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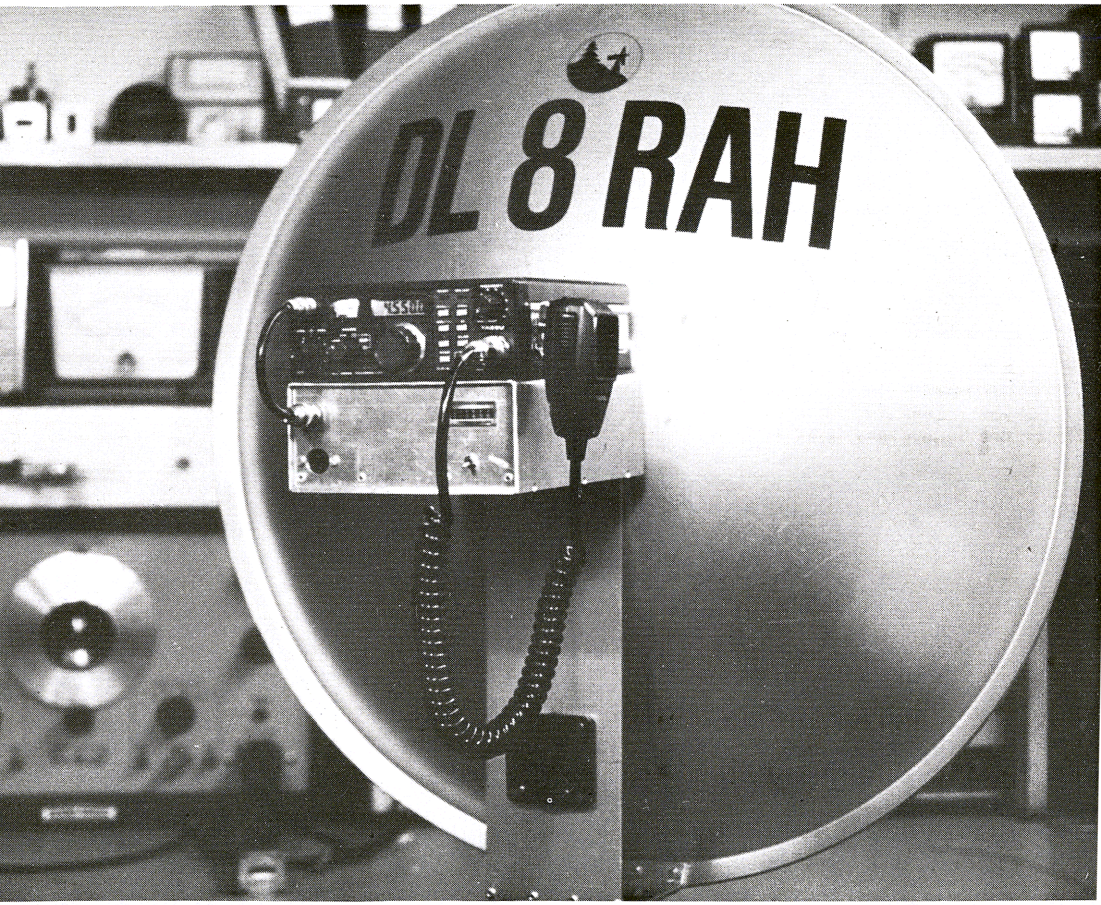
Claus Neie, DL7QY, D-7181 Rudolfsberg 24 Phone : 07951-7418



10 GHz SSB

INCLUDING GaAs FET MATRIX

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YU	2 CBM	RADIO CLUB MARJAN; P.O. BOX 155; YU-58001 SPLIT	YUGOSLAVIA

COVERPICTURE: 10 GHZ/144 MHZ SSB TRANSVERTER BY DL8RAH (FOTO BY DL8RAH)

CONTENTS:

EDITOR / REDAKTION: CLAUS NEIE; DL7QY; D-7181 RUDOLFSBERG 24. TEL: 07951/7418. JAHRESBEZUGSPREIS DM 18.-- INNERHALB DER BUNDESREPUBLIK DEUTSCHLAND UND BERLIN WEST. ERSCHEINUNGSWEISE 4 AUSGABEN PRO JAHR. AUSLIEFERUNG 1984 AM 25.FEB. 26.MAI 25.AUG 24.NOV. DURCH ÜBERWEISUNG VON 18.--DM AUF EINES DER UNTERHALB STEHENDEN KONTEN WERDEN SIE AUTOMATISCH IN DIE BEZIEHERKARTEI AUFGENOMMEN. DUBUS IS PUBLISHED 4 TIMES PER YEAR. FOR THE ANNUAL SUBSCRIPTION RATE OUTSIDE GERMANY CONTACT YOUR HOME DISTRIBUTOR. (SEE ABOVE) BW-BANK BLZ: 62231051 KONTO NR. 8264086301 ODER POSTSCHECKKONTO STUTTGART NR. 164175 - 703. BITTE DEN ABSENDER NICHT VERGESSEN !

TECHNICAL REPORTS

Frequency Doubler from 2.5 GHz to 5 GHz using GaAs FET

by Jürgen Dahms DC0DA

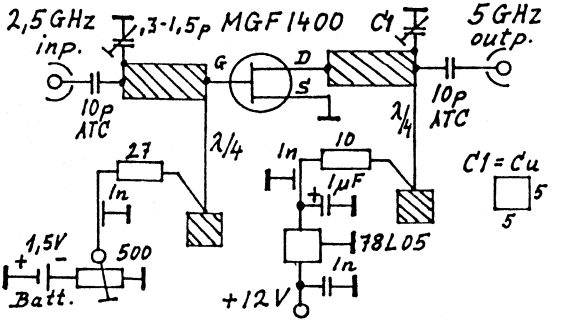
E. In the amateurradio section GaAs FET's are used mostly for amplifier applications in the prestage- or medium power range. But without any problems GaAs FET's are usable also as active frequencymultiplier especially in the short high frequency range with efficient success. Multipliers using varactor diodes, high mechanical performance is necessary, have an efficiency of mostly no more than 50%.
For set up a 10 GHz transverter (IF 144 MHz) under using a subharmonic mixer, a LO frequency of 10244/2 (MHz)= 5112 MHz is to produce. The needed 2556 MHz are easily to produce using low cost silicontransistors as BFR34A, BFQ65, BFQ69, BFR91, HXTR3101 a.s.o., because only a low power signal is necessary to drive the GaAs FET doubler. After passing the FET-doubler the signal must be filtered because the input- and other harmonic products are standing with nearly the same level on the drain of the GaAs FET. Good success shows the here discribed single circuit filter.
The printed circuit bord and the resonatorcircuit is calculated by DK2AB using a microcomputer program.

