NEW HF ANTENNA (HB9ABX) c

RoomCap Antenna

Felix Meyer

26th July 2005 (translation 7th.Aug 05) / **update: June 14, 2009**

There are **the last updates available** for the construction guide.
Date of update **= August 8th, 2008** >>> Read details here

A new, revolutionary idea allows the construction of small HF antennas,
which provide the same efficiency as large antennas.

Example: tested by Military + SUPER DX results on 80m + 160m DX Antenna <<< Big success !

The last demonstration of the antenna was here:
27th. October 2007 in ZOFINGEN - here a picture and one more
at the "Surplus Party", the largest HAM Radio fair in Switzerland
Unfortunately, I could not participate in the 2008 Surplus Party.

Technical specifications of the new HF ANTENNA:

- The new HF Antenna has the following specifications:
The name of the antenna is 'RoomCap Antenna' (from Room Capacity)
and is for use on the 10-15-20-40-80 m (+WARC) bands.
(UPDATE 20.8.06) and for 160 m (radiator tube 75 mm and 3 m long).
The radiator of the antenna consists of an element in the form of a tube
of 5cm diameter and a length between 50 to 170 cm, depending on the
frequency, with an additional 25 cm length (approximately) for the connection
and mechanical mounting space.
The feed impedance of the antenna is 50 Ohms, and it does not need a tuner
to reach an SWR better than 1 : 1.1 on all bands.
With the remote frequency adjustement RFA (inside the tube), any frequency of
the band can be set to SWR 1.0 in a few seconds.
The radiation pattern in the H-Plane is a circle and in the E-Plane has a broad
minimum upward, while the radiating beam is flat to the side with
maximum radiation angle between 15 to 25 degrees (depending on
frequency and height above ground) = low angle radiating antenna.
Polarisation of the antenna is vertical.
The antenna can be built as a monoband antenna, or as a 2 or 3 band antenna
(for some bands).
Area of application:

1. Mobile antenna with exceptional efficiency which barely can be surpassed.
2. Fix or portable antenna, as antenna does not need a support to hang up wires in the air, and works at low height with highest efficiency.

Transmit power: The antenna is designed for 200 W PEP.
By observing the special hints, the antenna can be built for 1 KW PEP.
The efficiency of the antenna is extremely good in comparison to
other antenna types. The comparisons can be found in the following test reports.

It is not the intention, to replace other, large antennas. This antenna works by using small dimensions as a very efficient antenna, without the need of supporting poles, what, by using traditional antenna design, is not possible.
Read the explanation June 29th 2006 (towards end of this page).

The Construction Guide is ready.

>>> Information to order the **construction guide**: **HERE** **<<< (click)**

Attention:
The following test report is no claim. This is simply a description of the experiences and the contacts made with this antenna.
All data can be verified, as date, callsigns, and frequencies of contacts are indicated.

Everybody is invited to participate personally in the tests here.

Here is the picture of the new HB9ABX Antenna for 40 m, antenna is 1.5 m long:

Many thanks to Samy, HB9BPP for the picture!

The antenna serves as excellent Mobile Antenna, but also as Home Station Antenna!

The antenna is a band antenna, which I would like to call "capacitive sky radiator", therefore the name RoomCap Antenna.

The time is over, where one needs a big antenna to produce a big signal.
This small antenna equals the performance of the large GPs as Cushcraft and Butternut!

TEST REPORTS

in chronological sequence

State: 7th June 2005 (LINK added 15th December 2005)

Fantastic results obtained with new small antenna.
The last days I was testing my recently developed antenna on 40m, in mobile use.

The tests were performed by comparing signals with the following antennas:
FD-3, G5RV, 4-BTV Groundplane and Butternut HF-6V (= 6-Band Vertical).
All stations were operating with 80 to 100 W in the local area of 12 km to my mobile station.
I was using the TS-50 with max. 100W operating on the car battery.

The comparing tests were always in the same QSO with frequent changeover between the comparing station and the mobile station.

