File format	CSV or ADIF	ADIF only
Signal propagation conditions	Excellent, you are on a summit !	Depends on the location

Combination of the programs

- WWFF and SOTA
- WWFF and WCA
- HBFF and WASL

**If you qualify for two different programs
during the same activation,
you get more chasers and
a larger, longer pile up!**

Awards



WWFF website

- News
- Directory of references
- Rules & FAQ
- WWFFwatch & DX cluster
- Calendar
- Awards & national programs
- → check your awards
- Maps
- Forum
- **Log search**
→ check the worked references



World Wide Flora & Fauna
in amateur radio

Make nature your shack!

HOME

♣ PLEASE DONATE TO WWFF
[Donate](#)

♣ TRANSLATOR
Select Language
Powered by  Google Translate

♣ LOGIN
▪ Register
▪ Log in

♣ LOGIN PROBLEMS ?
If you have login or password problems please mail to :
membersATwwff.co

♣ WWFF NEWS
▪ Changes in "Team GxFF"
▪ Get Your Park ON!
Spring Fling

LOGSEARCH

Search Results

All-Time Mixed Mixed All Programs

Please login for more statistics and to apply for awards

Summary Statistics for user (using call-sign HB9BIN)

Uniques		Worked		Activated
References	1170	<input type="text" value="WWFF-H"/>	84 / 84	<input type="text" value="WWFF-A"/>
DXFF	71	<input type="text" value="DXFF-H"/>	2 / 2	<input type="text" value="DXFF-A"/>
Continents	7	<input type="text" value="ACFF-H"/>	1 / 1	<input type="text" value="ACFF-A"/>
Points Award			182	<input type="text" value="WWFF[Pts]-A"/>
Park To Park			142 / 240	<input type="text" value="P2P-A"/>

Regulations for WWFF activations

Position	Within park borders
Number of QSOs	Normally 44
Duration of activation	No set limit
Operating mode(s)	Whatever you like
Mandatory freqs/bands	At least two bands
Data fields for ADIF	«MY_SIG» and «MY_SIG_INFO» <MY_SIG:4>WWFF e.g. <MY_SIG_INFO:9>HBFF-0169
Log submission	30 days after the activation
Filename	Call @ HBFF-Reference number YYYYMMDD e.g. HB9BIN @ HBFF-0234 20210415.adf

S2S and P2P QSOs

SOTA	Summit to Summit QSO (S2S)
WWFF	Park to Park QSO (P2P)
Regulations	P2P QSOs count for the P2P certificate only if both stations have uploaded the log with the QSO.
Awards	There are multiple awards for S2S and P2P QSOs.

Program-specific on-air greeting

WWFF program: use “73” and “44”

The **first numeral 4** stands for the 4 elements:

- Earth
- Water
- Air
- Fire

The **second numeral 4** stands for the cardinal directions

- North
- South
- East
- West

WCA/DCI: 11 ($73 + 44 = 111$)

SOTA: 73 (no special greeting)



WWFF Awards

Special Awards

- Activator Certificate different WWFF references
- Hunter Certificate wkd different WWFF references
- WWFF Activator Points-Award
- Awards for P2P QSOs
- Hunter Certificate for wkd different Continents
- Annual Event Awards
- Special Event Awards

98 National Awards

DLFF, FFF, EAFF, GFF, HBFF, IFF, ONFF, OZFF, PAFF, e.g.

- **There are plenty free awards available!**
- **Many diplomas are issued in an order of 44** e.g. 44, 88, 132, 176, 220 ...

Logging => Vkport-a-log

LP= Long PATH

April 5, 1997 Harrison St Shop WACytx
Drake 2R / Wilson / HKM three / Octad

2240	7TF6	8698	CW	569	Boufank Romo,
2248	SVD4	8692.5	CW	569	Athan Romo,
2252	IRMG	8695.0	CW	579	Rome Romo,
2258	EAD3	8682	CW	579	Maxo Romo,
2257	WSC	8680	CW	579	Tuckerton Romo,
2300	IAR8	8670	CW	569	Rome Romo,
2304	TAH	8662	CW	449	Istanbul, Turkey
LP 2308	XSR	8661	CW	339	Guangzhou, C