D. Bislang kam der GaAs-FET in der Amateurfunktechnik als HF-Vorverstärker oder als Kleinsignalverstärker zur Anwendung. Problemlos läßt er sich aber auch als aktiver Frequenzvervielfacher besonders bei hohen Frequenzen mit gutem Wirkungsgrad einsetzen. Dadurch werden mechanisch aufwendige Varactorvervielfacher mit geringem Wirkungsgrad (<50%) hinfällig.
Bei der Erstellung eines 10 GHz-Transverters mit einer ZF von 144 MHz benötigt man bei Verwendung eines subharmonischen Mischers (twin-diode-mixer) eine Oszillatorfrequenz von 10224/2 MHz= 5112 MHz. Bei Einsatz eines GaAs-FET-Verdopplers kann die zu verdoppelnde Frequenz von 2556 MHz mit preiswerten Siliziumtransistoren wie BFR34A, BFQ65, BFQ69, BFR91, HXTR3101 usw. aufbereitet werden, da relative kleine Steuerleistungen benötigt werden. Nach dem Verdoppler muß unbedingt ein Filter für 5112 MHz folgen. Am einfachsten setzt man hier ein kleines einkreisiges Resonatorfilter mit geringer Durchgangsdämpfung ein. Ohne Filter nach dem Verdoppler stehen sonst beide Frequenzen (2556 u. 5112 MHz) fast mit gleichem Pegel an.
Die Platine und das Resonatorfilter wurden mit Hilfe eines Rechnerprogrammes von DK2AB berechnet und von mir mit Erfolg aufgebaut und die meßtechnischen Daten festgehalten.

f in = 2556 MHz P in = 18 mW
f out= 5112 MHz Pout = 34 mW
Vp = 2.8 dB
P out gemessen mit nachgeschaltetem Resonatorfilter.
Durchgangsdämpfung = .5 dB
Unterdrückung der 2556 MHz=>55 dB
P out measured including resonatorfilter. Insertionloss of the filter=.5dB. Rejection of 2556 MHz => 55 dB.