In total, 38 Test QSOs were conducted, where the mobile station received a better signal report in 32 QSOs from the Remote Station, in 4 QSOs the signals were equal, and in 2 QSOs the Comparing Station was stronger.

The Remote Stations were in Germany (Stuttgart to north coast), France, Italy,

Austria, Isle of Corsica, UK, and the Netherlands.

Mostly, the mobile station received a signal report 1 to 2 S-points stronger than the comparing station, and some reports were 20 dB stronger than the comparing station.

The feet of the mobile antenna was on the car, 1.5 m above ground, and the length of the antenna was 1.5 m.

Location of mobile station: Peripheric parking place in the city of Basle.

The Butternut HF-6V comparing station was on top of a free standing 30 m high building, and also here the resulting reports were 2 times 1 S-point better and once 1 S-point less for the mobile station.

Overall, a nearly incredible good result.

One thing I can reveal here:
This is not a Microvert and no EH-Antenna. Here is LINK to EH-ANTENNA
I call it a "capacitive sky radiator".

The antenna wil be described after completion of the full test series.

State: 14th. June 2005 : 20m Tests

Since a few days I am testing on 20m.
Also in comparison QSOs wit nearby local stations.
The results look very similar to the 40m results:
On July 10 at 12.30 h QSO with EA3EHC and IK7LQH,
3 further stations were qrv in Basel.
The only station heared in Spain and southern Italy was my mobile station ...

On July 13 at 12.30h contact with EA3EHC
in Basel HB9PP with GP (Diamond CP5), HB9TQL with Butternut HF-6V,
HB9TQN with Hustler 4-BTV GP, HB9DRJ with FD-3. There were bad conditions.
We received the following reports:

HB9PP	**30**
HB9TQN	**41**
HB9TQL	**52**
HB9DRJ	**52**
Mobilantenna	**54**

On July 14. I made a comparison with HB9BXS, who operated with R7000 from Cushcraft on the roof of the building in a very good location.
I parked my car wit mobile antenna 100m distant from his house and we had following QSOs with the following received reports:

Call	HB9BXS	HB9ABX
GM7ASN	03	55
LA6FX	55	57
EA1TSR	unreadable	57
4Z5NB/m	33	57
RD3AW	56-7	58

Overall: very exciting results.

State: 16th. June 2005: Measuring results

Measured on the new HB9ABX antenna (20m) = (New mobile antenna)

For interested I was measuring today the new antenna.
The following SWR values have been noted:

(Measured on installed antenna on the car through 2 m coax cable)
on June 16th, 2005 with recalibrated MFJ-269.

QRG SWR

14.000 1.5
14.023 1.4
14.054 1.3
14.062 1.2
14.090 1.1
14.123 1.0
14.200 1.0
14.232 1.1
14.250 1.2
14.290 1.3
14.330 1.4
14.350 1.5

The SWR 1:2 bandwidth goes from 13.870 - 14.460
which corresponds to 590 Khz bandwidth.

The range of SWR 1.0 is adjustable in seconds to any
frequency within the 20m band.

Now I am leaving to HAM Radio Friedrichshafen and my next
reports will follow after the "HAM Radio".

Maybe we meet us in Friedrichshafen ?

State: 2nd. July, 2005

Antenna comparison 2nd July 2005
Band 7 MHz , 15.00h to 15.30h MESZ
QTH: Allschwil near Basel

Test antenna: New HB9ABX antenna (1,5m radiator) on the roof of my car.
Comparison antenne: Cushcraft R7000 from HB9BXS.

Station HB9ABX: TS-50 on 12V, 100 Watt PEP
Station HB9BXS: IC-756 Pro II, 100 Watt PEP

Preparation:
First we measured the R7000 and noted,
that the resonance for 40m was on 6.950.
We took down the antenna, shortened to top segment
until the resonance was in the center of the band with
an SWR of 1.0 .
The station was checked to verify, that 100 W output was reached.

The antenna is located on a family house at the border of the city
on a hill position with good view over the city of Basel.
With car and mobile antenna I drove some 150 m aside
to be outside of the houses, and the test could begin.