April 6, 1997

1120	PKN	8706.5	CW	569	Balikpapan, Ind
1123	JOS	8706	CW	569	Ug. ASAR, Jo
2253	IAR8	8670	CW	579	Rome Italy
2305	TAH	8662	CW	569	Istanbul, Tur
LP 2309	XSR	8661	CW	449	Shen Guangzhou, C

April 7, 1997 Drake 2R / Wilson / HKM three

2254	TAH	8662	CW	559	Istanbul, Tur
2258	IAR8	8670	CW	569/569	Rome Romo,
2300	WLO	8658	CW	579/569	Mobile, Ala
2305	WSC	8680	CW	579	Tuckerton,
2307	IRM	8685	CW	589	Rome Ital

Swisscom VK port-a-log

17:48:43z HB/NE-007 HBFF-0234 MAIDEN

Call: HB9CEV/P / /P /M Pile up (0)

Sent: 599 Rec'd: 599

Name: Arthur

SOTA ref: HB / FR - 028

Frequency (MHz) 5.354

Mode: CW Power: 15

1 2 3 4 5 6 7 8 9 0

TIME	CALL	MHz	TX	RX	NAME	OTH
1707	DL1FU	7.032	599	599	Frid	DL

Swisscom 3/7

Home > VKportalog > 20210520

HB9BIN_20210520_all.csv	41.62 kB	<input type="checkbox"/>
HB9BIN_20210520_SOTA_locations.txt	98 B	<input type="checkbox"/>
HB9BIN_20210520_SOTAv2_combined.csv	7.96 kB	<input checked="" type="checkbox"/>
HB9BIN_20210520_WWFF_locations.txt	98 B	<input type="checkbox"/>
HB9BIN_20210520.adi	79.97 kB	<input checked="" type="checkbox"/>
HB9BIN@HBFF-0234_20210520.adi	22.93 kB	<input checked="" type="checkbox"/>
SOTA file info.txt	485 B	<input type="checkbox"/>

Abbrechen Auswählen

- VK port-a-log → Android
The software can be downloaded from the Files section
See <https://groups.io/g/vk3zpf-logger/files>
- Outd Log → Android and iPhone

Equipments

The less wight
the better!



Transceivers from Elecraft



KX3



KX2

- Differences between KX3 and KX2
- Buy a transceiver with a ATU!

Cover and cooling unit for KX3 and KX2



**Cover and cooling unit for KX3 and KX2
are very useful in case of bad wx!**

Transceivers from Yaesu: FT-817ND, FT-818ND

FT-818ND



LDG Z-817 automatic QRP ATU for FT-817 and FT818

Transceivers from ICOM: IC-705 and FT-991

ICOM IC-705



Output Power:

10W with 13.8VDC external power supply
5W with BP-272 li-ion battery pack

Receiver Type:

Direct sampling

RX Frequencies:

0.030-470.000 MHz

Channels:

500

GPS:

Built-in

Mountain Topper class rigs

MTR-3B

MTR-5B



There are a wide variety of QRP rigs and kits.



Rigs from LNR Precision

LD-5



LD-11



Amplifiers

Required transmitting power
CW: 5W up to 15W
SSB: 5W up to 50W
→ There is no need for an amplifier



KXPA100



MX-P50M

Station setup for WWFF and WCA (not for SOTA)

For using maiden head locator buy a tablets with a GPS system installed.