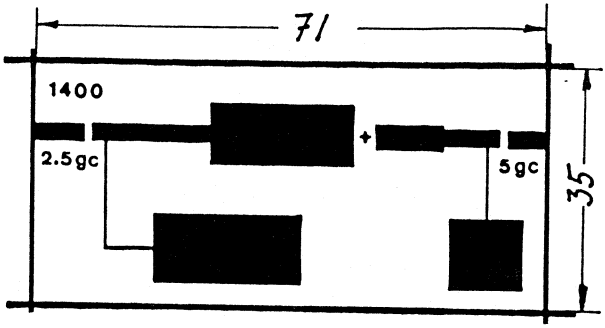
UDS = 4.6 V
UGS = -.6 V
Id = 40 mA

GaAs-FET Doubler 2.5 GHz to 5 GHz

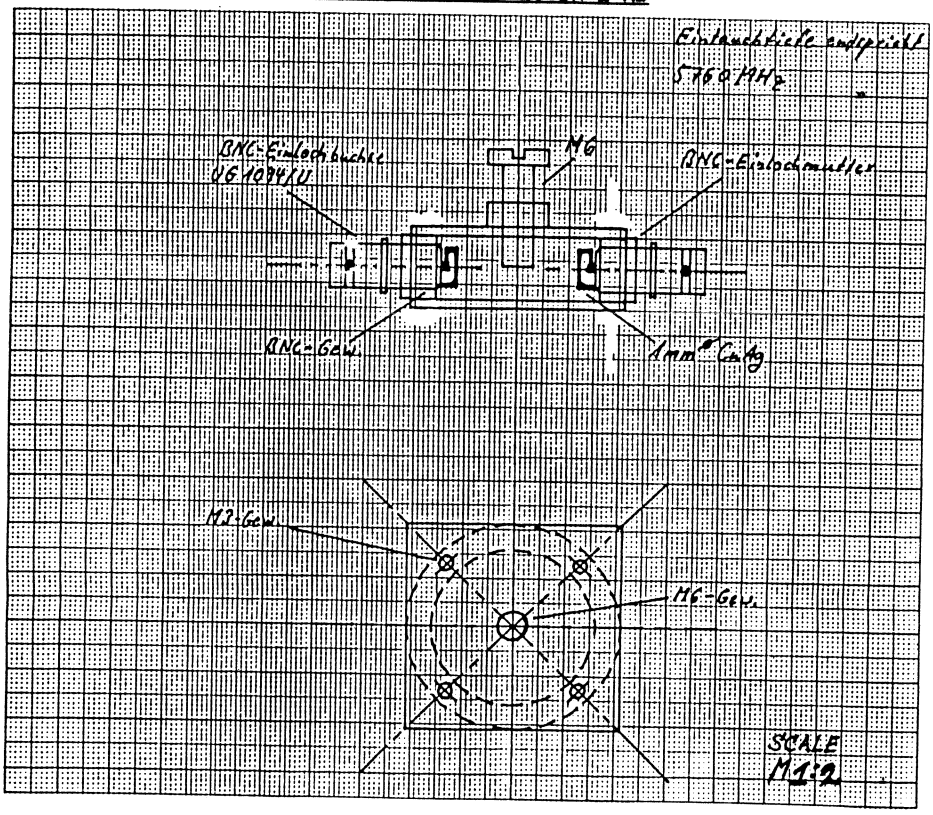


Printed circuit board DCØDA
Frequency GaAs-FET Doubler
RT DUROID RT 5870 0.79 mm

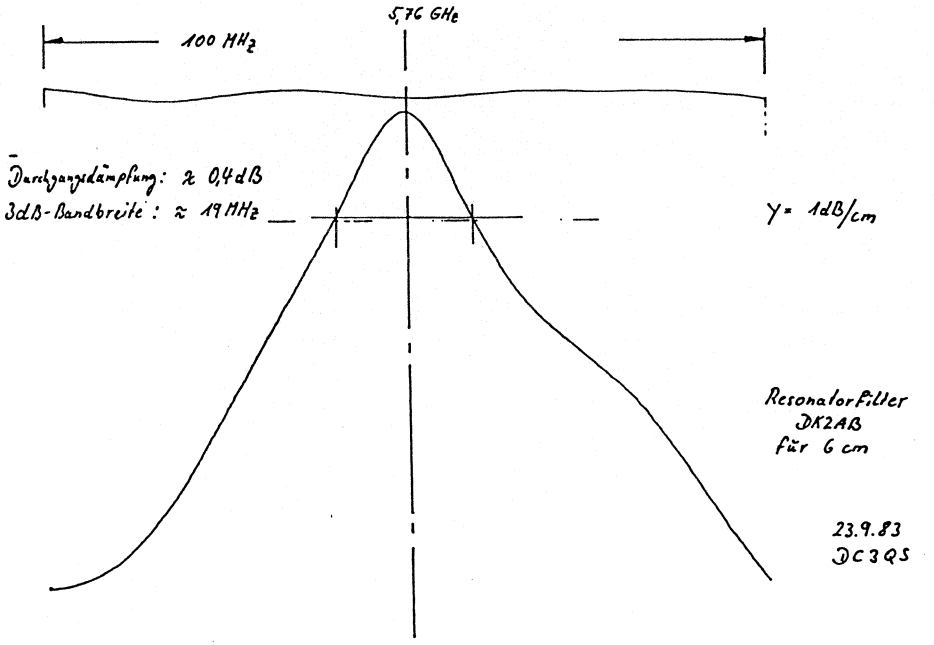
Gedruckte Schaltung v.DCØDA
GaAs-FET Frequenzverdoppler
RT DUROID RT 5870 0.79 mm