During each QSO multiple switchovers between HB9ABX and
HB9BXS in order to allow the remote station to measure
the average signal strength difference.

Remote STN	rprt for HB9ABX	rprt for HB9BXS	QTH
GB2GDO	59	57-59	nr. Gatwick Airport
DL0MUE	59	58-9	Mühlberg/Elbe Brandenburg
DC6EG	59	58	Bielefeld
PA2L	59	58	Elburg Holland
OE5EPG/5	58	57	portable on the Traun

In all QSOs multiple short switchovers between ABX and BXS
and the comment was regularly, that ABX arrives mostly one S-point
stronger.
Then the test was terminated for this day.

State: 6th. July, 2005

6th.July 2005: Antenna test, new HB9ABX Antenn on 40m, antenna on the ground

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**During all previous tests the antenna was installed on the car with
1.5 m distance between ground and antenna base.
Today the antenna was mounted directly at grond level for the following test.
The SWR was also at 1.0 .**

**Test station: HB9ABX with TS-50, 100 W, 1.5 m long radiator.
Comparing station: HB9EBG with 100W and dipole 2 x 20m,
with 500 Ohm feeder line and antenna tuner between TX and feeder.
Location: Also in Basel.**

**Test time: 17.05 to 17.55 MESZ , listing the received signal reports
(= signal report at remote location).**

Remote	HB9ABX	HB9EBG	QTH
DK9KS	58	59	nr.Bonn
HB9MGY	59+20	59+20	Duggingen
DM3KXL	58	57-58	nr.Dresden
DH7GGF	57-59	57-59	Augsburg
HB9PLH	59+10	59+10	Schaffhausen
G0DML	57 QRM	unreadable	Manchester

**Obtained comments:
Generally, the signal of HB9EBG was about one S point stronger than HB9ABX,
also 3 to 6 db were given, while during the QSB, the signal of the test station reached
the same signal strength as the comparing station.
Exception: Report from England, where HB9ABX was hearded with S7 with QRM
while HB9EBG was not readable.
Conclusion: Direct ground mounting provides less signal strength.**

State: 8th.July 2005

Antenna comparison with Microvert MV-500: 8th. July 05

**Today I could perform a Comparison between the new
HB9ABX antenna and the Microvert antenna on 40 m .
I was expecting long time to have this possibility,
as this antenna is mentioned many times as a very good
short antenna.
But, there is not "the Microvert", as there exist a wide
variation of different versions, described by the inventor,
DL7PE.
At HB9MGY I found two variants for 40 m, the ordinary
slim version, and the improved version with the round plate
above the coil, called model MV-500 or Station antenna.
The coil is wound in a special manner for low capacity.
We used the improved MV-500 for our test.**

**Location: Duggingen, 12 Km south of Basel.
Time: 10.00 to 10.25 MESZ**

**Test station: HB9ABX with TS-50, 100 W
Comparing station: HB9MGY with 100 W**

**The MV was located on the free terrace on the side
of the house, on a 1.5 m high support
and I parked my car abt. 20 m next to the house,
somewhat lower.
The location is to be considered as bad location for HF,
as Duggingen is down in a narrow valley.
We had contact with HB9ATX/EA3, located near
Palamos near to the coast in Spain.
We received the following reports:**

**HB9ABX = S4 to S5 with 100 percent readability.
HB9MGY = S1 to S2, signal was heared, but unable to understand.
The signal from HB9MGY increased by one S-point
after he switched to the longwire antenna.**

Other stations listening in Basel noted a big difference between the

two stations.
Report from HB9BPP:
HB9ABX = S9+5 dB
HB9MGY = S6 with Microvert
HB9MGY = S7 with longwire

Further tests will follow.

State: 12th. July 2005

Today a Test was performed on 20 m as comparison with the Cushcraft R7000 from HB9BXS.

Test station: HB9ABX, 100 W, 1.3 m long antenna on the car.
Comparing station: HB9BXS, 100 W, R7000 on top of the roof.
Distance between test and comparing station abt. 150 m.

