## 10m Repeaters

(PART 01/27)

I just have finished an update of my last 10m-repeaterlist WW 2.99. You can find many news and corrections of my last list. Thanks for all the informations for my 10m-repeaterlist worldwide, i have received via e-mail or packet-radio, to all hams around the world!

The new list is sorted to 10m-output frequencies. Quickly you can find now the 10m-repeaters working on the same frequency. Please send me your corrections, news and updates (tx-pwr, tx-qth, tx and rx-locator, use of antennas to tx and the rx-side, CW-ID?, link on what band? and additional input-frequencies from other repeaters on 6m, 2m, 220mhz and 23cm-bands, using ctcss-tone on the repeater, voice-messages and so on). You can send me your news via packet-radio to: DL6XB@DBOHHB.#HH.DEU.EU or to my hamradio-friend Juergen Moeller, DH3JM, with the e-mail-adress: dg1xj@t-online.de for news for my 10m-repeaterlist worldwide... These full 10m-repeaterlist includes 27 parts.

This list you can find also into the world wide web under the URL's:

http://www.qsl.net/dl2gg or http://www.darc.de./referate/hf and

http://www.hb9hd.ch

(END OF PART 01/27)

(PART 02/27)

COORDINATION OF THE 29 MHZ FM REPEATERS IN THE IARU REGION 1

#### INTRODUCTION

Since the number of active 29 MHz repeaters in Region 1 is increasing and applications for new ones are continously dropping in, it seems necessary to coordinate them on Region 1 level.

The main policy for the coordinator is, that he shall do his best to make it possible for all radio amateurs interested in 29 MHz FM repeaters to get an allocation where they do not cause interference to other repeaters or modes. It is important for the coordinator to keep and update a list of repeaters. The Region 1 member societies should therefore provide information about changes of the 29 MHz FM Repeater situation in their countries for the coordinator.

# FREQUENCY COORDINATION

The written determination of the regional and the national frequency coordination body shall prevail and be considered good amateur operating practice. The regional frequency coordination body of IARU Region 1 is the 29 MHz MF Repeater Coordinator, nominated by and member of the HF Committee. Name, callsign and address are published in each number of Region 1 News. The national frequency coordination is carried out in deliberation with the Region 1 Coordinator by a body nominated by the national member sosiety.

THE IARU-REGION 1 29MHZ-FM-REPEATER-COORDINATOR IS: SM3AVQ, Lars Olsson, Furumovaegen 21 K, S-80641 Gaevle, SWEDEN, Telephone: Home:00946 (0)26 518424, QRL:00946 (0)26 179275, Summerhouse: 00946 (0)26 99578, GSM(Mobile):00946 (0)70 7204203, Fax:00946 (0)26 179365

## GUIDELINES FOR COORDINATION

The distance between two repeaters using the same frequency pair should be at least  $250\ \mathrm{km}$ .

If the distance of a repeater-location to the boarder of a neighbouring country is less than 250 km, the HF Committee or the neighbouring national society must be consulted for coordination.

Access to the repeaters shall always be possible with a 1750 Hz tone. Other access methods (DTMF tones) may be allowed in parallel with the standard  $1750~{\rm Hz}$ .

If a radio link is used between the repeaters RX and TX it is advisable to use a subtone system (CTCSS).

The holder of a 29 MHz Repeater licence is free to switch off the repeater when it is misused or if the repeater in normal conditions causes interference with another one.

(END OF PART 02/27)

(PART 03/27)

Repeaters are primarily intended to facilitate mobile operation. Mobile traffic shall always have priority.

If you can hear each other on the in-frequency - QSY to a simplex frequency. Never occupy a repeater if simplex traffic is possible, because that prevents others from using it.

Use the minimum amount of power necessary to maintain contact.

Monitor the repeater in order to become familiar with any peculiarities in its operation.

There is no need for long calls. Just simply indicate that you are on the repeater.

Identify legally. You must identify at least every 10 minutes during a contact and at the end of it.

Pause between transmissions to allow other hams to break in and gain access to repeater too.

Be thoughtful and keep the transmissions as short as possible. Be aware that your transmissions are monitored by many listeners. Don't give the amateur radio hobby a bad reputation!

THE 29 MHZ FM SEGMENT IN THE IARU REGION 1

FREQUENCY (MHz)	APPLICATION
29.510 29.520 - 29.550 29.560 - 29.590 29.600 29.610 - 29.650 29.660 - 29.690	Band edge, don't use FM Simplex Repeater inputs, (10 kHz spacing) Calling Frequency FM Simplex Repeater outputs, (10 kHz spacing)
29.700	The product of the producting,

#### FREQUENCIES FOR FM REPEATERS IN THE IARU REGION 1

DESIGNATION	REPEATER IN	PUT REPEATER	OUTPUT
RH1	29.560 MH	z 29.660	 MHz
RH2	29.570 MH	z 29.670	MHz
RH3	29.580 MH	z 29.680	MHz
RH4	29.590 MH	z 29.690	MHz

(END OF PART 03/27)

(PART 04/27)

EXPLANATION FOR THE 10M-REPEATERLIST WORLDWIDE (de ARRL, WIA and DL6XB)

# NOTES

What follows is a discussion of some of the specialized features used in repeaters listings (NOTES) in the directory.

- The city/town where the repeater is located a pound sign (#) LOCATION following indicates the repeater is uncoordinated by the coordination council. OUTPUT - The output frequency in megahertz.

INPUT - The input frequency in megahertz. - The call sign of the repeater. CALL - Effective radiated power (watts). ERP - Height above sea level (metres). HASL - QTH-Locator from this 10m-repeater. Locator

- How the repeater may be accessed and other specialized features NOTES are indicated by the following abbreviations: - Open (usually carrier-operated)

- Bi-lingual system bi/bl

- Closed, limited access system

- Demonstration, experimental system

LiTZ - (Ltz) Long-Tone Zero. Used to alert users to an emergency in some areas of the country.