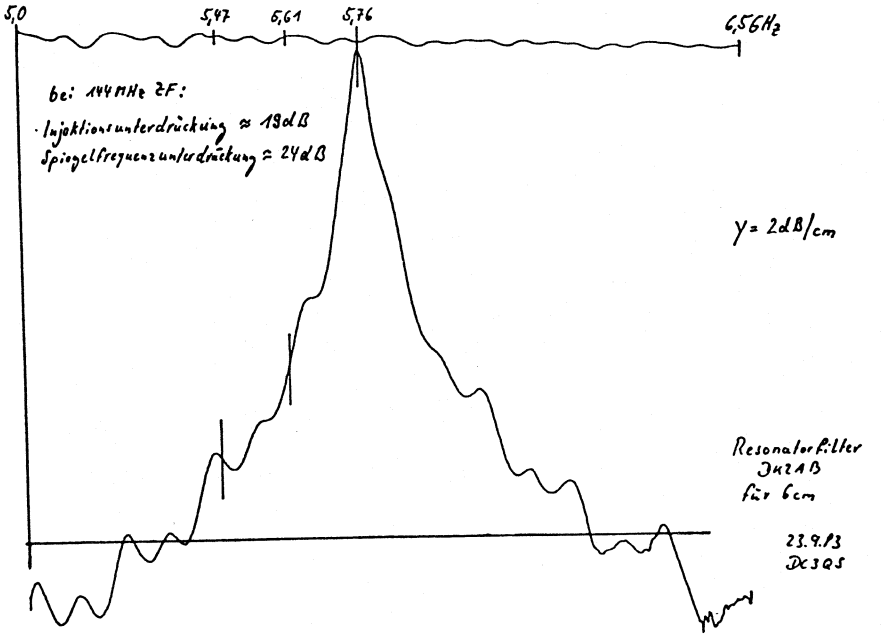


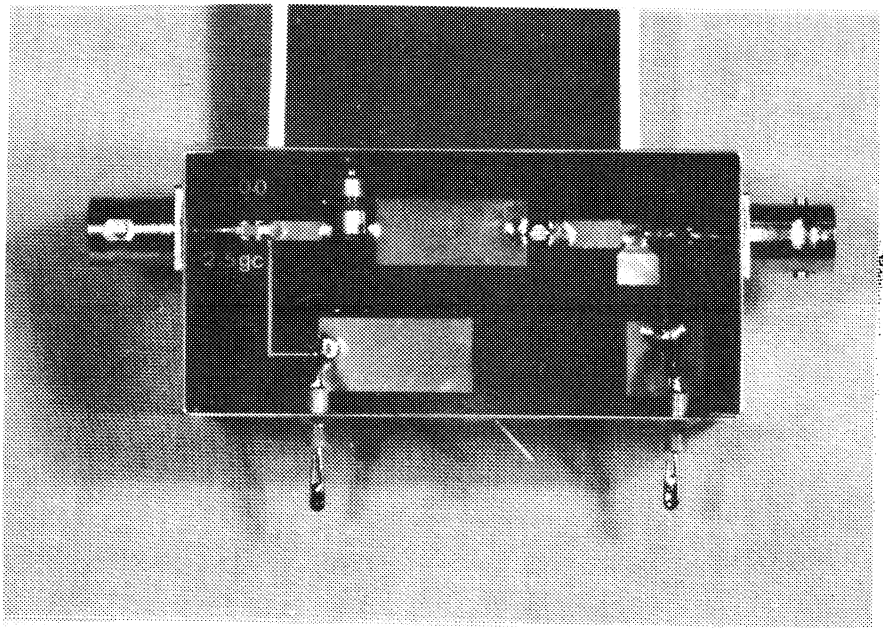
6 cm Resonator Filter by DK 2 AB

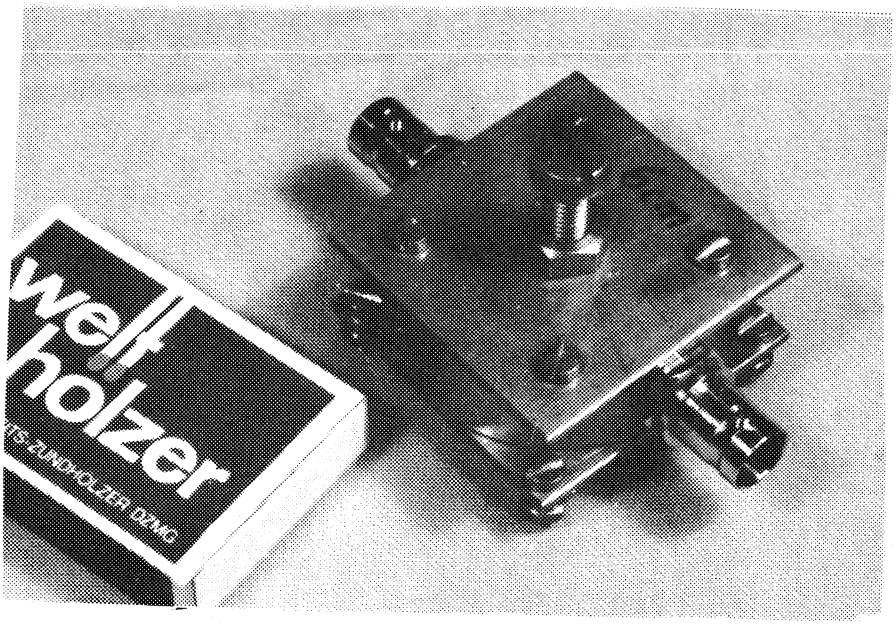


Reonator Ring: 32mm innen (inside), 42mm außen (outside), 13mm hoch (high).
Abdeckplatten (Bottom-/Topplate) 42 x 42mm, 2mm stark (thick) Ms.
BNC- Gewindeschneider (BNC-tap) 3/8"-32 UNEF; 8.5mm vorbohren (drilling).
Bezugsquelle für Gewindeschneider (Ref. address for drilltap):
Georg Bornatsch GmbH, Postfach 100434, D-4300 Essen 1. Tel: 0201/778011.


5,76 GHz
100 MHz
Durchgangsdämpfung: ≈ 0,4dB
3dB-Bandbreite: ≈ 19 MHz
Y = 1dB/cm
Resonatorfilter
DK2AB
für 6 cm
23.9.83
DC3QS


5,0
5,47
6,61
5,76
6,5 GHz
bei 144 MHz ZF:
Injektionsunterdrückung ≈ 19dB
Spiegelfrequenzunterdrückung ≈ 24dB
Y = 2dB/cm
Resonatorfilter
DK2AB
für 6cm
23.9.83
DC3QS




welt
holzer

Three Band GaAs FET Amplifier 1000 - 4000 MHz

by DL 7 QY

E. Following discribed amplifier can be used as preamp as well as low power linear amplifier. The circuit operates with 2 GaAs FET's factured by NEC (NE72089). Both stages produce their own negative gate-voltage automatically. For optimizing the noise figure, a variable capacitor is included in the input newtwork of the first stage. Lowest noise-figure, abt. 3 dB, will be achieved at 10 mA drain-current on all three bands. If the amplifier is used as "small power" than a drain-current of 25 - 35 mA per stage is recommanded. Fig. 1 shows the circuit diagram and the mounting of the source capacitors, Fig. 2 the placement of parts and Fig. 3 shows the pcb made from DUROIT RT5870 0.79mm thick.
The adjustment procedure: After adjustment of the wanted drain currents, the transmissioncurve can be moved by adjust CE1. Fig. 4 and 5 show the transmissioncurves and gain characteristics of the amplifier. NE72089 (DM 74.--) and pcb (DM 40.--) available at DL7QY.

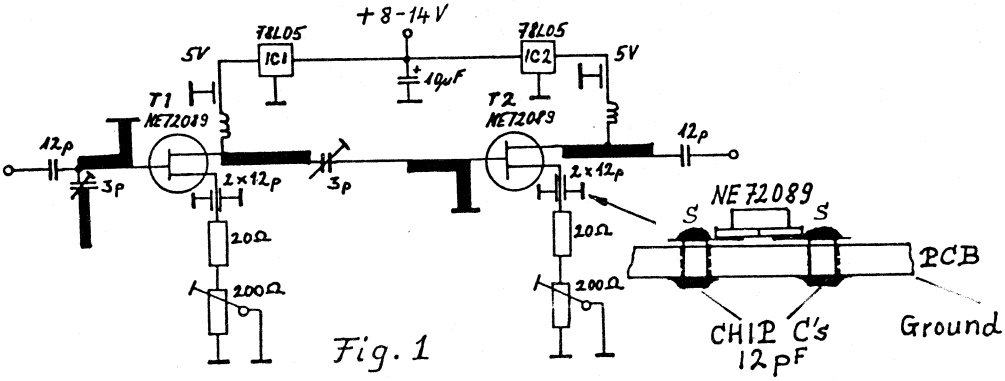


Fig. 1

Dynamik Werte P inp. 0 dBm = P outp. 18 dBm P inp. -3dBm = P outp. 17 dBm
(dynamic values) P inp.-20dBm = P outp. 13 dBm P inp.-23dBm = P outp. 12 dBm