Time: 16.05 to 1745 h MESZ, 14260 - 14290 KHz

Reports received from remote stations:

Remote	HB9ABX	HB9BXS	QTH
SM5HDJ	58	57	nr.Stockholm
G3GYE	55	54	Landsend
IS0HQJ	54	54	Sardinien (Insel)
2E1GOS	59+20	59	George UK
G0LHH	55	55	Birmingham
G6ZBV/m	57	57	nr.Birmingham
M3JUQ	57	56-7	N-London
G0GNE	57	56	Guildford
9A2KL/YU	59	58-9	nr.Belgrad
G8GIY	59	57	Mutlock
F/PA1EW	58-9	58-9	SuedFrankreich
4L4MM	57	57 ?	Georgien

During all QSOs several short changeovers between ABX and BXS and requesting the remote station to measure the signal difference, averaged in the QSB.
Hereby the difference was mostly 1/2 to 1 S point, in some cases 2 S points stronger for HB9ABX. In no case the signal of HB9ABX was weaker.

Is the new antenna a wonder ? >>>>> Look here.

State: 13th. July 2005

Antenna comparison Microvert 40 m extended

On July 8th only a single QSO could be performed, comparing the Microvert antenna. Therefore an extended comparison was planned for today.
The improved Microvert MV-500 was installed in a free test field close to the new HB9ABX antenna, mounted on the car. Both antennas have the same length and are installed at the same hight connected to the same transceiver via a Coax Switch.
Both antennas indicated SWR 1.0 on the crossneedle instrument.
The test began at 12.20 MESZ and terminated at 14.45 MESZ, after completeing 14 comparisons contacts .
The results showed a clear picture, which indicated that the new HB9ABX antenna received in most contacts 1 to 2 S points more (= 6 to 12 dB).
In the receive mode of the signals the same difference was noted.
The comment was generally: With HB9ABX antenna also in QRM good readable, while with the MV nearly unreadable.
Here follows the received signal reports in S points:

Ant1 = HB9ABX Ant, Ant2 = Microvert, Modell MV-500 (DL7PE)

Remote	Ant1	Ant2	QTH
DF6OE	7	5	nr.Ingoldstadt
F5FCH	8	6	Blois
DC6NY	9	9	nr.Nürnberg
DJ4WJ	5	3-4	Neumark
DL5KUA/p	9+5dB	8	Stabehoch nr.Burg
I3/I6KYL	9	8	Bellano
DG4BZ	9	7	nr.Osnabrück
DK9HJ	5	3	North sea, coast
HB9DQH	7-9	5-7	Chur
HB9N	7	5	Thun
SN4NMU	8	7	Glogo (Poland)
F5LMH	8	7	Lyon
OE50GMQ	5	2	Spittal/Drau
HB9JB	8	7	Uhwiesen

Here you see the installation of this test close to Basel:

In the foreground the MV-500 and on the car the RoomCap antenna.

State: 15th. July 2005

Antenna report 15th. July.05

Today I performed the first successful test on 20 m with the new antenna on the roof of a house, on 14.317 MHz from 12.15 to 12.45 MESZ.

Antenna: 1.3m long radiator
Transmitter: TS-50, 100W

The location was on a flat roof in Allschwil (Basel), 11 m above ground on top of an industrial building.

The antenna was adjusted on 20m, as well as on 40m to a SWR of 1.0 at 50 Ohms.

20 m Tests:

The following stations from Basel and vicinity were qrv:
HB9PP with GP: CP5 Diamond with 100 W
HB9BPP with Beam 5el DJ2UT with 100 W
HB9EAX with GP: R5 Cushcraft with 100 W (17km distant)

Remote stations:
SM4/HB9ZA nr.Lulea (Sweden): receeived HB9ABX as strongest signal
Comment: HB9ABX 1.5 S points stonger than HB9PP
IK7LQH Appulien: Strongest signal: HB9ABX, HB9PP not readable
EA6/HB9DNY (Mallorca): Strongest signal: HB9ABX
Comment: HB9ABX 1 S point stronger than HB9EAX

For next week a longer test is planned at the same location on 40 m.
Probably next Tuesday afternoon.