- Tone-Access (CTCSS tone) required to access the system. Standard EIA frequency codes are listed later in this chapter.

```
- Touch-Tone (R) access to specialized features.
RB
           - Remote Base
SNP
           - Shared Non-Protected Pair. In some areas there are repeater fre-
             quencies listed as SNP. These frequencies are intended to provide
             spectrum for experimental repeaters, search and rescue operations,
             portable public service systems and to act as a holding place for
             repeaters awaiting coordination. Users of SNP frequencies do so
             under the following guidelines:
             1) The frequencies are shared by all users.
             2) Operators receive no protection from other co-channel users.
             3) All systems use CTCSS or other approved method of limited
             access.
             4) The frequency coordinator shall coordinate the CTCSS tones.
           - Burst (tonecall)
b
          - Beacon
bcn
          - Shortwave-channel in the IARU-Region 1 for 10-m-repeaters
          - Please send more informations of this repeater to:
INFO
            DL6XB @ DB0HHB.#HH.DEU.EU
           - licensed, but not currently on air
li
(END OF PART 04/27)
(PART 05/27)
    EXPLANATION FOR THE 10M-REPEATERLIST WORLDWIDE (de ARRL, WIA and DL6XB)
NOTES
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op - Operating (carrying on)

pl - Planning/development stage / planned; not yet licensed

QTH ? - Location not known...?

T - testing

- licensed but operational status unknown

# SPECIALIZED FEATURES (NOTES continued):

# \_\_\_\_\_

- closed autopatch; may be used with authorization (ca)

- Dual Squelch e - emergency power
e-sun - solar power
e-wind - wind power
l - linked or crossband system
p - portable system
pkt - digital/packet capability
R/r - RACES affiliated

- autopatch

- ARES affiliated

wide area coverage systemRTTY/ASCII system Х

У z Wx - direct access to law enforcement

- direct access to - weather net/weather usage - experimental system

Exp - Receiver RX

- Transmitter TX

Voice: - Voiceannouncement: .....(Text)..... - This is currently understudy by ARRL

signators, are as follows: (see the Call Area list!)

SPONSOR - The Sponsor of the repeater. Plus (+) sign indicates the listed

call plus additional calls, sponsor the repeater.

T/O - timeout (in minutes)

#### CTCSS (PL) TONE FREQUENCIES \_\_\_\_\_\_

The purpose of CTCSS (PL) < TM > is to reduce co-channel interference during band openings. CTCSS (PL) < TM> equipped repeaters would respond only to signals having the CTCSS tone required for that repeater. These repeaters would not respond to weak distant signals on their inputs and correspondingly not transmit and repeat to add to the congestion. The standard Electronic Industries Association (EIA) frequency codes, in hertz, with their Motorola alphanumeric des-

During 1980 the ARRL Board of Directors adopted the 10-meter CTCSS (PL)<TM> tone-controlled squelch frequencies listed below for voluntary incorporation

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(END OF PART 05/27)
(PART 06/27)
CTCSS (PL) TONE FREQUENCIES
______
Call Area Tone 1 Tone 2
_____
  W1 131.8 Hz-3B 91.5 Hz-ZZ
W2 136.5 Hz-4Z 94.8 Hz-ZA
W3 141.3 Hz-4A 97.4 Hz-ZB
        146.2 Hz-4B 100.0 Hz-1Z
  W4
  W5
        151.4 Hz-5Z 103.5 Hz-1A
        156.7 Hz-5A 107.2 Hz-1B
  W6
        162.2 Hz-5B 110.9 Hz-2Z
  W7
        167.9 Hz-6Z 114.8 Hz-2A
  W8
  W9
       173.8 Hz-6A 118.8 Hz-2B
  WΟ
       179.9 Hz-6B 123.0 Hz-3Z
        127.3 Hz-3A 88.5 Hz-YB
  VE
Bandplan for frequency modulation (FM) in the IARU-Region 1
29.520 - 29.550 MHz FM-Simplexworking (10-kHz-distance 29520,29530 kHz and
                                   so on)
29.560 - 29.590 MHz Repeater inputs (RH1 - RH4)
29.600
              MHz FM Simplex calling-frequency (to connection pse clear)
29.610 - 29.650 MHz FM-Simplexworking (10-kHz-distance 29610,29620 kHz and
                                   so on)
29.660 - 29.690 MHz Repeater outputs (RH1 - RH4)
10-m-repeater-channels in the IARU-Region 1
_____
(Ch) Input Output
_____
RH- 29.530 29.630 MHz (not IARU-Region 1 bandplanconform)
RH1 29.560 29.660 MHz
RH2 29.570 29.670 MHz
RH3 29.580 29.680 MHz
RH4 29.590 29.690 MHz
Bandplan for 10-m-repeaters in the IARU-Region 2
______
29.510 - 29.590 MHz Repeater inputs
             MHz National FM Simplex Frequency
29.610 - 29.690 MHz Repeater outputs
Bandplan for 10-m-repeaters in the IARU-Region 3
_____
29.510 - 29.700 \text{ MHz} FM Repeaters and Simplex
29.520 - 29.580 MHz Repeater Inputs
Note: Four repeater channels are allocated, with 20 kHz channel spacing and
     100kHz offset.
29.600
             MHz International FM Simplex
29.620 - 29.680 MHz Repeater Outputs
(END OF PART 06/27)
(PART 07/27)
Repeater frequency pairs (input/output) in the IARU-Region 2 and 3
                 29.560/29.660 MHz
29.580/29.680 MHz
29.520/29.620 MHz
29.540/29.640 MHz
REPEATER LINGO (by The ARRL REPEATER DIRECTORY 1995/1996 Edition):
______
This chapter covers a basic course in "repeater-speak" and explains many of the
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into 10-meter repeater systems to provide a uniform national system.

terms heard on your local repeater. Read on and enjoy!

Definations of the words and phrases commonly used on repeaters:

- Autopatch A device that interfaces the repeater system with the telephone system to extend ham communication over the telephone communication network.
- Breaker A ham who interjects his call sign during a QSO in an attempt to get a chance to communicate over a repeater.
- Channel The pair of frequencies (input and output) a repeater operates on. Closed Repeater A repeater whose use is limited to certain individuals.
  - These are completely legal under FCC Rules.
- Control Operator An individual ham designated to "control" the repeater, as required by FCC regulations.
- COR Carrier-Operated-Relay, a device that, upon sensing a received signal, turns on the repeater's transmitter to repeat the received signal.
- Courtesy Tone A short tone sounded after each repeater transmission to permit other stations to gain access to the repeater before the tone sounds.
- Coverage The geographical area in which the repeater may be used for communication.
- CTCSS Continuous Tone Coded Squelch System, a subaudible tone system which operates the squelch (COR) of a repeater when the corresponding subaudible tone is present on a transmitted signal. The squelch on a repeater that uses CTCSS will not activate if the improper CTCSS tone, or if no tone, is transmitted.
- Crossband Communication to another frequency band by means of a link interfaced with the repeater.
- Desense Degradation of receiver sensitivity caused by strong unwanted signals reaching the receiver front end.
- Duplexer A device that permits the use of one antenna for both transmitting and receiving with minimal degradation to either the incoming or uotgoing signals.
- Frequency Synthesis A scheme of frequency generation in modern transceivers using digital techniques.
- Full Quieting Signal strength in excess of the amount required to mask ambient noise.
- Hand-Held A portable FM transceiver that is small enough to use and carry in one hand.
- Input The frequency the repeater receiver is tuned to: The frequency that a
   repeater user transmits on.
- Intermod Interference caused by spurious signals generated by intermodulation distortion in a receiver front end or transmitter power amplifier stage.
- Key-Up Turning on a repeater by transmitting on its input frequency.
- ${\tt LiTZ}$  Long Tone Zero (LiTZ) Alerting system. Send DTMF zero (0) for at least three seconds to request emergency/urgent assistance.

Machine - The complete repeater system.

(END OF PART 07/27)

(PART 08/27)

# REPEATER LINGO (by The ARRL REPEATER DIRECTORY 1995/1996 Edition):

This chapter covers a basic course in "repeater-speak" and explains many of the

terms heard on your local repeater. Read on and enjoy!

Definations of the words and phrases commonly used on repeaters:

- Mag-Mount A mobile antenna with a magnetic base that permits quick installation and removal from the motor vehicle.
- Offset The spacing between a repeater's input and output
- Omnidirectional An antenna system that radiates equally in all directions.