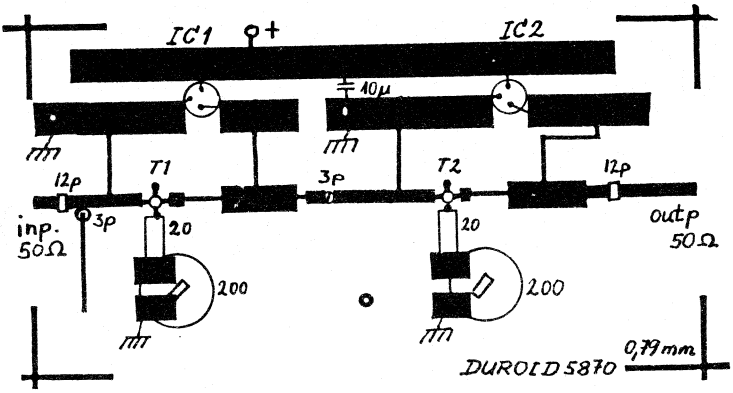


Fig. 2

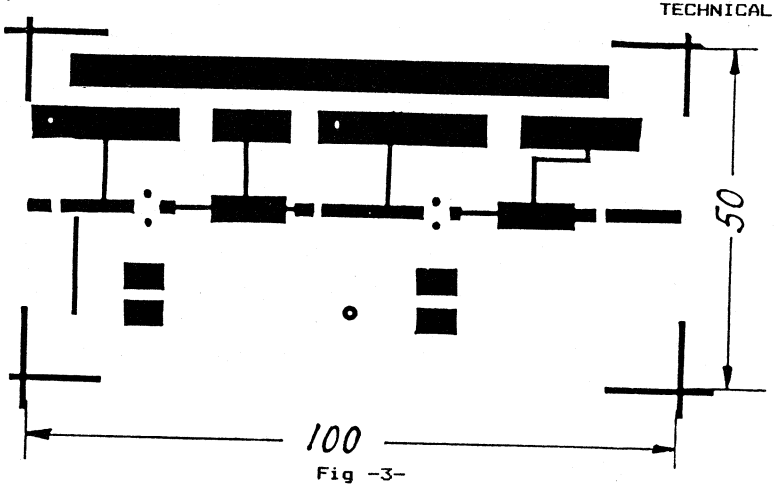


Fig -3-

D. Nachfolgend beschriebener Verstärker kann als Empfangsverstärker oder als Kleinleistungsverstärker benutzt werden. Die Schaltung arbeitet mit 2 GaAs FET's vom Typ NE72089 (NEC). Beide Stufen erzeugen sich ihre negative Gate-Spannung selber. Der Trimmkondensator CE1 im Eingangs- netzwerk der ersten Stufe dient zur Rauschoptimierung. Beste Rauschzahl erhält man bei etwa 10 mA Drain-Strom je Stufe (Mittelwert über alle 3 Bänder etwa 3 dB). Soll der Verstärker als Kleinleistungsverstärker im Sendebetrieb arbeiten, werden die Drain-Ströme auf jeweils 25 - 35 mA eingestellt. Bild 1 zeigt das Schaltbild und die Montage der Source-Kondensatoren, Bild 2 den Lageplan und Bild 3 die gedruckte Platine (aus DUROID RT5870 0.79 mm stark).
Der Abgleich: Nachdem die Drain-Ströme der Transistoren eingestellt wurden, kann mit dem Trimmkondensator CE2 die Durchlaßkurve beeinflußt werden. Bild 4 und 5 zeigen die Durchlaßkurve des Verstärkers. NE72089 (DM 74,--) und die gedr. Platine (DM 40,--) sind bei DL7QY erhältlich.

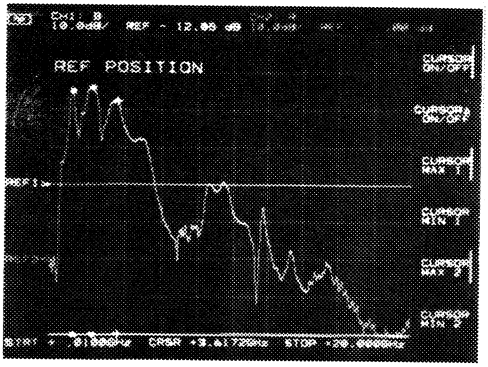


Fig. 4 Durchlaßkurve von 10 MHz-20 GHz. Vertik. 10dB/div. Ref.Linie = 0dB Verstärk. Transmission curve from 10 MHz to 20 GHz. Refer.-line = 0 dB gain.

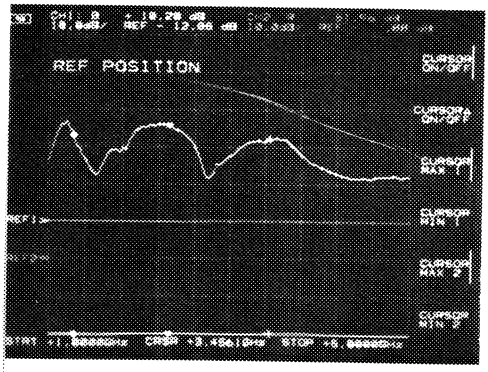


Fig.5 Durchlaßkurve von 1-5 GHz Marken = 1296 2320 und 3456 MHz.
Transmission curve from 1-5 GHz. Marker on 1296 2320 and 3456 MHz.

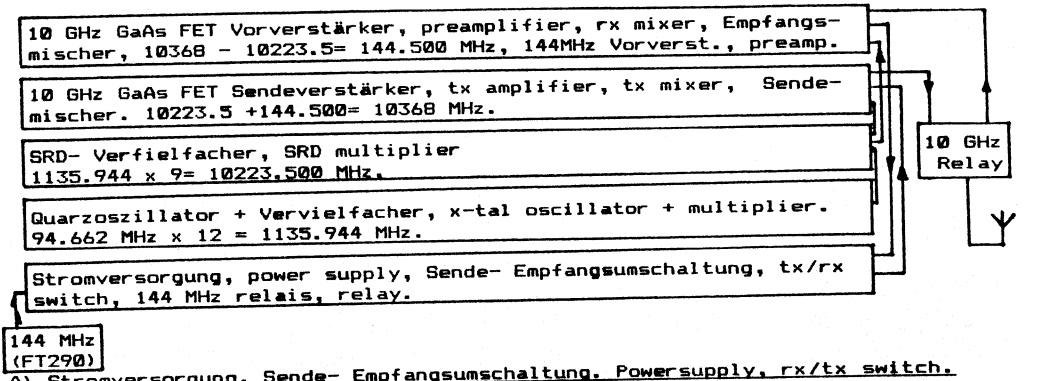
10 GHz SSB Transverter in Modulbauweise

by Peter Vogl, DL8RAH

In diesem Beitrag wird ein 10 GHz- Transverter in der Größe des bekannten 2m-Gerätes FT290 vorgestellt. Der Transverter ist in Modulbauweise aufgebaut. Dies ermöglicht einfache Optimierung, leichten Service und problemlose Anpassung des Gerätes an den "Stand der Amateurfunktechnik" (=Preise der GaAs FET's). Ein Mustergerät wurde vom Verfasser gebaut und hat sich bereits im QSO mit OE2BM über ca. 145 km bewährt. Acht weitere Geräte sind derzeit innerhalb der 10 GHz Gruppe "Bayernwald" und der 10 GHz Gruppe "Salzburg" im Bau. Der Verfasser bedankt sich bei OE2BM, OE2JG, OE2GKM, OE7WMI, DJ2UH, DL9RAH und DJ4YJ für die ideelle und materielle Unterstützung bei der Entwicklung des Mustergerätes.