Until then ...

State: 19th. July 2005

Antenna test 19th. July 2005 on 40 m.

Band = 7 MHz, flat roof , industrial building, 11 m above ground.
Both stations with 100 Watt.

A longer comparison test on 7 MHz took place between:
GP: Cushcraft R7000 on the roof of a family house of HB9BXS
and the 40 m HB9ABX antenna (1.5 m long) on the flat roof.

The test began at 1715h MESZ und finished at 1930h MESZ.
Unfortunately the band was nearly dead and only very few stations could be heared with weak signals. One had to search long to find a station. This one was called and the comparison test performed.

The result was, that in most contacts, both stations arrived with nearly the same signal strengths, the differences were small.
The test indicated, that in a roof installation the small antenna equals the performance "of the bigger brothers".

Here follows the worked stations and the received reports in S points.

Remote STN	HB9ABX	HB9BXS	QTH
DL7WA	8	8	Hof/Bayern
DJ4PZ	8	8	Willhelmshafen
HA/DK7ZU	8-9	8-9	Malaton, Hungary
DC3TS/p	9	9	Waren, North Germany
PE0PSL	8	6	Arnheim, Holland
SO3AD	9	7	West-Poland
G0ECX	9	8	Weymouth UK
G3MCA	9	8	Kent UK
G3FGH/m	8-9	8-9	Grimsby UK
DB2LTU	7 (9)	8 (9)	Heiligenhafen, East sea
M0BBZ	9	8	UK
EA2ID	9+5	9+5	Zaragossa, Spain
EA3BGQ	9	9+10	Tarragona, Katalonia

State: 22th. July 2005

Here I refer to the test performed on the 13th of July (extended Microvert comparison).
I received several mails on this subject und would like to explain why and how the result could be obtained:

Read here: MV-losses

State: 26th. July 2005

DX result of test on 20 m from 26th. July, 2005, 20.45 to 22.00 UTC

This is the first time that an antenna comparison of the HB9ABX antenna was performed in DX contacts. (DX = large distance, overseas).

HB9ABX = 1.3 m long antenna, 100 w PEP, 150 m distant from HB9BXS
HB9BXS = R7000 on the roof of his house, 100 W PEP
Long QSOs with DX stations on 20m gave the following results:

Reports shown are received reports in S points (averaged in QSB)

Call	HB9ABX	HB9BXS	QTH
K1EKF	3	1	Evans, Georgia, USA
HB9DTF/mm	3	0-1	Coast of French Guayana, South America
W1LC	4	2	Spencer, Massachusetts USA
W1ZY	5	2-3	Brooklyn, NY USA
2E1MJH	5	2	Clare, UK, not DX

State: 13th. August 2005

Results of 9th. and 12th.August

On August 9th. I made a Comparison test with a 5-Ele Beam from HB9BPP. On top of the 7 floors building at the altitude of 27 m is the DJ2UT-Beam Model 5c installed. The beam was directed towards the remote stations. We performed the tests while I was located at a parking place with my test antenna of 1.3 m length. Both stationen with 100 W PEP. The following QSOs were made between 20.20 - 20.35h MESZ:

Remote Stn.	HB9ABX	HB9BPP
OH5ZZ	59+10	59+20
SM2YZZ	59+10	59+10
LA6TOA	58	58

Surely interesting, isn't it ?

Clay tile roof Test

On August 12th. August we made the first antenna test on a building with clay tile roofing and wooden understructure. The test antenna was mounted vertically in the center of one side of the roof, the base of the antenna 20 cm above the roofs. The R7000 was monted on a mast on top of the roof, abt. 2 m distant from the end of the house. The test was conduted on 40 m band.

Comparing antenna: R7000 (Cushcraft) with its own radials and Test Antenna: HB9ABX (1.5 m long). Both antennas decoupled from each other and connected to the same transceiver via a coax switch.