- Output The frequency the repeater transmits on; the frequency that a repeater user receives on.
- Picket-Fencing Rapid flutter on a mobile signal as it travels past an obstruction.
- Polarization The plane an antenna system operates in; most repeaters are vertically polarized.
- Reverse Autopatch A device that interfaces the repeater with the telephone system and permits users of the phone system to call the repeater and converse with on-the-air repeater users.
- RPT/R Abbreviation used after repeater call signs to indicate that the call

sign is being used for repeater operation.

Simplex - Communication on one frequency, not via a repeater.

Split Sites - The use of two locations for repeater operation (the receiver is at one site and the transmitter at another), and the two are linked by telephone or radio.

Squelch Tail - The noise burst that follows the short, unmodulated carrier following each repeater transmission.

 $\begin{array}{lll} {\tt Time-Out-Timer-A\ device\ that\ limits\ the\ length\ of\ a\ single\ repeater\ transmission\ (usally\ 3\ minutes).} \end{array}$ 

Tone Pad - A device that generates the standard telephone system tones used for controlling various repeater functions.

(END OF PART 08/27)

(PART	09/27)	10M-REPEATERLIST	WORLDWIDE	BY DL6	SXB (Release:	: April 1999	)
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(PART 09/	27) 10M-	REPEATERLI	ST WORLDWIDE BY	DL6XB (Release: April 1999)	! 
Output (MHz)	Input (MHz)	Call- sign	Country	Federal State/ Town	QRV?
29.500 open, sim			U.S.A.	California South/SO CAL	Yes
				Mandaluyong on this frequency. This is to a function) up to every 49-50	
talker, v and S55TV	434.650 and mult oice cloc A 2.4/1.20	isystem, f k, etc. co ghz fm atv	mmands. 10m-gat	Sv.Jungert s from 2m, DTMF commands, DV eway soon and link to: S50VN N760H, 574m/HASL, sponsor:S	MS (dvms)
emergency	-	K2TKE aces affil d system,		New York-TSARC/Manhattan/ Setauket nd 100.0hz, sponsor:WrdMlvHS	Yes
and 70cm,	ked or cre ctcss:14 Hamburg	6.2hz, PWR on 29.690m	:60W, sporadic	New York-TSARC/Suffolk/ Long Island/Centereach connection with the 10m-repe for this Info to KA2JOB via	
29.6 PSE Info	29.5 <u> </u>	V5	NAMIBIA	Windhoek	?
	29.600 ss:103.5h	VE2RYM z, sponsor	CANADA :VE2VK	Quebec-RAQI/Montreal/ Mt Yamaska	Yes
My 10 Met stalled a with this (output) TA-33 at I point t Also for mhz. at 3 Vertical ter for D 13.5dB ga put on 10 With this 2 watts a behind th had no pr	29.600 repeater, er Crossb re: 440 M Rig. The with no t 50'. It i his anten 10 meters 5' for om VS. Horiz X on 10 M in on 440 meters as system, nd Duck as e TM-742 oblems at	anding sys Hz, 2 Mete way I now one. Anten s a Three na South E, I occasi nidirectio ontal. I'v eters. On mhz. It is nd 10 watt I can be untenna to to keep th all. 73 -	e on 446.210mhz tem consists of rs, 10 Meters. run it is 446. nas used for th Element Tri-Ban ast from here i onally use an Anal pattern. (I e found Horizon the UHF side, I located 75'abo s output on the p to 8 miles aw work through th ings running co	ntron "99" Vertical tuned for 'm still experimenting with tal polarization usually work use a Comet GP-98 Vertical ve ground level. I run 50 was 440mhz side with great resular from home using my handher crossBand. I mounted a small during full duty cycle and E7IDV @ VE7SRY Surrey, B.C.	iguration 9.600 MHz Mosley 0 meters. or 29.600 both rks bet- with atts out- ults! eld using all fan nd have
20 600	20 600			California Couth/CO CAI	

29.600 29.600 W4CM U.S.A. Virginia/Newport News open, remote base, sponsor:newport, simplex

(END OF PART 09/27)

## (PART 10/27) 10M-REPEATERLIST WORLDWIDE BY DL6XB (Release: April 1999)

QRV?	Federal State/ Town	Country	Call- sign	Input (MHz)	Output (MHz)
Yes	St.Johns/St.Johns	NEWFOUNDLAND	VO1KEN	29.510	29.610 open
Yes	Lisboa/Monsanto	PORTUGAL	CT0HAS	439.375 29.610	29.610 439.375

Crossbandrepeater, TX-PWR on 29.610mhz:40W with vertical dipol, TX-PWR on 439.375mhz:45W with 2 X 5/8 lambda vertical. Equipment:All Alinco UHF and HF equipment. Connection board between HF<>UHF homemade by CT1EOU. Responsible: CT1DGZ. Licensed to ARAS ASSOCIACAO DE RADIOAMADORES DA AMADORA-SINTRA. TNX for this Info to CT1DBH@CS1AAS.CTLX.PRT.EU or e-mail: pissaro@mail.telepac.pt

.\_\_\_\_\_ 29.620 29.520 VK5RHF AUSTRALIA ADELAIDE/Glenside open, ctcss:88.5hz, PWR:5W ERP, Link via wire, 70m/HASL, RX-QTH:Glenside, sponsor:SSC

29.620 29.520 VK2RUW AUSTRALIA WOLLONGONG/Knights Hill

open, linked or crossband system, PWR:50W ERP, 771m/HASL, T/O:5.0, RX-QTH: Mt Murray, expected back on air late 1995, sponsor:NIL 29.620 29.620 VK2RUW AUSTRALIA Wollongong Yes Simplex-Gateway, linked or crossband system, sponsor: IARS

The Illawarra Amateur Radio Society on the south coast of N.S.W., has established a 10 metre Simplex "Gateway". This Gateway is Simplex on 29.620mhz FM and is connected to two UHF 70cm repeaters, one in Wollongong (servicing from Sydney in the north to Batemans Bay in the south) and one in Goulburn (servicing the Southern Highlands and parts of Canberra).

The term "Gateway" was chosen as it is not a repeater in itself, it is a Gateway into the local UHF repeater systems. To access the system, you transmit and receive on 29.620mhz (no offset). Because it is not a repeater there is no "tail" to acknowledge if the system hears you. Instead, to inform users if they are successfully accessing the Gateway, a Voice Identtification will transmit 2 seconds after the mute closes, announcing in a female voice the following -"This is VK2RUW, the Wollongong New South Wales, 10 metre Simplex Gateway". The ident will be transmitted with every mute opening of less than 4 seconds. When a longer transmission is received or when a QSO is taking place, the Ident is inhibited.

Also a "Talking Clock" is connected to the Gateway and to the 2 repeaters. The female voice will announce the local time every hour, plus, if a DTMF "9" is sent, the current time will also be transmitted back.

The Gateway runs 100 watts FM into a dipole 100 feet up a tower, 2,600 feet A.S.L. and has good RX sensitivity with a noise mute.

In the future, the VK2 Division WIA Sunday morning Broadcasts will be relayed via the Gateway. Also, work is currently progressing in linking the Gateway into another 70cm repeater covering VK1 and southern N.S.W.

The Gateway is reliant on 2 factors, the Sun Spot Cycle and Amateur Operaters knowing about the system. Unfortunately, we can't do much about the Sun Spots, but this message can help with the second. We would appreciate any readers of this information passing it on to fellow HF Operators and local Clubs. Our Club invites all Amateurs far and wide, to try and access the Gateway and to make contacts with the many friendly operators in this region.

\_\_\_\_\_\_

Wishing you all the best in this great hobby of ours...

Thank you. Rob - VK2MT (Repeater Officer I.A.R.S. inc.)

TNX for this Info to Cliff Walker, Wellington, ZL2ALY@ZL2WA.#63.NZL.OC

(END OF PART 10/27)

# (PART 11/27) 10M-REPEATERLIST WORLDWIDE BY DL6XB (Release: April 1999)

Output	Input	Call-	Country	Federal State/	QRV?
(MHz)	(MHz)	sign		Town	

29.620 29.520 ONOHOB BELGIUM 430.250 431.850 Crossband linked system vi Obligated linked to 29.620mhz output and 29 QTH:JO21IB, TX-PWR:15W ERP, TX-antenna:Cush diversity-RX is in Locator:JO21LA. The ante with 3db and 15W ERP. Transmitter and recei bands. Callsign ONOHOB using synthesised vo Rogerbeep:3-tone on all bands plus random r Second remote programmable and reconfigurab linked brother repeaters on same sites on 1 1297.250mhz with ctcss:131.8hz in -6mhz. TN ON7WP@ON7RC.#BR.BEL.EU	.520mhz input with no RX-ctcss. craft R5, TX-ctcss:131.8hz. The nna for 70cm is a comet colinea ver separated using SHF-Links o ice, clock announcements every adio checks almost every half h le based on Z-80 processor. Als 45.6375mhz with ctcss:173.8hz a	TX-  r n all hour, our. o non
29.620 29.520 VA3FMR CANADA emergency power, ctcss:136.5hz	Ontario-SLVRC/National Capitol Region/Dunrobin	Yes
29.620 29.520 VE3TFM CANADA open, closed autopatch, emergency power, direct access to law enforcement, linked or ctcss:103.5hz, sponsor:TFMCS	Ontario-WNYSORC/Metro Toronto/ Uxbridge crossband system to the 2m-ban	