Here is discribed a 10 GHz transverter similar to the size of the wellknown FT290 2m transceiver in module technique which provides simple optimizing, easy service and update possibility to the state of art (=expense of GaAs FET's). One sample was built by the writer of this article and has been successfully tested in QSO with OE2BM over a distance of 145 km. Eight more transverters are at present in work at the 10 GHz group "Bayernwald" and the 10 GHz group "Salzburg".

Blockschaltbild, block circuit diagram:



A) Stromversorgung, Sende- Empfangsumschaltung. Powersupply, rx/tx switch.

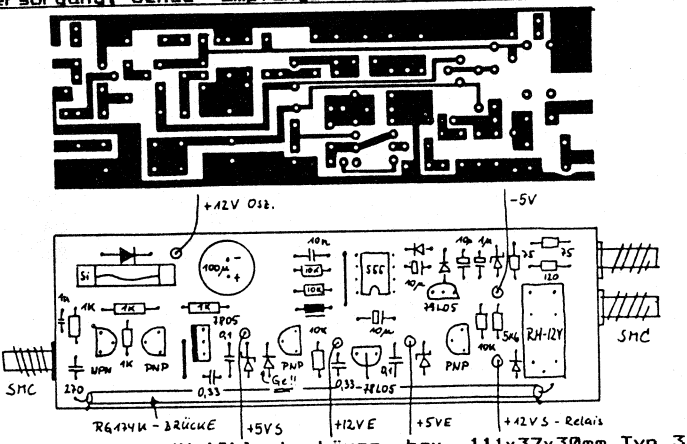
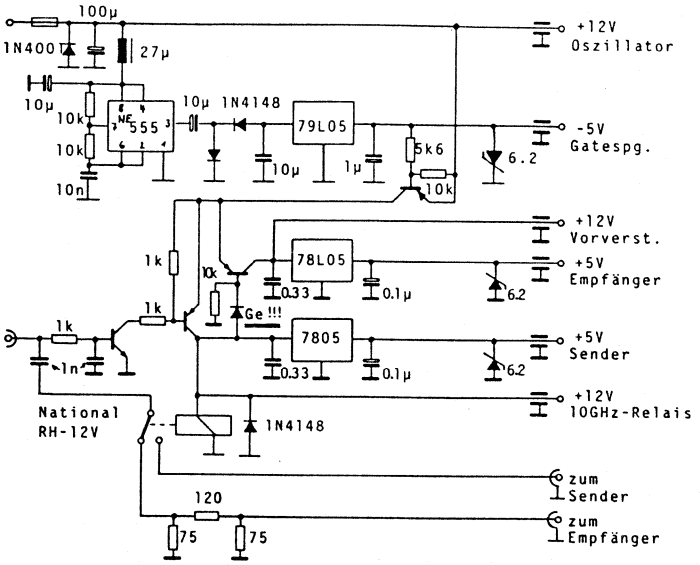


Fig. 1: Platine, pcb. (Weißblechgehäuse, box 111x37x30mm Typ 3)



+12V Oscillator

-5V Gatevoltage

+12V Preamplifier

+5V Receiver

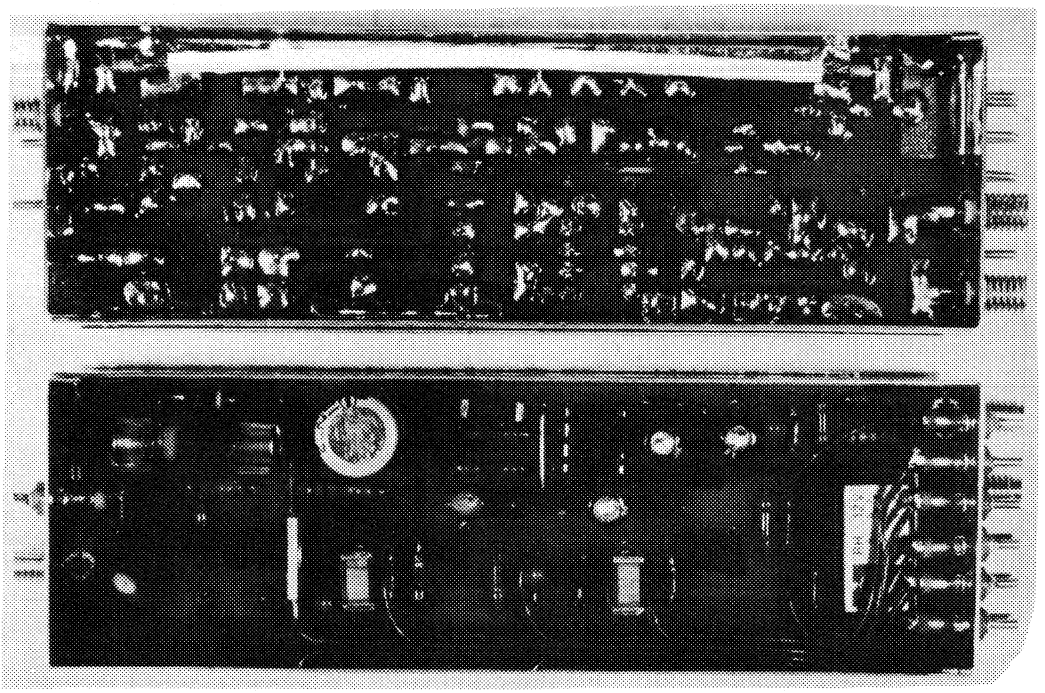
+5V Transmitter

+12V 10GHz Relay

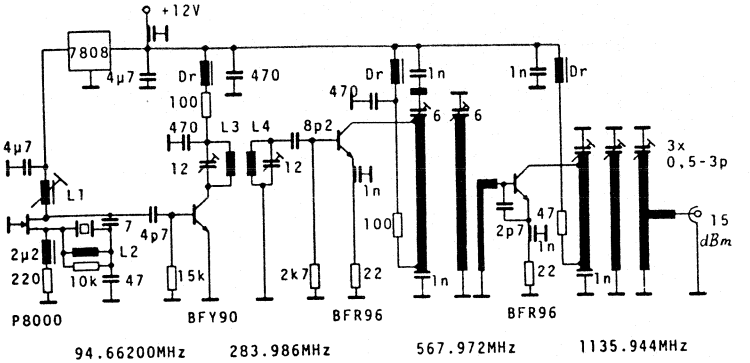
To Transmitter

To Receiver

Fig.2: Stromversorgung, Powersupply.