Here follows the QSOs with the received reports:

Remote stn.	Testantenna	R7000	QTH	Remark
DL1AVP/p	57	57	Isle Rügen	R7000 1 db stronger
DL5DIL	57	57 1/2	Dresden	R7000 1/2 S point stronger
PA/DJ5KP	57	57 1/2	Ost-Kapelle	both equal, sometimes R7000 somewhat stronger
OZ/DK3HG	57-59	57-59	Bornholm	both equal, no difference

DJ4HG 59-59+ 58 Rott/Eifel Testantenna well 1 to 1.5 S points stronger

Then came the unexpected end: The neighbour returned from vacation and was disturbed by the antennas. To keep freedom, we dismounted all from the roof.
We intended to conduct at least 10 contacts on 40 m and afterwards to perform a test on 20 m during one hour ...

Interesting note during test on the clay tile roof:

During receiption, the test antenna delivered a clear signal from all stations, while listening with the R7000 all stations disappeared in the noise, except DJ4HG, who was the strongest station. The noise was man made noise, as caused by TVs, computers, and monitors.
The signal/noise relation was between 10 to 18 dB better, using the test antenna.
This shows, that the antenna operates upwards and suppresses well downwards.

State: 30th. August 2005 DX DX DX DX DX DX DX DX DX DX DX DX

DX-Test on 20 m: To Trinidad (close to Venezuela), South America.
On August 29th we made an extensive DX test on 20 m.
The duration of the test was over one hour, and beside my test station further two local stations and one distant station participated as comparing stations.

Test station: Felix HB9ABX, 1.3 m long ABX radiator installed on car with 100 W PEP.
Test site 1 = Parking place "Bachgraben" (Basel-Allschwil)
Test site 2 = Small hill in Allschwil, street to Neuwiller

Remote station: Beat, HB9DTF/mm in Trinidad, Port-of-Spain, inv.V with 100 W PEP

Comparing station 1 = Sämi, HB9BPP, 5 Ele Beam (DJ5UT) 27m high, 100 W in Allschwil
Comparing station 2 = Ueli, HB9EAX, Cushcraft R5 mit 100 W PEP 18 km distant
Comparing station 3 = Sigi, OE6KNG, 3 Ele Yagi, 15m high, 100 W in Graz, from 22.35h on

Start of test: 22.00h MESZ on 14.318 Mhz from test site 1.

General remark: The signal from Beat was received by all participants with very large signal strength variations, rapid QSB in the order of 3 S points, whereby the average signal strength varied slowly between S3 and S6.

22.00 Start of test: Beat received Felix with R5, Sämi with R5, and Ueli was heared with R1 (not readable, just detectable),
Sämi arrived a little stronger than Felix, but could not be measured in S points due to rapid QSB.
22.10: Felix is driving to test site number 2 (duration 8 Min).
22:20h-22.30h Felix noticed a slight signal improvement of Beat signals. Difference minimal.
Then we performed a number of short changeovers between Sämi and Felix to permit Beat to perform a signal comparison:
Comment from Beat: Sämi and Felix appear to have the same strength, both are readable with R5. Difference below 1 S point advantage to Sämi. Ueli now with R2 (barely readable).
22:35h : Sigi appears and receives from Beat about 1 S point better report than Sämi.
Now Ueli can be received with R3 (weak readable), later back to R2 from Beat.
Felix and Sämi with R5.
22:45 bis 23:00: Several short changeovers between Sigi, Sämi and Felix:
Comment from Beat: Now all 3 stations arriving with the same signal strength in Trinidad. Exact S points cannot be given due to rapid QSB.

Additional info: Between Graz (Austria) and Basel were short skip conditions.
Sigi's signal reached S9+ at some times in Allschwil.