- FT-991
- Tablet or smartphone
- Morse key
- Mike or headset

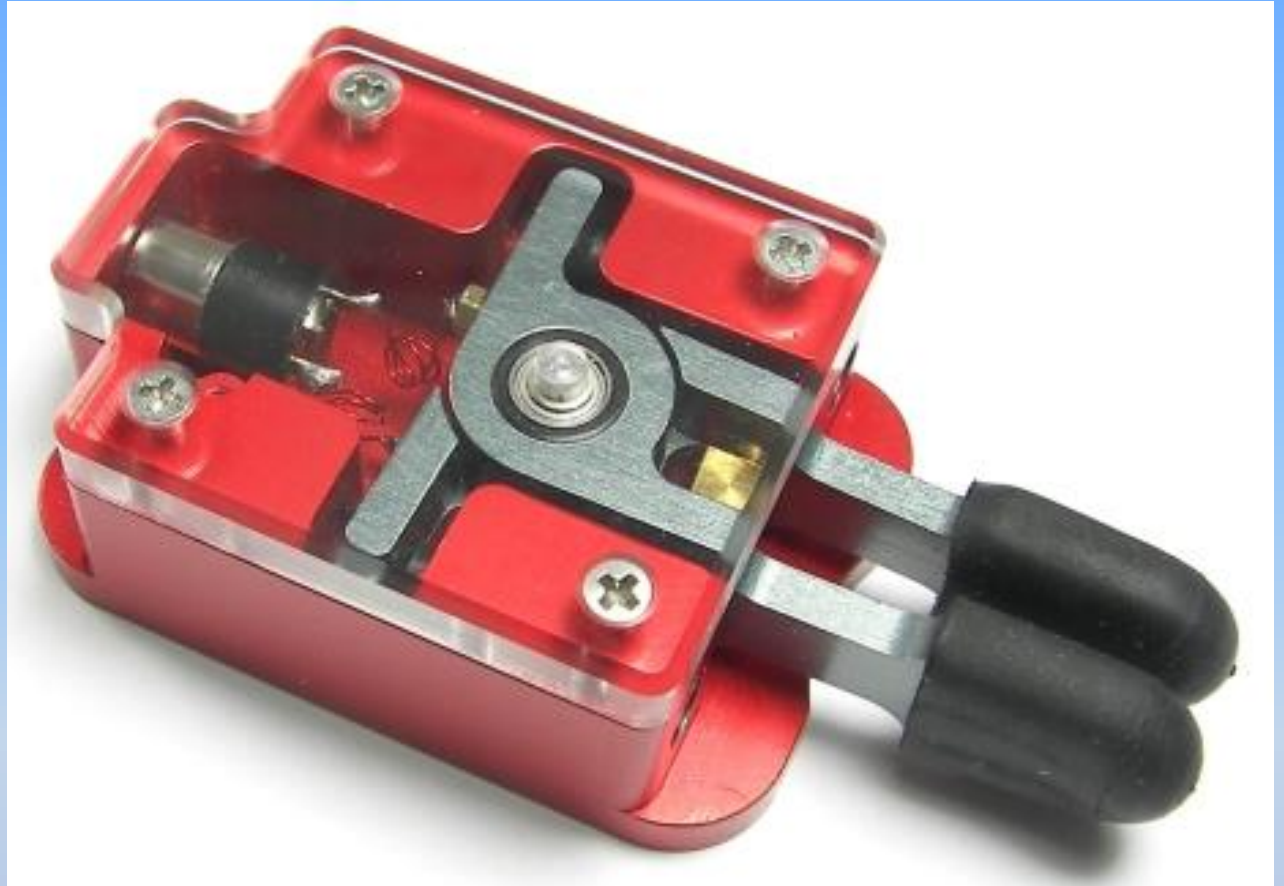


Morse Key

BaMaKey TP-III

ultra compact twin paddle key - red

- Weight: 70 g / 2,47 oz
- Dimensions: 0,79x1,38x1,97 (2,87)" 20x35x50 (73)mm
- Aluminum housing, anodized
- Housing color: red
- Levers color: grey
- High precision ball bearings,



Antennas

- The antenna is the most important part!
- Which antenna is best?



Strategies

- Which outdoor program do you want to use?
- What is your strategy?

Quantity or quality: Running a lot of QSOs or collecting S2S- or P2P-QSOs from time to time → time consuming!

Running QSOs with EU or dxing on the high bands

Activating low or high mountains, lot or only few space on a summit or in a park

Drive in areas or wight to carry

QRO or QRP only

Modes: SSB, CW or FT4/FT8

- Good or bad progagation

The best antenna is the one that best fits your strategy!