29.620 29.520 KP4IA PUERTO RICO open, linked or crossband system to 145.425 Voice: This is the Kilo Papa 4 India Alfa re to 10 meter link, this is the Kilo Papa 4 I then the QTR), CW-ID: DE KP4IA/R, Rogerbeep: high-tone), sporadic coupling with KP3AV on	mhz ?, Voice:From KP4IA repeate peater, Voice:2 meter to 6 mete ndia Alfa repeater, the time is 3-tones in CW: S (low/mid	r and (and
29.620 29.520 N8DNZ U.S.A. open, touch-tone, emergency power, closed a sponsor:N8DNZ	Alabama/Talladega utopatch, ctcss:103.5hz,	Yes
29.620 29.520 WA5P U.S.A. open	Arkansas/Rudy	Yes
29.620 29.520 N6JSL U.S.A. open, ctcss:156.7hz, sponsor:N6JSL	California North-NARCC Sacramento Valley/Auburn	Yes
29.620 29.520 KD6AOG U.S.A. open, sponsor:KD6AOG	California North-NARCC South Bay/San Jose	Yes
29.620 29.520 NI8H U.S.A. open, ctcss:107.2hz, sponsor:BARC	California South/LA,OR,RIV, SBER, Los Angeles	Yes
29.620 29.520 WOTX U.S.A. open, CW-ID:WOTX/R, sponsor:Denver RC	Colorado/Denver Denver	Yes
29.620 29.520 KM4ZT U.S.A. open, linked or crossband system, Voice:Listen to the southeast USA on KM4ZT 9:32 am wednesday november 4 good morning), sponsor:KM4ZT		Yes
29.620 29.520 W4ILQ U.S.A. open, emergency power, sponsor:W4ILQ	Florida/Southeast-Miami/Ft Lauderdale Area/Miami	Yes
(END OF PART 11/27)  (PART 12/27) 10M-REPEATERLIST WORLDWIDE BY	DL6XB (Release: April 1999)	
Output Input Call- Country	Federal State/	===== QRV?
(MHz) (MHz) sign	Town	=====
29.620 29.520 WA3DUX U.S.A. open, autopatch, direct access to law enforcement, linked or crossband system, ra		Yes
29.620 29.520 KF4XH U.S.A. open, the city/town where the repeater is lindicates the repeater is uncoordinated by		Yes

Georgia/Monroe

Yes

29.620 29.520 KQ4XL U.S.A.

New York-TSARC/Ulster/

Woodstock

2-tone(low-high tone)

29.620 29.520 KQ2H U.S.A.

ctcss:110.9hz, sponsor:KQ2H

		WB2HYP D, CW-ID:W		New York-UNYREPCO/Rochester/ Avon	Yes
29.620 ctcss:127	29.520 .3hz	N2ISQ	U.S.A.	New York-WNYSORC/Southern Tier/ Maple Springs	Yes
open, eme: Hi! I am V Voice if in CW when linked fu split site feet in a na is 5/8 and 70cm 400 foot	rgency por WB4IUY. My the repear n in use. It time where the couple of the wave-groupower outpasite as we	y repeater ters has n It also h ith 53.07m Height about the weeks. Tundplane. put is 30W ell. Power	d or crossband has a combinat of been in use as an auxiliary hz output and 5 ve ground is cuthe RX antenna i UHF simplex is 6 meter system out on 6 meter	North Carolina/Wendell system, PWR:300W, sponsor:WB4IUY ion voice and CW id'r. It ID's i in the last 45 seconds or more, input on 442.300mhz simplex. It 2.07mhz input and shares the same rently 170 feet, but moving to s 1/2-wave-groundplane and TX ar 3 X 5/8-wave-groundplane up 170 m is at 170 feet also, but moving is 100 watts into 3 bay phased Y@WB4IUY.#RTP.NC.USA.NOAM	and is ne 400 nten- feet ng to
	29.520 ked or cr	-		North Carolina/Wilkesboro XE/R, sponsor:BLUE RIDGE	Yes
	e-access			Ohio/Warren/Mason access the system, sponsor:FARA,	Yes
				Oregon/Portland Metro/Portland access the system, sponsor:WCRI	Yes
	rgency po	wer, spons		Pennsylvania-WPRC/Pittsburgh/ Irwin "S"	Yes
(END OF PA	ART 13/27	)		z, sponsor:W4ZJM(star/pound)	
(PART 14/: ======= Output	27) 10M-1	REPEATERLI ======= Call-		DL6XB (Release: April 1999)  Federal State/	==== QRV?
(PART 14/2 ======== Output (MHz) ====================================	27) 10M-1 ====================================	REPEATERLI ====================================	Country  U.S.A.	DL6XB (Release: April 1999)  Federal State/ Town  Virginia/Staunton	~
(PART 14/:	27) 10M-1 ====================================	REPEATERLI Call- sign KN4FK er system, KA80TX	Country  U.S.A. sponsor:WB40JL  U.S.A.	DL6XB (Release: April 1999)  Federal State/ Town	====
(PART 14/2  Output (MHz)  ===================================	27) 10M-1 ====================================	REPEATERLI  Call- sign  KN4FK er system,  KA8OTX  /R, sponso  DF0MHR  Ohz the r ve-groundp nning:3 re to DF0MOT	Country  U.S.A. sponsor:WB40JL  U.S.A. r:ARA NORTH  GERMANY epeater goes on lane, Locator:Jucceiver with divections of the control of the con	DL6XB (Release: April 1999)  Federal State/ Town  Virginia/Staunton ??? PSE Info to DL6XB!	? Yes Yes Arl
(PART 14/:	27) 10M-1 ====================================	REPEATERLI ====================================	Country  U.S.A. sponsor:WB40JL  U.S.A. r:ARA NORTH  GERMANY epeater goes on lane, Locator:Joceiver with dive (Wiesbaden) on ith e-mail:c113  AUSTRALIA stem, touch-tone	DL6XB (Release: April 1999)  Federal State/ Town  Virginia/Staunton ??? PSE Info to DL6XB!  West Virginia/Beckley  Muelheim an der Ruhr air, PWR:15W(planning:100W), RX 031JL, 180m/HASL, ctcss:123.0hz, ersity-receiving in Muelheim, Ma 70cm-band, QSY to 29.660mhz out	? Yes Yes arl cput, Yes ater-
(PART 14/2  Output (MHz)  29.620 Voice:KN4  29.620 open, CW-  29.630 with tone TX-Antenna sponsor:Di and Dortm TNX for tl  29.640 open, lini site:Olina 141.3hz,  29.640	27) 10M-1 ====================================	REPEATERLI  Call- sign  KN4FK er system,  KA8OTX  R, sponso  DFOMHR  Ohz the r ve-groundp nning:3 re to DFOMOT to DF2ER w  VK3RHF ossband sy ters on 29 TF  VK6RHF	Country  U.S.A. sponsor:WB40JL  U.S.A. r:ARA NORTH  GERMANY epeater goes on lane, Locator:Joceiver with divociver with divociver with email:c113  AUSTRALIA stem, touch-tonoc640mhz and 438	DL6XB (Release: April 1999)  Federal State/ Town  Virginia/Staunton ??? PSE Info to DL6XB!  West Virginia/Beckley  Muelheim an der Ruhr air, PWR:15W(planning:100W), RX 031JL, 180m/HASL, ctcss:123.0hz, ersity-receiving in Muelheim, Ma 70cm-band, QSY to 29.660mhz out 56@email.mot.com  MELBOURNE/Mt Dandenong e, 600m/HASL, T/O:2.5, 10m-repea	? Yes Yes arl cput, Yes ater-
(PART 14/2 ====================================	27) 10M-1 ====================================	REPEATERLI	Country  U.S.A. sponsor:WB40JL  U.S.A. r:ARA NORTH  GERMANY epeater goes on lane, Locator:Joceiver with divoceiver with divoce	DL6XB (Release: April 1999)  Federal State/ Town  Virginia/Staunton ??? PSE Info to DL6XB!  West Virginia/Beckley  Muelheim an der Ruhr air, PWR:15W(planning:100W), RX 031JL, 180m/HASL, ctcss:123.0hz, ersity-receiving in Muelheim, Ma 70cm-band, QSY to 29.660mhz out 56@email.mot.com  MELBOURNE/Mt Dandenong e, 600m/HASL, T/O:2.5, 10m-repea .750mhz are linked, tone access:  PERTH/Roleystone  SYDNEY/Berowra	Yes Yes Arl Lput, Yes Ater-
(PART 14/2  Output (MHz)  29.620  Voice:KN4  29.620  open, CW-  29.630  with tone TX-Antenna sponsor:Dand Dortm TNX for the  29.640  open, line site:Oline 141.3hz,  29.640  planning,  29.640  planning,  29.640  planning,  29.640	27) 10M-1 ====================================	REPEATERLI  ========  Call- sign  ========  KN4FK er system, KA80TX /R, sponso  DF0MHR .0hz the r ve-groundp nning:3 re to DF0MOT to DF2ER w VK3RHF ossband sy ters on 29 TF VK6RHF erne Hill, VK2RBW d system,	Country  U.S.A. sponsor:WB40JL  U.S.A. r:ARA NORTH  GERMANY epeater goes on lane, Locator:Joceiver with dive (Wiesbaden) on ith e-mail:c113  AUSTRALIA stem, touch-ton 640mhz and 438  AUSTRALIA sponsor:WRG  AUSTRALIA 230m/HASL, spon  AUSTRALIA	DL6XB (Release: April 1999)  Federal State/ Town  Virginia/Staunton ??? PSE Info to DL6XB!  West Virginia/Beckley  Muelheim an der Ruhr air, PWR:15W(planning:100W), RX 031JL, 180m/HASL, ctcss:123.0hz, ersity-receiving in Muelheim, Ma 70cm-band, QSY to 29.660mhz out 56@email.mot.com  MELBOURNE/Mt Dandenong e, 600m/HASL, T/O:2.5, 10m-repea .750mhz are linked, tone access:  PERTH/Roleystone  SYDNEY/Berowra	Yes Yes arl tput, Yes ater- ?

open, ctcss:103.5hz	Agincourt	
29.640 29.540 VE2RST CANADA open, sponsor:VE2GSB	Quebec-RAQI/Montreal/ St Jsph du Lac	Yes
29.640 29.540 DX1HB PHILLIPPINES Link on the 6m-band, PSE Info to DL6XB!	Mandaluyong	QRT?
29.640 29.540 WB4TJO U.S.A. remote base, PWR:350W, tone-access (ctcss ctcss:177.3hz on 29.640mhz for the time wh sponsor:WB4TJO, Voice:29.64 megahertz and then the QTR), Voice:W B 4 T J O repeater (low-middle-high tone), CW-ID:DE WB4TJO/RP	en the repeater-squelch is open, the 350 watts WB4TJO repeater (ar system Echo Mike 60, Rogerbeep:3-	tem,
29.640 29.540 KX4I U.S.A. closed, limited access system, wide area conserbeep:3-tone (high-middle-low tone), C		Yes
29.640 29.540 KA4AFE U.S.A. open, sponsor:WA5P	Arkansas/Northwest/Rogers	Yes
29.640 29.540 W6KRW U.S.A. open, ctcss:107.2hz, sponsor:OC RACES	California South/LA,OR,RIV, SBAR,SBER,SD,VE/Santiago Peak	Yes