Conclusion: The ABX radiator demonstrated a very good performance in DX communication for both test sites, in parking place as well as on a slight hill. There was a difference noticable between test site 1 and test site 2. Signal from test site 1 arrived slightly lower than Sämi. On test site 2 there was practically no difference between Sämi (5 Ele Beam 27 m above ground) and Felix!
- Here follows the email, I received from Trinidad after the QSO:
I nearly can't beleave it, that your antenna is only 1.3 m long, and at my next Cybercafe

visit I will have a look to your homepage.
The strength of your signal was slightly weaker than HB9BPP while at the parking place in the city, and on your drive.
When arrived in Allschwil on the small hill, there was no difference to detect between your two signals ...

State 16th. September 2005: Last 2 weeks.

What happend in the last two weeks? Read here

For antenna unbeleavers: (22th. Sept. 2005)
Michael, DF8WI, visited me and wrote this mail:
Hello, all interested in antennas <<< (Click to read)

State 6th. October 2005: 80 m
The new 80 m construction is finished, here follows the information:
New 80 m HB9ABX antenna <<< (Click to read)

State 14th. October 2005:
Several improvements could be obtained in the last few days:
20 m and 40 m improvements <<< (Click to read)

State 1st. November 2005:
Power testing of the antenna with high power:
Test report 1 KW on 20 m and 40 m <<< (Click to read)

State 9th. November 2005:
Now I was able to build a 3 band version, which I was testing and measuring today:
3 Band Version <<< (Click to read)

State 26th. November 2005:
Good question about the construcion guide of the new antenna:
Here the answer <<< (Click to read)

State 14th. December 2005:
Why a NEW HF ANTENNA ?
Here the answer <<< (Click to read VARYLINK etc.)

State 31th. December 2005:
Technical functions of the VARYLINK
Varylink <<< (Click to read)

State 6th. Janaury 2006:
3 Band Antenna: Measuered values and picture
20-17-15m antenna <<< (Click to read)

State 16th. Febr. 2006:
During January/February tests were performed in Chile on 20m and 40m
Chile Tests <<< (Click to read)

State 1st May 2006:
A new antenna version: 2 band RoomCap for 20m and 30m
20-30m antenna <<< (Click to read)

State 28th May 2006:
Experience on 80m (mobile installation)
Report 80m <<< (Click to read)

State 1st June 2006:
New antenna version for 10/11/12 m
10m RoomCap <<< (Click to read)

Explanation 29th June 2006:
Why is the small RoomCap so efficient ?
Efficiency of the RoomCap Antenna <<< (Click to read)

State 15th July 2006:
Field strength measurements RoomCap
Measuring results 20m <<< (Click to read)

State 4th August 2006
New version: 160 m RoomCap (power capability 1 KW SSB)
160 m test reports <<< (Click to read)

State 6th September 2006
160 m antenna at 2% and 1.25% of wavelength
160 m antenna shorter and shorter <<< (Click to read)

State 24th October 2006 / UPDATE 28th Oct 2006
Evaluation and Comparison of the antenna by antenna builders
Here are the reports <<< (Click to read)

State 29th October 2006 / UPDATE 12th Nov 2006
Life demonstrations of the RoomCap antenna
Dates and reports <<< (Click to read)

State 7th November 2006 / UPDATE 14.April 2007
80m SWR bandwidth as Excel sheet + picture of anteanna
Here is the bandwidth data <<< (Click to read)

State 30th November 2006
Comparison with Magnetic Loop antenna
Here is this report <<< (Click to read)

State 1st December 2006
Comparison with EH antenna
Here is this report <<< (Click to read)

State 19th March 2007
RoomCap antenna simulation with NEC
Read report here <<< (Click to read)

State 14th May 2007
Comparison with Titanex GP 40-10
Here is this report <<< (Click to read)

State 22nd May 2007
Builder report from Germany, DL5GBP, 40m band
Here is this report <<< (Click to read)

State 9th June 2007
Report of antenna measuring with MiniVNA antenna analyzer
Here is this report <<< (Click to read)

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The Tests are going on. Will keep you informed here. Please check in frequently to see ...

Until then, and maybe we meet us in an antenna test ?

To arrange a sked: send e-Mail to email

Felix Meyer HB9ABX

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