WSPR antenna comparison

Antennas tested (using **WSPR on 40/30/20/60m**):

- Linked EFHW inverted V
- G5RV
- Trapped EFHW inverted V
- EARC End-Fed (9:1 UNUN)
- G8JNJ (modified for SOTA)
- Vertical with one radial
- Fuchs antenna

most **differences were in the range of 0.5 S levels.**

See also:

<https://reflector.sota.org.uk/t/seven-sota-antennas-compared-using-wspr-on-a-summit/15635>

Antennas

I use the following antennas

- EFHW (length abt 20.3m) for 60, 40, 30, 20m bands
- J-poles for 6, 12, 20m
- Dipoles
- Vertical with radials
- Buddipole without coils, full size elements
- Whips from MFJ, Elecraft



Antennas from Alex Loop



Shack (in Nature)

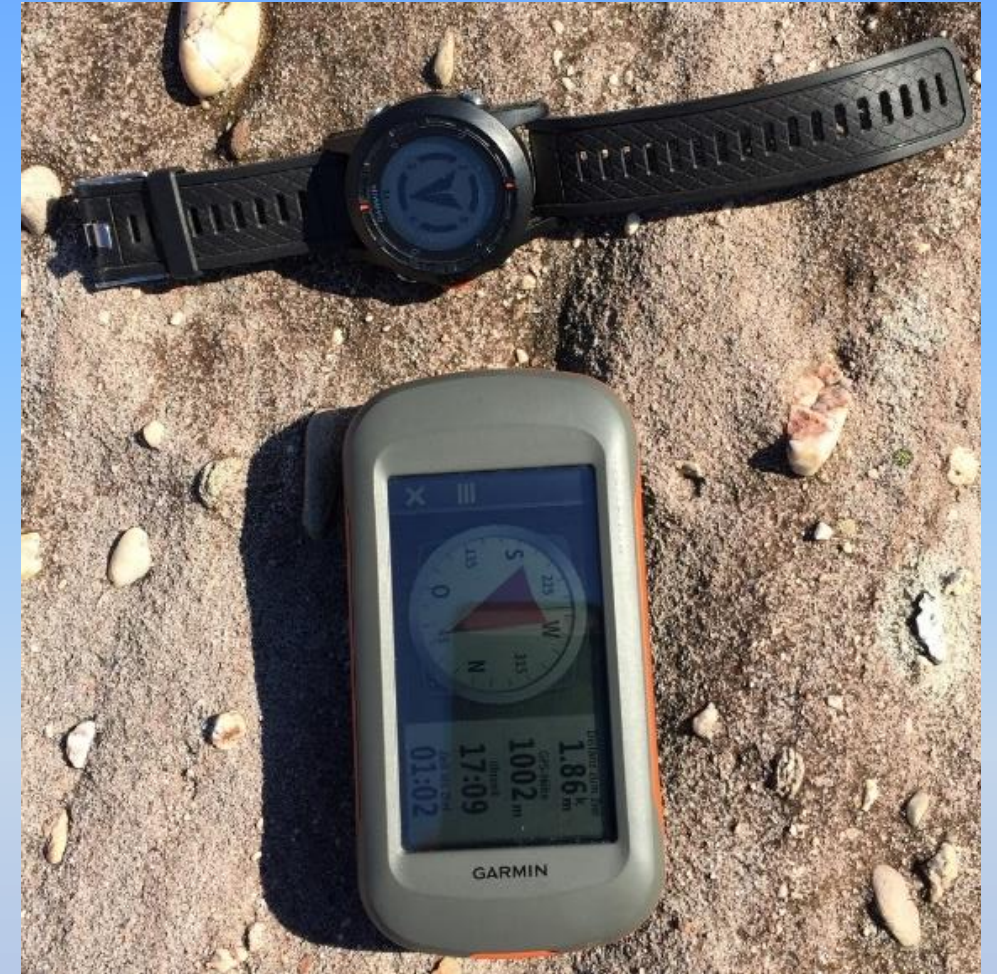
The WWFF program allows you to use your car as a shack, the SOTA program does not!