B) Quarzoszillator und Vervielfacher auf 1135.944 MHz.
x-tal oscillator and multiplier to 1135.944 MHz.



L1=8 Wdg 0.4CuL 4mm Spulenkörper mit UKW Kern. L1=8turns 0.4CuL 4mm diam. L2=18 Wdg 0.2 CuL auf 10 kOhm Widerstand 3mm. L2=18 turns 0.2CuL on 10kOhm r3mm. L3=1.5 Wdg 1mm CuAg 5mm freitragend. L3=1.5 turns 1mm CuAg 5mm diameter. L4=wie L3. L4 similar as L3. Dr=2 Wdg 0.4CuL in 5mm Ferrit-Dämpfungsperle. Dr=2turns in 5mm ferrite tube. 2µ2=1 Wdg 0.4CuL in 5mm Ferrit- Dämpfungsperle. 1turn in 5mm ferrite tube.

Fig.3: Schaltplan Oszillator, circuit diagram oscillator.

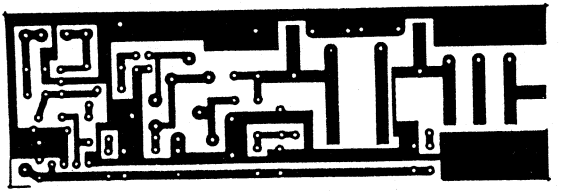
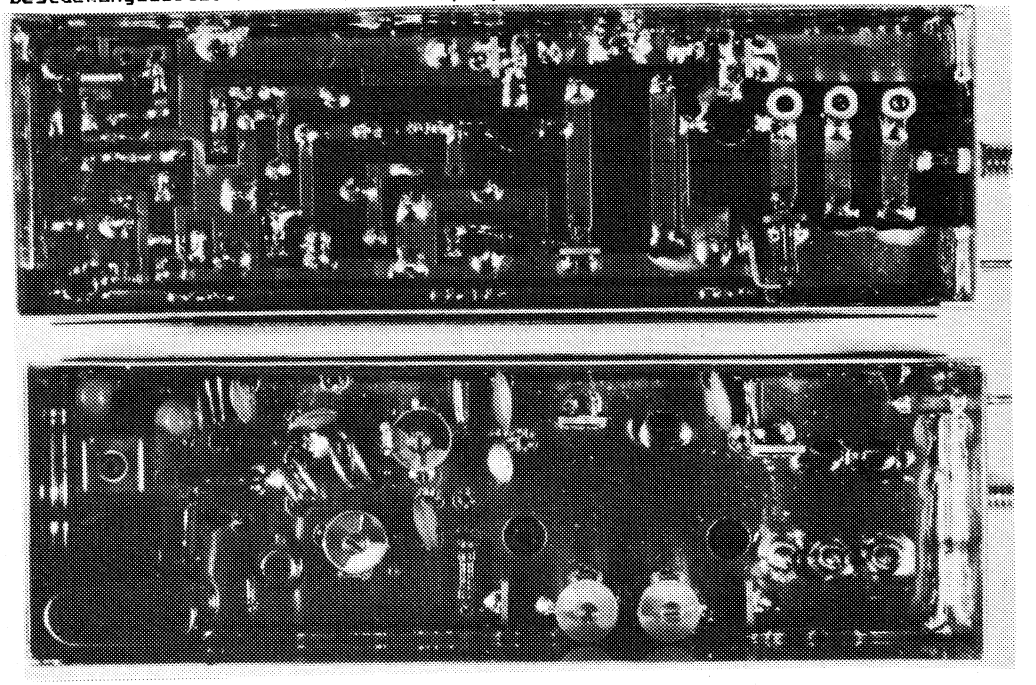
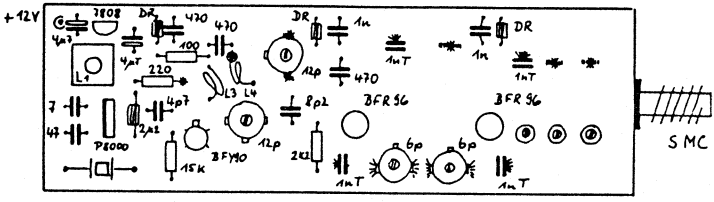


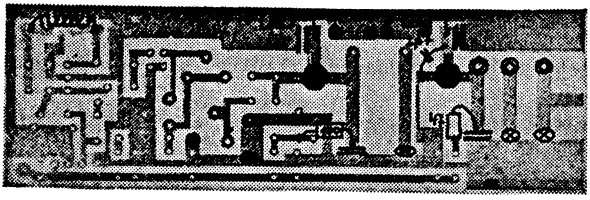
Fig.4: Platine Epoxy 1.5mm zweiseitig kaschiert, durchgehende Massefläche auf Bestückungsseite. PCB double-clad Epoxy 1.5mm, component side grounded.



Bestückungsplan des Oszillators und Vervielfachers. An den mit Sternchen gekennzeichneten Stellen muß durchkontaktiert werden! Für die mit T gekennzeichneten Trapezkondensatoren müssen passende Schlitze gesägt werden. Vorsicht, Kurzschlußgefahr mit der Massefläche. Die drei Rohrtrimmer des 1135MHz Filters werden in entsprechende Bohrungen stehend eingelötet, wobei sinngemäß die Gewindekappe mit der Massefläche und der Stator stumpf mit den Leiterbahnen verlötet wird. Die Platine wird in ein Weißblechgehäuse Typ3 (111x37x30) beidseitig eingelötet, wobei die Montagehöhe durch den voll auf der Masseoberfläche aufsitzenden HC-6U Quarz bestimmt wird.
Component placing of the oscillator and frequency multiplier. On the marked places with "*" must be through-connected. For the "T" marked capacitors the pcb must be slotted, take care when soldering the trapezcapacitors because ground-shorting-danger. The three tubular trimm-capacitors of the 1135MHz filter are soldered standing in drilled holes. The pcb is soldered in a box of 111x37x30mm. The height of pcb within the box is fixed by the height of the HC-6U crystaloutlines.
Fig.5: Bestückungsplan Oszillator und Vervielfacher.