29.640 29.540 KB4TJ U.S.A. open, Voice: (Intro:Ding Dong) Welcome to VX Juliet at the repeater Echo Mike 60, spons		
(END OF PART 14/27)		
(PART 15/27) 10M-REPEATERLIST WORLDWIDE B		====
Output Input Call- Country (MHz) (MHz) sign	Federal State/ Town ====================================	QRV?
29.640 29.540 KB1CBI U.S.A.	Connecticut or Massachusetts ??	Yes
open, Voice: Hello		e:
Voice: From KB1CBI repeater system, Voice: WGood morning and then the QTR), Voice: Welcremote system.  29.640 29.540 K1JCL U.S.A.	elcome to KB1CBI repeater (Examplome to the K B 1 C B I repeater a  Connecticut/Willimantic/	e:
Voice: From KB1CBI repeater system, Voice: WGood morning and then the QTR), Voice: Welcremote system.  29.640 29.540 K1JCL U.S.A. open, closed autopatch, emergency power, linked or crossband system, CW-ID: DE K1JCL	elcome to KB1CBI repeater (Examplome to the K B 1 C B I repeater a  Connecticut/Willimantic/ North Coventry COVENTRY, Rogerbeep: 3-tone	e: and
Voice:From KB1CBI repeater system, Voice:WGood morning and then the QTR), Voice:Welcomemote system.  29.640 29.540 K1JCL U.S.A. open, closed autopatch, emergency power, linked or crossband system, CW-ID:DE K1JCL  29.640 29.540 N4LEM U.S.A. open, sponsor:N4LEM	elcome to KB1CBI repeater (Example one to the K B 1 C B I repeater and Connecticut/Willimantic/ North Coventry COVENTRY, Rogerbeep:3-tone Florida/East Central/Cocoa	e: and Yes Yes
Voice:From KB1CBI repeater system, Voice:WGood morning and then the QTR), Voice:Welcomente system.  29.640 29.540 K1JCL U.S.A. open, closed autopatch, emergency power, linked or crossband system, CW-ID:DE K1JCL 29.640 29.540 N4LEM U.S.A. open, sponsor:N4LEM  29.640 29.540 KI4RF U.S.A.	elcome to KB1CBI repeater (Example one to the K B 1 C B I repeater and another connecticut/Willimantic/ North Coventry COVENTRY, Rogerbeep:3-tone Florida/East Central/Cocoa  Florida/Northeast/ Daytona Beach	e: and Yes Yes
Voice:From KB1CBI repeater system, Voice:WGood morning and then the QTR), Voice:Welcomente system.  29.640 29.540 K1JCL U.S.A. open, closed autopatch, emergency power, linked or crossband system, CW-ID:DE K1JCL 29.640 29.540 N4LEM U.S.A. open, sponsor:N4LEM  29.640 29.540 KI4RF U.S.A. open, linked or crossband system,	elcome to KB1CBI repeater (Example one to the K B 1 C B I repeater and a connecticut/Willimantic/ North Coventry COVENTRY, Rogerbeep:3-tone  Florida/East Central/Cocoa  Florida/Northeast/ Daytona Beach  Florida/Northeast-Jacksonville Area/Jacksonville sponsor:NS4R, Voice:Welcome to te	e: and Yes Yes Yes Yes Yes
Voice:From KB1CBI repeater system, Voice:WGood morning and then the QTR), Voice:Welcomemote system.  29.640 29.540 K1JCL U.S.A. open, closed autopatch, emergency power, linked or crossband system, CW-ID:DE K1JCL  29.640 29.540 N4LEM U.S.A. open, sponsor:N4LEM  29.640 29.540 KI4RF U.S.A. open, linked or crossband system, ctcss:100.0hz, sponsor:KI4RF  29.640 29.540 NS4R U.S.A. open, closed autopatch, emergency power, linked or crossband system, ctcss:103.5hz, NS4R repeater (example:8:38 am 30 upcovere  29.640 29.540 WD4NLG U.S.A. open, sponsor:WD4NLG	elcome to KB1CBI repeater (Example one to the K B 1 C B I repeater and the	e: and Yes Yes Yes Yes Yes the
Voice:From KB1CBI repeater system, Voice:WGood morning and then the QTR), Voice:Welcomemote system.  29.640 29.540 K1JCL U.S.A. open, closed autopatch, emergency power, linked or crossband system, CW-ID:DE K1JCL 29.640 29.540 N4LEM  29.640 29.540 KI4RF U.S.A. open, sponsor:N4LEM  29.640 29.540 KI4RF U.S.A. open, linked or crossband system, ctcss:100.0hz, sponsor:KI4RF  29.640 29.540 NS4R U.S.A. open, closed autopatch, emergency power, linked or crossband system, ctcss:103.5hz, NS4R repeater (example:8:38 am 30 upcovere  29.640 29.540 WD4NLG U.S.A. open, sponsor:WD4NLG  29.640 29.540 KC4HAZ U.S.A. open, linked or crossband system, sponsor:KC4HAZ	elcome to KB1CBI repeater (Example ome to the K B 1 C B I repeater and a connecticut/Willimantic/ North Coventry COVENTRY, Rogerbeep:3-tone  Florida/East Central/Cocoa  Florida/Northeast/ Daytona Beach  Florida/Northeast-Jacksonville Area/Jacksonville sponsor:NS4R, Voice:Welcome to	re: and Yes Yes Yes Yes Are Yes Yes Yes Yes Yes
Voice:From KB1CBI repeater system, Voice:WGood morning and then the QTR), Voice:Welcomemote system.  29.640 29.540 K1JCL U.S.A. open, closed autopatch, emergency power, linked or crossband system, CW-ID:DE K1JCL 29.640 29.540 N4LEM  29.640 29.540 KI4RF U.S.A. open, sponsor:N4LEM  29.640 29.540 KI4RF U.S.A. open, linked or crossband system, ctcss:100.0hz, sponsor:KI4RF  29.640 29.540 NS4R U.S.A. open, closed autopatch, emergency power, linked or crossband system, ctcss:103.5hz, NS4R repeater (example:8:38 am 30 upcovere  29.640 29.540 WD4NLG U.S.A. open, sponsor:WD4NLG  29.640 29.540 KC4HAZ U.S.A. open, linked or crossband system, sponsor:KC4HAZ	elcome to KB1CBI repeater (Example ome to the K B 1 C B I repeater and the	re: and Yes Yes Yes Yes Are Yes Yes Yes Yes Yes
Voice:From KB1CBI repeater system, Voice:WGood morning and then the QTR), Voice:Welcremote system.  29.640 29.540 K1JCL U.S.A. open, closed autopatch, emergency power, linked or crossband system, CW-ID:DE K1JCL  29.640 29.540 N4LEM U.S.A. open, sponsor:N4LEM  29.640 29.540 KI4RF U.S.A. open, linked or crossband system, ctcss:100.0hz, sponsor:KI4RF  29.640 29.540 NS4R U.S.A. open, closed autopatch, emergency power, linked or crossband system, ctcss:103.5hz, NS4R repeater (example:8:38 am 30 upcovere  29.640 29.540 WD4NLG U.S.A. open, sponsor:WD4NLG  29.640 29.540 KC4HAZ U.S.A. open, linked or crossband system, sponsor:KC4HAZ  29.640 29.540 N4NEQ U.S.A.	elcome to KB1CBI repeater (Example ome to the K B 1 C B I repeater and the	e: and Yes Yes Yes Yes Lhe Yes Yes

open, CW-ID:WA9QDZ/R, Rogerbeep:2-tone, sponsor:WA9QDZ	County Vanderburgh	
29.640 29.540 WOAQ U.S.A. open, closed autopatch, linked or crossband	Kansas/South Central/Wichita system, sponsor:POWRLINK	Yes
29.640 29.540 KK4CZ U.S.A. open, sponsor:KA9KOP, CW-ID:KK4CZ LOU KY	Kentucky/Louisville	Yes
29.640 29.540 WD8DPA U.S.A. open, emergency power, linked or crossband system, autopatch, wide area cove AA PSE Info to DL6XB!, ctcss:114.8hz,		Yes /AUX
29.640 29.540 WBOQQK U.S.A. open, emergency power, linked or crossband coverage system, sponsor:OMA COM	Nebraska/Ohama/Ohama system on 444,875mhz, wide area	Yes
29.640 29.540 N2VV U.S.A. open, linked or crossband system, sponsor:N2VV	New Jersey-TSARC/Cumberland/ Millville	Yes
(END OF PART 15/27)		
(PART 16/27) 10M-REPEATERLIST WORLDWIDE BY	DL6XB (Release: April 1999)	
Output Input Call- Country (MHz) (MHz) sign	Federal State/ (	==== QRV?
29.640 29.540 WA2MLG U.S.A. open, tone-access (ctcss tone) required to access the system, CW-ID:DE WA2MLG/RPT,	New York-TSARC/Westchester/ Tuckahoe sponsor:WA2MLG	Yes
29.640 29.540 K8LK U.S.A. open, sponsor: K8LK	Ohio/Medina/Wadsworth	Yes
29.640 29.540 WB5VXK U.S.A. open, sponsor:WB5VXK	Oklahoma/Tulsa/Tulsa	Yes
29.640 29.540 W3MIE U.S.A. open, sponsor:CrwfrdARS, Voice:W3MIE repeater	Pennsylvania-WPRC/Northwest/ Meadeville	Yes
29.640 29.540 W4CAT U.S.A. open, the city/town where the repeater is lindicates the repeater is uncoordinated by 29.640 29.540 W4CAT U.S.A. open, emergency power, linked or crossband	ocated a pound sign (#) following the coordination council Tennessee/Gallatin/Bna	Yes
29.640 29.540 WB4NKM U.S.A. open, sponsor:WB4NKM	Tennessee/Greeneville	Yes
29.640 29.540 WT50 U.S.A.	Texas/Bastrop	Yes
29.640 29.540 WB5MPX U.S.A. open, closed autopatch, ctcss:151.4hz, spon		Yes
29.640 29.540 WB8CQV U.S.A. open, linked or crossband system, sponsor:W		Yes
29.650 29.550 JP8YCV JAPAN TX-PWR:30W, ctcss:88.5hz, TNX for this Info	Hokkaido/Shiretoko to: JP2PHV@JA2BAS.19.JNET2.JPN.A	Yes AS
29.650 29.550 WA1CBY U.S.A. open	Connecticut/Willimantic/ Columbia	Yes
29.650 29.550 AA3RG U.S.A. open, emergency power, linked or crossband system to 2m, ctcss:110.9hz, Rogerbeep signal from the 2m-band, sponsor:A.A.R.G., miles northwest of Philadelphia (Info de N30145.170 144.570 AA3RG U.S.A.	Pine Grove :double beep() for a incoming CW-ID:AA3RG/R, located about 100	Yes

(END OF PART 16/27)

	(PART	17	/27	)	10M-REPEATERLIST	WORLDWIDE	RY	DI.6XB	(Release:	Anril	1999)	
- 1	/ T 🕁 T / T	<b></b> / .	/ 4 / .	,	TOM NELEMIENTESI	MOLUDNIDE	$_{\rm L}$	עמטעע	11/CTC 02C •	TLLT	エンンン)	