- Rig: KX3



Navigation

- Smartphone → Internet access?
- Navi → Garmin



Spotting with GMA

HBFF REFS Link GeoMap v202103 x | LOGSEARCH | WWFF x | GMA - Global Mountain Activity x

← → ↻ cqgma.org/index.php# 🔍 ☆ ☁ 🔑 ⚙ J ⋮

Apps SOTA Results and S... GMA - Global Mou... Google 🌐 Callsign Database b... 🔄 VK port-a-log ADIF... » 📁 Weitere Lesezeichen



eingeloggt als: hb9bin

Referenzen » GMA » **QRV »** Forum Info » Suchen Karte LIVE

Aus der GMA Datenbank

Aktivierer QSOs	1808261
mit Stationen in	276 Ländern
aktivierte Berge in	54 Ländern
Jäger QSOs	848425
mit Stationen in	273 Ländern
Aktivierungen	70875
aktivierte Berge	13359
Aktivierungen im Mär 2021	285
im Feb 2021	622
im Jan 2021	508
Top 3 meist aktivierte Berge	
1. DA/AV-346 Eschlberg	784
2. DA/SX-215 Lunabark	208

Willkommen zurück **Juerg,**
Dein letztes Login war am 1...
Du hast zur Zeit 24287 Akt...

Siehe [ALL-IN-ONE](#) [istiken](#)

Hackerangriffe auf die Datenbank seit 01.01.2020: 1200

Donate

VISA Mastercard SEPA

NEWSLETTER

GMA Forum

Wrong Crossreference entry
17.03.2021, 06:42
von lz2ht
in Hilfe & Anleitungen
[Lesen](#)

Ochelspitze DA/SX-557
14.03.2021, 17:22
von dq0imb

Spotting with GMA

Choice of these clusters:

- SOTAWatch3
- GMA
- DX-Cluster (RBN)
- WWFF
- SOTL.AS

Enter new Spot - Google Chrome

cqgma.org/spot.php

Meldende Station: HB9BIN

Aktivierer: HB15SOTA

Berg Referenz: 4L / AA - /-

oder hier eine Ref eingeben: HB/SO-008

QRG in kHz: 7032 z.B.: 7032.1, 145575

Betriebsart: CW

Kommentar: also HBFF-0040

Spot an SOTAwatch senden ☒ (Nur bei einer SOTA-Referenz)

Benutzer: HB9BIN

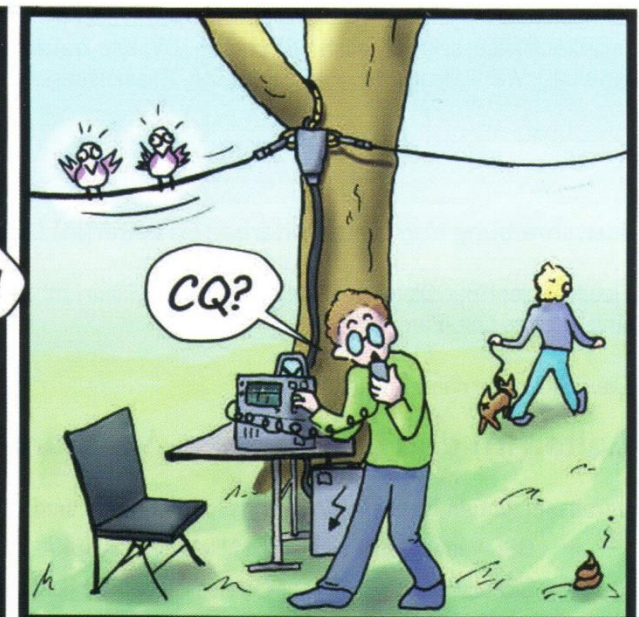
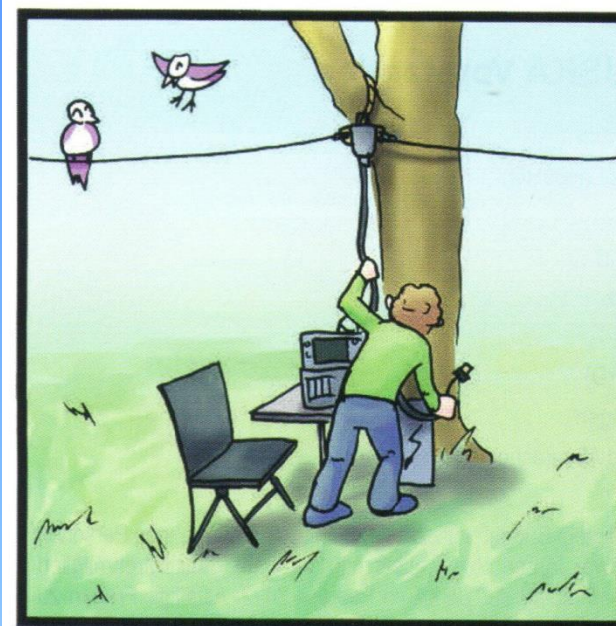
Passwort:

Zugangsdaten speichern? ☒

Spot an DX-Cluster senden ☒

Absenden Schließen

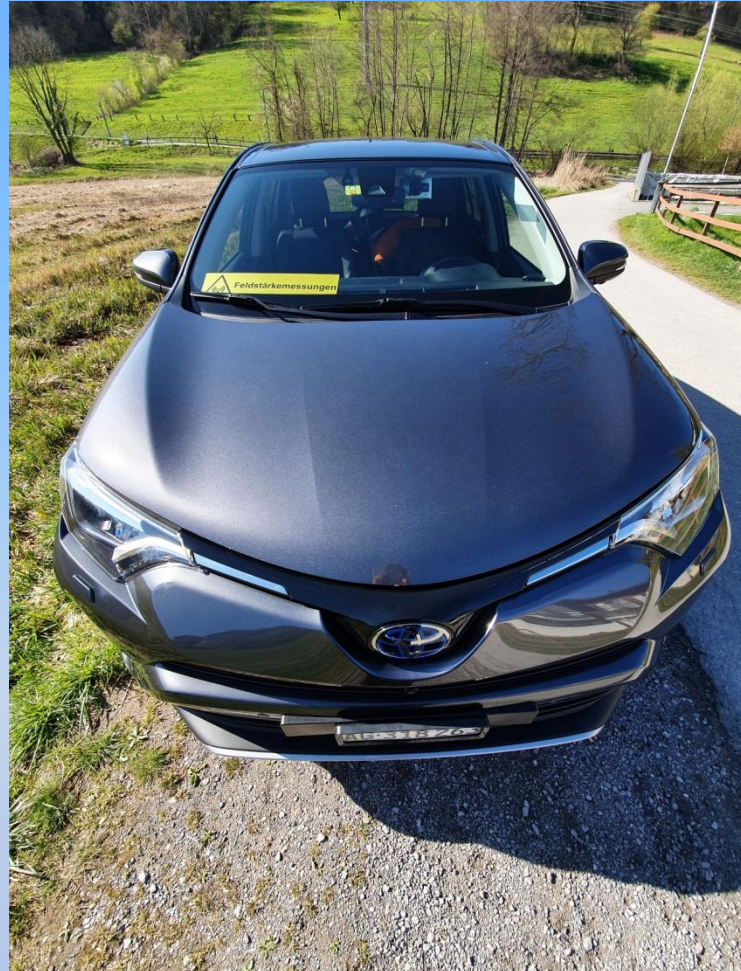
Troubleshooting



HB3XUY

Idee: während einer lustigen Runde auf dem Uto-Relais entstanden

Messuring of RF



Troubleshooting



Use your common sense!
Demanding activations should
never be done alone!



Web links

- DLFF http://www.wff-dl.de/html/w_dl_ff_award.html
- GMA <https://www.cqgma.org/index.php>
- HB9SOTA <https://hb9sota.ch/was-ist-hb9sota/>
- HBSOTA summit map <https://hb9sota.ch/gipfelkarte/>
- HBFF home page https://hbff.ch/HBFF_Intro.htm
- HBFF regulations <https://hbff.ssfg-gsrc.ch/Rules/HBFF-Rules.htm>
- HBFF references https://hbff.ch/Refs/HBFF_Refs.htm
- HEMA <http://www.hema.org.uk/>
- SiOTA <https://www.silosontheair.com/about.html>
- VK porte-a-log The software can be downloaded from the Files section of this groups.io group. See <https://groups.io/g/vk3zpf-logger/files>
- BaMaTech-Keyer <https://www.bamatech.net/morsetasten/bamakey-tp-iii-twin-paddle-key-rot.html>
- WWFF <https://wwff.co/>
- Worked All Swiss Lakes (WASL) <http://web.ticino.com/wlog2000/laghi/>
- Worked Castle Award (WCA) <http://wcagroup.org/>

Thank you for your attention!
Questions ...

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