(PART 17/27) 10M-REPEATERLIST WORLDWIDE BY DL6XB (Release: April 1999)	
Output Input Call- Country Federal State/ Q (MHz) (MHz) sign Town	PV?
29.660 29.560 VK4RCC AUSTRALIA NW BRISBANE/Southside/ Y open, PWR:10W ERP, T/O:3.0, ctcss:88.5hz, Camp Mountain sponsor:QCG	es
The Southside Amateur Radio Society Inc. has VK4RCC the Clubs 10m repeater is operation. VK4RCC is also linked to the clubs 2m repeater VK4RAX. Should you hear an engaged tone (Beeping) on 29.660mhz this means that the 2m repeater in use by an amateur not using the ctcss-tone required to key the 10m setup. All traffic on VK4RCC is also heard on the 2m side. Users are requested not use voice processor or excessive microphone settings whilst working through VK4RCC as the transmitter and receiver are linked via radio link and audio levels have been set finely. It is easy to cause your output to be distorted For SEQ users VK4RAX operates on 147.675mhz with a negative offset. A CTCSS tone of 91.7hz is required for access to VK4RCC. TNX for this Info to: VK4BB@VK4BBS.#BNE.QLD.AUS.OC	is to
29.660 29.560 OE1XKC AUSTRIA Vienna(Wien) 438.675 431.075 OE1XKU connection with OE1XKC via ctcss-tone:162.2hz, TX-QTH:Simmering, RX-QTH:Laaerberg, the TX and RX are 3km apart, TX-ANT:1/2-wav dipole, RX-ANT:Fritzel GPA Mono GP 55m over ground, Voicemessage on OE1XKU: BITTE BEACHTEN SIE DIE FERNMELDETECHNISCHEN BESTIMMUNGEN, Rogerbeep on OE1XK 1-tone(low tone) for a incoming signal from 10m, T/O:8.0, TX and RX:Alinco m bil-TRX, link on 70cm-band, CW-ID:OE1XKC, open on the 10m-site, TX-locator: JN88EE, High:191m/HASL, PWR:40W, sponsor:Radio-Club Austria / OE1BAD. TNX fo this Info to OE3KLU with his e-mail-adress: oe3klu@oevsv.at	re (U:
29.660 29.560 ONOTEN BELGIUM Antwerpen open, CW-ID:DE ONOTEN, PWR:15W ERP, TX-QTH:JO21EE, Rogerbeep:1-tone(long), sponsor:ON7PG	Yes
29.660 29.560 VP2V BRITISH VIR- Virgin Islands PSE Info to DL6XB! GIN ISLANDS	?
29.660 29.560 VE8NWT CANADA Northwest Territories/ open, emergency power, linked or cross- Yellowknife/Yellowknife band system, direct access to law enforcement, sponsor:VE8DP	Yes
	No
	No
	Yes
	Yes mhz l E LEU
(END OF PART 17/27)	

Output Input Call- Country Federal State/ (MHz) (MHz) sign Town

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29.660 29.560 KP3AV PUERTO RICO Toa Alta/County Toa Alta open, carrier operated, ANT:Antron A-99(1/2-wave), linked or crossband system on 449mhz, CW-ID:DE KP3AVRPT, Rogerbeep:4-tone and then a end-1-tone(high tone) , sporadic coupling with KP4IA on 29.620mhz output.

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PSE Info to DL6XB! Sponsor:SM6HQL and SM6FDQ

29.660 29.560 SK6RIC SWEDEN Alingsues

29.660 29.560 SK3RHU SWEDEN Hudiksvall

PSE Info to DL6XB! Sponsor:SM3BVF

29.660 29.560 SK7RVI SWEDEN Lyckeby/Karlskrona TX-PWR:50W ERP, QTH near Karlskrona, CW-ID:KARLSKRONA, Rogerbeep:in CW "K". . ,

linked or crossband system, Sponsor:SM7FGG

29.660 29.560 SKORVM SWEDEN Stockholm

Send a burst with 1750.0hz for 2-3 seconds and the repeater goes on air with 15 minutes-timer for TX, planning:Link on 10ghz and DTMF, TX-PWR:50W ERP, Sponsor:SM0GXZ

(END OF PART 18/27)

#### (PART 19/27) 10M-REPEATERLIST WORLDWIDE BY DL6XB (Release: April 1999)

Output Input Call- Country Federal State/ (MHz) (MHz) sign Town \_\_\_\_\_\_ 29.660 29.560 HB9HD SWITZERLAND Brunnen (near Zuerich) Yes

To activate the repeater, transmit a 1750.0hz-tone burst of approximately 0.5sec on the input frequency  $(29.560 \, \text{mhz})$  or -using a DTMF (touch tone) Mike- by sending the sequence 8. Ensure your FM deviation not to exceed 2,2khz in peak. This is mandantory to keep the 10khz spacing and to prevent others from being interferred by our repeater.

- Regular mode:
  - Repeater is "standby", it needs to be activated by 1750.0hz-Tone or DTMF 8. 5-Tone (ZVEI) 51201 is also possible. "Squelch closed" is indicated by a fast "HD" CW-Identification (similar to the "K" {over} on many VHF/UHF-Repeaters). Transmitter Hang Time is about 5 seconds, then repeater remains active (to be opened by a simple carrier) until a "QRT-CW-Identification is given (about 10 seconds). After that, repeater is "standby" again.
- Monitor mode (switched on by the sysops under special circumstances. TX active on any signals on the input frequency):
- Repeater is in "Hot Standby", it does not need to be activated by a certain tone or code. Everything what is received at the RX is retransmitted on the TX-frequency (Carrier Operation). If repeater is in Monitor mode, there is a very short TX hang time (1 sec.). Every 10 minutes the CW-ID "HB9HD" is gi-
- Permanent TX (switched on by the sysops under special circumstances. TX always active, regardless of the presence of a carrier at the RX): During 30 minutes maximum, a constant carrier is transmitted. Every signal at the RX is retransmitted. CW-Beacon every 10 seconds: "HD", every 120 seconds: "HB9HD TEST"

The main functions of the repeater are constantly checked. If a failure of any kind occurs (Mains Power, HF Power Amplifier, high SWR and many other criteria) , a CW-Alarm text is generated and sent out automatically. So the sysops know before climbing the mountain what kind of failure is to be expected. The choice of the right spare parts and tools is much easier that way.

PWR:55W, emergency power. CW-ID:HB9HD(in regular-mode all 10 minutes). Here are the differences of the two QTH's: TX:Fronalpstock Kanton Schwyz SZ near Stoos: High:1908m/HASL, Locator:JN46HX, Antenna:4m over ground. RX:near Goldau on the mountain Rigi-Scheidegg: High:1665m/HASL, Locator:JN47GA, Antenna:9m over ground. The RX and TX are 11km apart. Antennas: Antron A-99(1/2-wave), polarization:vertical. The Rogerbeep gives in the regular mode a "HD" in CW or a 1-tone in the monitor-mode. The beacon-ID is: HB9HD 10M RPT JN46HX all 10 minutes in slow-CW with no activity. When the power-supply (AC 230V) is down, the repeater goes on emergency power and it gives a message in CW:ALARM. All 2 hours gives the repeater in CW: R2 (it is a control-function from the HB9HD-RX). We look forward to your rapports including a description of your antennas, polarization , RX, locator etc. Please send your rapport to Markus, HB9CPW@HB9PD.CHE.EU or hb9cpw@uska.ch

You always find the latest news and a lot of additional information about this

HB9HD-project at our internet home page: http://www.hb9hd.ch

Thank you for your help. Vy 73 es gd dx de HB9HD / HB9LBC@HB9OS.CHE.EU and HB9CPW@HB9PD.CHE.EU or hb9lbc@uska.ch and hb9cpw@uska.ch Sponsors of HB9HD-crew: HB9BUB, HB9BXR, HB9CPW, HB9LBC, HB9LCQ, HB9SJE The Builder only for the RX and TX from HB9HD is Achim (Joe), DL7KH

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(END OF PART 19/27)

Output (MHz)	Input (MHz)	Call- sign	Country	Federal State/ Town	QRV?
29.660 open, spo	29.560 onsor:WB40	~	U.S.A.	Alabama/Foley	===== Yes
29.660 open, ctc	29.560 css:100.0	KR4UD nz, sponso	U.S.A. c:KR4UD	Alabama/Pelham	Yes
	29.560 css:156.7h	N6RKS	U.S.A. c:N6RKS	California North-NARCC/ South Bay/San Jose	Yes
29.660 open, ctc	29.560 css:107.2h	K6TY nz	U.S.A.	California South/LA,OR,RIV, SBER/Arcadia	Yes
WY4P MD E	RG is in t PL 4A, cto	this time 2 css:141.3h:	z, Rogerbeep:1-t	Florida/Miami o on 29.662mhz, open, CW-ID:WY4P tone(high tone), see also the KB with KB4TKQ ??? PSE Info to DL	4TKQ
	crossbar		U.S.A. rgency power, direct access t	Florida/Central-Orlando Area/ Orlando to law enforcement, ctcss:103.5h	Yes
29.660 open, eme	ergency po	KF4QVP	U.S.A. s affiliated,	Florida/Southeast/ West Palm Beach	Yes
00 660	29.560	K4LK	U.S.A.	Elawida/Wash Cantus   Mamma /	Voc
system, w ctcss:146	ergency po vide area 5.2hz, spo	ower, linke coverage s	ed or crossband system,	Florida/West Central-Tampa/ St Petersburg Area/ St. Petersburg K, TNX for this Info to	165
open, emesystem, was ctcss:146 n5tor@yah29.660 open, link K9KE repeis the K9Rogerbeer	ergency povide area 5.2hz, sponoo.com 29.560 nk on the eater, Voie 2MEE 2meter 2:3-tone,	coverage sonsor:unknows K9KE 440mhz, spice:This is	ed or crossband system, bun-assumed K4LK U.S.A. bonsor:K9KE, Vois the K9KE link er link system, ime the RX-squel	St Petersburg Area/ St. Petersburg	Yes
open, emesystem, we ctess:146 n5tor@yah	ergency powide area 5.2hz, sponoo.com 29.560 nk on the eater, Voi 0.8E 2meter 0:3-tone, ne (110.9h 29.560 y power, 125s:141.444.025	wer, linke coverage sonsor:unknown K9KE 440mhz, spice:This is to 10mete for the traz?) on 29	ed or crossband system, own-assumed K4LK  U.S.A. consor:K9KE, Voi s the K9KE link er link system, ime the RX-squel .660mhz.  U.S.A. crossband sor:KD3R, CW-ID: U.S.A.	St Petersburg Area/ St. Petersburg  X, TNX for this Info to  Illinois/St.Louis/Godfrey Ce:K9KE repeater, Voice:This is repeater, Voice:From center USA Voice: Hi, this is the K9KE sys. Ch is open the TX transmitted a  Louisiana/Washington DC Area/ Silver Spring  N3AUY/R MD PL 4A, Rogerbeep:2-t Louisiana/Washington DC Area/	this tem,  Yes
open, emesystem, we ctcss:146 n5tor@yah	ergency powide area 5.2hz, sponoo.com 29.560 nk on the eater, Voide area 6.2hz, sponoo.com 29.560 nk on the eater, Voide 29.56	wer, linker coverage sonsor:unknown K9KE 440mhz, spice:This is to 10meter for the transport on 29 N3AUY linked or constant of the constant of	ed or crossband system, own-assumed K4LF  U.S.A. ponsor:K9KE, Vois the K9KE link er link system, ime the RX-squel .660mhz.  U.S.A. crossband sor:KD3R, CW-ID: U.S.A. crossband sor:KD3R crossband sor:KD3R	St Petersburg Area/ St. Petersburg  (, TNX for this Info to  Illinois/St.Louis/Godfrey Ce:K9KE repeater, Voice:This is repeater, Voice:From center USA Voice: Hi, this is the K9KE sys. Ch is open the TX transmitted a  Louisiana/Washington DC Area/ Silver Spring N3AUY/R MD PL 4A, Rogerbeep:2-t Louisiana/Washington DC Area/ Silver Spring  Maryland/Silver Spring n, ctcss:141.3hz, sponsor:KD3R	Yes the this tem, Yes one Yes
open, emesystem, we ctess:146 n5tor@yah	ergency powide area 5.2hz, sponoo.com 29.560 nk on the eater, Voi 9KE 2meter 5:3-tone, ne (110.9h 29.560 y power, 12tcss:141.444.025 y power, 12tcss:156.29.560 y power, 12tcss:156.29.	wer, linke coverage sonsor:unknown K9KE 440mhz, spice:This is to 10meter for the transport of the transport	ed or crossband system, own-assumed K4LF  U.S.A. consor:K9KE, Voi s the K9KE link er link system, ime the RX-squel .660mhz.  U.S.A. crossband sor:KD3R, CW-ID: U.S.A. crossband sor:KD3R	St Petersburg Area/ St. Petersburg  (, TNX for this Info to  Illinois/St.Louis/Godfrey Ce:K9KE repeater, Voice:This is repeater, Voice:From center USA Voice: Hi, this is the K9KE sys Ch is open the TX transmitted a  Louisiana/Washington DC Area/ Silver Spring N3AUY/R MD PL 4A, Rogerbeep:2-t Louisiana/Washington DC Area/ Silver Spring  Maryland/Silver Spring n, ctcss:141.3hz, sponsor:KD3R  Massachusetts/Northeast/ Haverhill	Yes the this tem, Yes one Yes
open, emesystem, we ctoss:146 n5tor@yah	ergency powide area 5.2hz, sponoo.com 29.560 nk on the eater, Voi 28.560 power, 19.560	wer, linke coverage sonsor:unknown K9KE 440mhz, spice:This is to 10meter for the transport of the transport	ed or crossband system, own-assumed K4LF  U.S.A. consor:K9KE, Voi s the K9KE link er link system, ime the RX-squel .660mhz.  U.S.A. crossband sor:KD3R, CW-ID: U.S.A. crossband sor:KD3R U.S.A. crossband sor:KD3R U.S.A. crossband sor:KD3R	St Petersburg Area/ St. Petersburg  (, TNX for this Info to  Illinois/St.Louis/Godfrey Ce:K9KE repeater, Voice:This is repeater, Voice:From center USA Voice: Hi, this is the K9KE sys Ch is open the TX transmitted a  Louisiana/Washington DC Area/ Silver Spring N3AUY/R MD PL 4A, Rogerbeep:2-t Louisiana/Washington DC Area/ Silver Spring  Maryland/Silver Spring n, ctcss:141.3hz, sponsor:KD3R  Massachusetts/Northeast/	Yes the this tem, Yes one Yes

=======	=======	=======	=========		=====
Output (MHz)	Input (MHz)	Call- sign	Country	Federal State/ Town	QRV?
29.660 open, lin	======= 29.560 ked or cr	AA7DG ossband sy	U.S.A. stem, sponsor:B	Montana/South Central/Bozeman ARBS	Yes
29.660 open, ctc	29.560 ss:107.2h	K2NK z	U.S.A.	New York-UNYREPCO/Oneonta/ Norwich/Walton	Yes
29.660 open	29.560	K4GRW	U.S.A.	North Carolina/Newport	Yes
open, lin 2m and 70 repeater,	cm, Voice Voice:Hi the WY4P	radio clu repeater o	s operator Klif b P	North Carolina/Raleigh/ County Wake fy Bravo 4 Tango Kliffy Quebec SE Info to DL6XB!, sponsor:KB4T put. Is it idently with WY4P ??	
29.660 open, CW-		WW4C	U.S.A.	North Carolina/Sanford/ County Lee	Yes
-	ID:DE N4J :1-tone(a	long high	U.S.A. CKY MOUNTNC, tone) and when	North Carolina/Rocky Mount/ County Nash the repeater makes QRT:5-tone(	Yes (from
emergency	power, a			Ohio/Carroll/Malvern band system, direct access to l RES	Yes
29.660 open, spo	29.560 nsor:ICAR	W3BMD .C	U.S.A.	Pennsylvania-WPRC/Southwest/ Indiana	Yes
	29.560 rgency po		U.S.A. d or crossband	South Carolina/Sumter system, remote base, sponsor:SA	Yes ARA
29.660 open, spo	29.560 nsor:RARC	WA4YGM	U.S.A.	Tennessee/Union City	Yes
		s the WB5B	U.S.A. FW repeater Dal	las(Text?) PSE Info to I	Yes )L6XB!
Remote Ba	se Assn,	W5DFW CW-ID:W5DF	U.S.A.	Texas/Keller/County Tarrant	Yes
29.660		WB5TTO z, sponsor		Texas/Fort Worth	Yes
open				Utah/Wasatch Front/Salt Lake	Yes
29.660	29.560 power, c	N7JYW tcss:114.8	U.S.A. hz,	Washington-WWARA/Southwest/ Longview	Yes
	29.560	WA8YWO z, sponsor	U.S.A.: :WA8YWO	West Virginia/Richwood	
(END OF P.	 ART 21/27				
				DL6XB (Release: April 1999)	
Output (MHz)	Input (MHz)	Call- sign	Country	Federal State/ Town	QRV?
29.660	29.560 erbeep:Di	NP2Y	VIRGIN ISLANDS		Yes
29.670	29.570	LU5CBA	ARGENTINA	Cordoba/Cordoba	Yes

open				
open, QTH:25km southe	east from P	aris, Locator	Savigny-le-Temple :JN18GN, Rogerbeep:"K" in C er for my 10m-repeaterlist to D	
29.670? 29.570? DF Planning in Locator:J			Braunschweig OW, Sponsor:DJ5VV	No
29.670? 29.570? DF Planning in Locator:J Sponsor:DL5LBK	-		Luetjenburg (near Kiel) coupling with DF0HHH,	No
29.670 29.570 DF Planning in Locator:J	OTRA GE IN67HT, Hig		Traunstein Sponsor:DF7MW	No
high mountain:Field mTX-QTH:on a high moun J040BC, distance betw	air when y nountain in ntain with ween TX and	ou push to ta Taunus, RX-H name:High roo RX:28km, lin	Wiesbaden/Taunus/Hohe Wurzel lk for 2 seconds PTT, RX-QTH:on igh:940m/HASL, RX-Locator:JO40F t, TX-High:720m/HASL, TX-Locato k system on 70cm, planning a li -wave-groundplane, TX-PWR:50W,	F, r:
29.670 29.570 JR TX-PWR:50W, Link on t JP2PHV@JA2BAS.19.JNET	the 23cm-ba		Okinawa/Urazoe oman, TNX for this Info to:	Yes
29.670 29.570 PI Planning in Locator:J			Leeuwarden N	No
29.670 29.570 KA	Aldfi U.		Connecticut/New London/ Montville	Yes
CTCSS:123.0hz, PWR:12	20W, ANT:ve d a series	rtical, T/O:3 of beeps to i	Northern Territory/Darwin .0 . There is a beep at the dro ndicate time out is about to oc .OC	
	-		PERTH/Lesmurdie implex gateway linked to VK6RLM	? I on
29.680 29.580 VE open, wide area cover sponsor:VE2CM			Quebec-RAQI/Mauricie/ Grand Mere	Yes
vertical and 100m/HAS	nning:100W) SL, linked en from OZ1	, Locator:JO4 system on 70cm BSL. Sponsor:	Bredsten 5QQ, TX/RX-antennas are 1/2-wav m, RX and TX are 1km apart. The OZ1BSL, Rogerbeep:No Beep?. TNX	TX
(END OF PART 22/27)				
	=======	=========	DL6XB (Release: April 1999)	====
Output Input Ca (MHz) (MHz) si ============	gn		Town	QRV? ====
With tonecall 1750.0h LOC KP10DL TURKU QRV the link is on 70cm,	nz the repe (the long- TX/RX-ante	ater goes on info all 10 m	Turku air. CW-ID:DE OH1RHU or DE OH1R inutes), PWR:20W, Locator:KP10D -groundplane(in test?:5/8-wave- 3km, sponsor:OH1BX and OH1JX,	L,
29.680 29.580 DF Planning in Locator:JPWR:50W, Link via wir with DFOHHH, Sponsor:	043JG, Hig ce, emergen	h:72m/HASL,	Osterholz-Scharmbeck (near Bremen) ennas:5/8-wave-vertical, coupli	No ng

Planning RX-QTH-Lo	in Locato cator:J06	2MI on the	TX-High:81m/HA hill "Kleiner	Potsdam (near Berlin) SL, TX-Antenna:5/8-wave-vertical, Ravensberg", RX-Antenna:Magnetic 3cm-band, Sponsor:DL2RSI	No
29.680 Planning		DFOSIP r:JN47NT,	GERMANY Sponsor:DL7KH	Sipplingen (near Konstanz)	No
29.680 TX-PWR:50	29.580 W, ctcss:	JP1YEE 88.5hz	JAPAN	Ogasawara	?
open, 550 ANT:horiz ctcss:192 radioamad	m/HASL, Lontal dipole.8hz, spoi	nsor:CT10Q osta da pr	9QM, ave), PWR:40W,		Yes
	29.580 ked or cr	NP4VG ossband sy	PUERTO RICO	Catano	Yes
		SK6RFQ Sponsor:S		Goeteborg	?
With tone (ERP:35W) km. The T QTH every "9" gives SVARK, Sc	, split s X and RX- 30 minute a Info.	ites with Antennas a es. CW-ID: Responsibl rbygdens A	link on 70cm b re 1/2-wave-gr SK7RGI TEST SK e:SM7LQQ and S	Joenkoeping es the repeater on air, TX-PWR:20 etween RX and TX. The distance is oundplane. The repeater sends ID 7RGI QTH JONKOPING. With DTMF-ton M7NDX. Owner of the repeater is b. TNX for this Info to:	9 and
29.680 ctcss:100		 WA4MZL nsor:WA4MZ		Alabama/Dothan	Yes
	29.580 ess:151.4h	N5YU z, sponsor	U.S.A. :N5YU	Arkansas/North Central/Clinton	Yes
29.680 open, ctc		NOEDS z, sponsor	U.S.A.:N0EDS	California North-NARCC/ North Bay/Clear Lake	Yes
29.680 open, ctc		WA6SUV z, sponsor	U.S.A. :WA6SUV	California North-NARCC/ Tahoe Sierra/Lake Tahoe	Yes
(END OF P	PART 23/27	)			
(PART 24/	27) 10M-	REPEATERLI	ST WORLDWIDE B	Y DL6XB (Release: April 1999)	
(MHz)	(MHz)		_	Town	==== QRV?
29.680	29.580	K6BFS	U.S.A.	California South/LA,OR,RIV, SBER,VE/Johnstone Peak	==== Yes
		tone) req		Colorado/Colorado Springs/ Colorado Springs or:KX0E	Yes
	ss (ctcss	tone) req	U.S.A. uired to GA/R, sponsor:	Connecticut/Hartford/ Bloomfield KB1GA	Yes
open, eme	rgency po			Florida/North Central/Ocala system, sponsor:KA2MBE	Yes
29.680 open, aut		KA4ZAY inked or c		Florida/Southeast-Miami/ Fort Lauderdale Area/Miami sponsor:KA4ZAY	Yes
	29.580 ked or cr	KF4ZC ossband sy		Florida/West Central-Tampa/ St Petersburg Area/Tampa	Yes

29.680 29.580 AI8H U.S.A. open		iC
4	Georgia/Conyers	Yes
29.680 29.580 N4BZJ U.S.A. open, autopatch, linked or crossband system	=	Yes
29.680 29.580 KD9FA U.S.A. open, autopatch, linked or crossband system	Illinois/Chicago/Chicago , sponsor:ACLR	Yes
29.680 29.580 AA9ME U.S.A. open, linked or crossband system, sponsor:A	Illinois/St Louis/Mascoutah A9ME	Yes
29.680 29.580 WB5NIN U.S.A. open, sponsor:B.A.R.G., TNX for this Info t		Yes
29.680 29.580 N5OMG U.S.A. open, emergency power, wide area coverage system, direct access to law enfor races affiliated, sponsor:N5OMG	Louisiana/New Orleans/ New Orleans cement, linked or crossband sys	Yes
29.680 29.580 WBOGUA U.S.A. ctcss:131.8hz, sponsor:WBOGUA	Massachusetts/East/Boston	Yes
29.680 29.580 KA0JZV U.S.A. open, linked or crossband system to 443.200		Yes \0JZV
29.680	New Jersey-TSARC/Somerset/ Bridgewater	Yes
29.680 29.580 K2YBW U.S.A. open, autopatch, tone access (ctcss tone) required to access the system, emergency po portable system, sponsor:K2YBW, the city/to a pound sign (#) following indicates the re coordination council	wer, linked or crossband system wn where the repeater is locate	
(END OF PART 24/27)		
(PART 25/27) 10M-REPEATERLIST WORLDWIDE BY	DL6XB (Release: April 1999)	
		=====
Output Input Call- Country (MHz) (MHz) sign		QRV?
	Town   New York-TSARC/Ulster/  Ellenville (#)  ing indicates the repeater unco	?
(MHz) (MHz) sign  ===================================	Town	?
(MHz) (MHz) sign  ===================================	Town	?
(MHz) (MHz) sign  29.680 29.580 WB2BQW U.S.A. sponsor:WB2BQW, the city/town where the repeater is located a pound sign (#) follow ordinated by the coordination council, see mhz output in my list(DL6XB)  29.680 29.580 N2HJD U.S.A. open, linked or crossband system, ctcss:123.0hz, sponsor:RRRA, Voice:N2HJD re  29.680 29.580 WB2JQK U.S.A. open, DTMF, sponsor:tim/Wx,	Town  New York-TSARC/Ulster/ Ellenville (#) ing indicates the repeater uncoalso the WB2BQW-repeater on 29.  New York-UNYREPCO/Rochester/ Rochester peater, CW-ID:N2HJD/R  New York-WNYSORC/Niagara/ Williamsville  North Carolina/Thomasville	? ? 690 Yes

3-tone(low-middle-high tone)					
29.680 29.580 W8HHF U.S.A. open, sponsor:TMRA	Ohio/Woods/Rossford	Yes			
29.680 29.580 W3HZU U.S.A. open, emergency power, linked or crossband affiliated, tone access (ctcss tone) requir ctcss:123.0hz, sponsor:Keystone	<del>=</del>	Yes			
29.680 29.580 N1RS U.S.A. open, autopatch, emergency power, linked	Pennsylvania-WPRC/Pittsburgh/ Apollo	Yes			
or crossband system, direct access to law e system, races affiliated, ctcss:141.3hz, sp 29.680 449.300 N1RS U.S.A. open, autopatch, emergency power, linked	onsor:SARA, Voice:N1RS Pennsylvania-WPRC/Pittsburgh/	Yes			
or crossband system, direct access to law e system, races affiliated, ctcss:131.8hz, sp	nforcement, wide area coverage				
29.680 29.580 WG1A U.S.A. ctcss:131.8hz, sponsor:WY1M	Rhode Island/W Greenwich	Yes			
29.680 29.580 WB5TTS U.S.A. open, ctcss:114.8hz	Texas/Edinburg	Yes			
29.680 29.580 WB6CDN U.S.A. open, ctcss:162.2hz	Utah/Wasatch Front/Salt Lake	Yes			
29.680 29.580 WZ8E U.S.A. open, remote base, linked or crossband syst	Virginia/Bluefield/One .em, sponsor:ARA-SOUTH	Yes			
(END OF PART 25/27)					
(PART 26/27) 10M-REPEATERLIST WORLDWIDE BY	DL6XB (Release: April 1999)				
Output Input Call- Country (MHz) (MHz) sign	Federal State/ Town	QRV?			
29.680 29.580 KD4DN U.S.A. linked or crossband system, ctcss:146.2hz, sponsor:KD4DN	Virginia/Washinton DC Area/ Sterling Park	Yes			
	Washington-WWARA/Northwest/ Mt Constitution required to accsess the system,	Yes			
29.680 29.580 N9BBG U.S.A. open, ctcss:127.3hz, CW-ID:N9BBG/R, sponsor	Wisconsin/Southeast/Milwaukee:W.E.R.A.	Yes			
29.680 29.580 KC7NP U.S.A. closed autopatch, sponsor:KC7NP	Wyoming/Northwest/Cody	Yes			
29.690? 29.590? DF0EFT GERMANY Planning in Locator: JO50MX, Sponsor: DL3AF	Erfurt	No			
Planning in Locator:JN48MT, open, High:440m					
band, Antennas:7/8-wave-vertical, planning coupling with DFOREU, Sponsor:DK6TE  29.690 29.590 DFOHHH GERMANY Hamburg Yes  open, carrier operated, RX's/TX-Antennas:5/8-wave, TX-PWR:50W(planning:100W),  TX-Locator:JO43XN (on the building of the university) with 85m/HASL, 1.RX-Locator:JO43XN with 102m/HASL (distance to the TX:0,8km), 2.RX-Locator:JO43XK with  40m/HASL (distance to the TX:13km), planning a 3.RX in Locator:JO43WJ with  220m/HASL (distance to the TX:20km), CW-ID:DFOHHH HAMBURG all 5 minutes, planning in this year: real diversity-receiving with 3 receivers, voice-messages (remote-controlled) and a digital-voice-recorder (recording-time:30 seconds and with DTMF remote-controlled for the user on DFOHHH). Rogerbeep:3-tone. Link- system between RX's and TX are on the 23cm-band, planning a coupling with DFOHFT and DFOKIL, planning a coupling with the 70cm-city-repeater DBOWI on  438.850mhz output and on 431.250mhz input with a ctcss-tone:67.0hz linking to					

the 10m-site on 29.690mhz. For the time when the RX-squelch from DF0HHH is open, the TX on 29.690mhz transmit a ctcss-tone:67.0hz, for a another repeater-coupling with no need link on the higher bands (a very fine idea from DL6XB!). Sponsor:DL6XB

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29.690 29.590 DFOREU GERMANY Reutlingen No Planning in Locator: JN48NM, TX-High: 440m/HASL, TX-Antenna: 5/8-wave-groundplane, TX-PWR: 20W, Link on the 23cm-band, TX and RX are 4km apart, Sponsor: DL8SDL, planning coupling with DF0LBG

29.690 29.590 EI4GRC IRELAND Galway/Ballinruan/County Clare Yes 145.625 145.525 EI4GRC IRELAND Galway/Ballinruan/County Clare Yes 434.950 433.350 EI4GRC IRELAND Galway/Ballinruan/County Clare Yes Crossband and linked system to the 10m-site. With DTMF-tones \*126 activate the repeater-system, with DTMF-tones \*128 reactivate the repeater-system, linear-transponder-mode 10m<>2m included. Locator:IO53HO, 10m-PWR:50-60W, 10m-ANT: 1/2-wave, 300m/HASL, link on 70.260mhz, emergency power, e-wind, TX and RX are 15miles apart, Sponsor:Galway Radio Experimenters Club, EI4GRC and EI4HG. TNX for this Info to: ei4hg@iol.ie or ei4hg@ampr.org

(TND OF DADE OC (07)

(END OF PART 26/27)

## (PART 27/27) 10M-REPEATERLIST WORLDWIDE BY DL6XB (Release: April 1999)

=======					
Output (MHz)	Input (MHz)	Call- sign	Country	Federal State/ Town	QRV?
open, lin	ked or cr	ossband sy	U.S.A. stem to 2m	New York-TSARC/Orange/ Bloomimg Grove D:WB2BQW/R, Rogerbeep:1-tone	Yes
53.190	52.190 ked or cr	WB2BQW	U.S.A. stem to 10m,	New York-TSARC/Orange/ Blooming Grove	Yes
open, clo	sed autop	atch, emer	CANADA gency ystem, ctcss:15	Pefferlaw	Yes
system, t	rgency po	s (ctcss t	d or cross-	New York-TSARC/Manhattan/ Setauket o access the system, races aff:	Yes i-
	ss (ctcss	K1NQJ tone) req		Connecticut/Hartford/ Glastonbury	Yes
Receiver-	site, lin	k to CTOHC.	PORTUGAL A on 29.660mhz CS1AAS.CTLX.PRT	output with ctcss:192.8hz?	Yes
Receiver- put, RX-A sor:Assoc	site, lin ntenna: H	k with PWR orizontal Radioamado	:3W and ctcss:1 Dipol(1/2-wave)	Serra d'Aire (Alcanena) 92.8hz to CTOHPA on 29.680mhz o , Locator:IM59QM, 670m/HASL, sp Prata (A.R.C.P.). TNX for this	pon-

444.600 29.690 KA2JOB U.S.A. New York-TSARC/Suffolk/ Yes open, linked or crossband system to 10m Long Island/Centereach and 70cm, ctcss:146.2hz, sporadic connection with the 10m-repeater DFOHHH in Hamburg on 29.690mhz output.