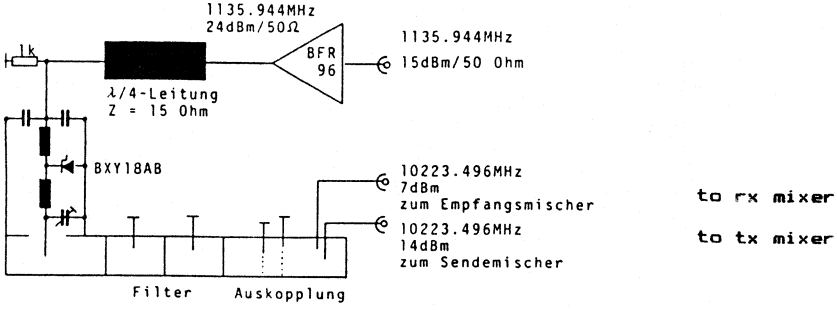


Bestückungsplan für die Leiterseite. Für die Transistoren BFR96 werden zunächst entsprechende Bohrungen gefertigt. (Diese Bohrungen trennen auch die Leiterbahnen!). Die BFR96 werden dann von der Leiterseite in die Bohrungen gelegt und ganz knapp am Gehäuse mit den Leiterbahnen verlötet. Die Emitter- und Kollektorwiderstände dieser Transistoren werden ebenso wie der 2.7 pF Kondensator auf der Leiterseite verlötet. Die R-L-Kombination parallel zum Quarz wird an die überstehenden Quarzanschlüsse gelötet.

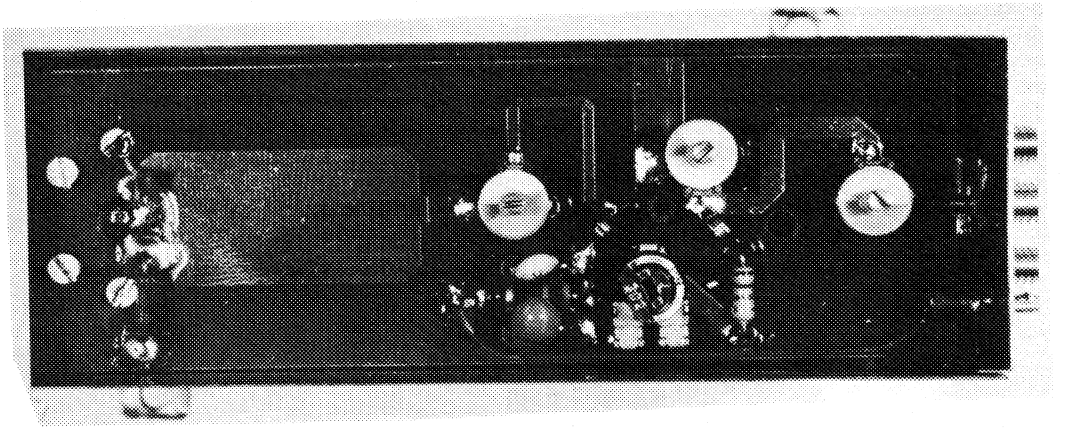


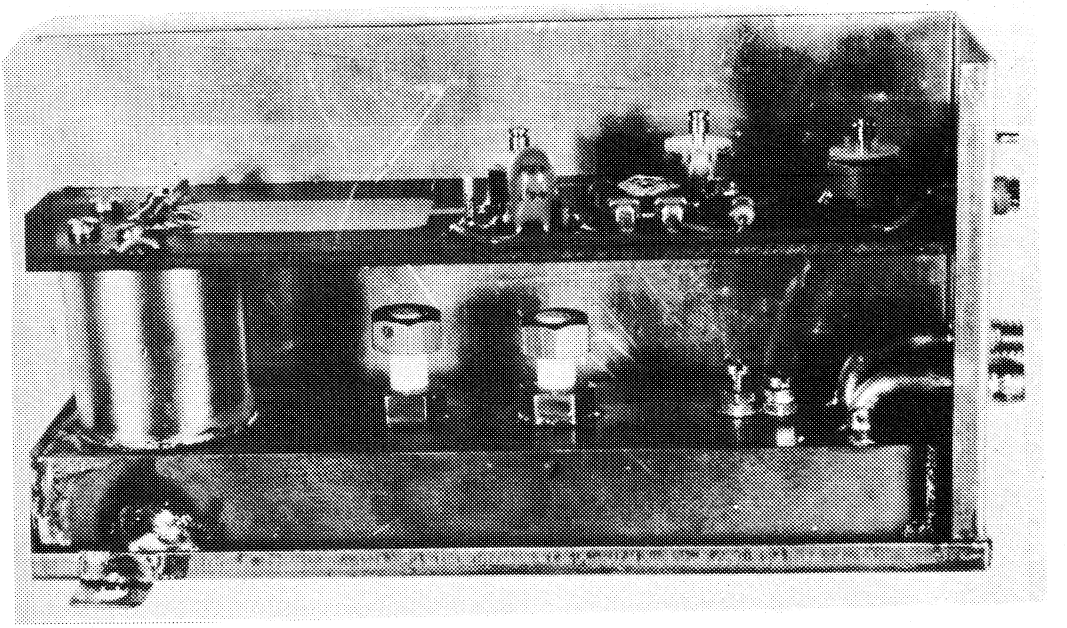
First, the necessary holes are drilled for the transistors BFR96. (This holes also seperate the printed lines on the board) The transistors BFR96 are soldered on the line side of pcb very close to the lines. Also the Emitter- and Collector resistors are soldered from the line side as well as the 2.7pF capacitor. The R-L- combination is soldered on the bottom of the crystal terminations. Fig.6: Bestückungsplan Leiterseite. Partplacing line side.

C) Step Recovery Vervielfacher (multiplier to) auf 10223.500 MHz.



Der SRD Vervielfacher gliedert sich in drei Teile: 1. Epoxyplatine mit BFR96 9dB Verstärker und Transformationsleitung zur Anpassung des extrem niederohmigen Vervielfacherteils. 2.Koaxialer SRD Verneunfacher nach DJ1CR (5). 3. Hohlleiterfilter und Auskopplung im WG16.
The SRD multiplier is realized in the following three stages: 1. Epoxy pcb containing a BFR96 9dB gain transistor amplifier and matchingline for the lowresistant SRD multipliersection by 9. 2. Coaxial-SRD-multiplier by DJ1CR (5). 3. Waveguidefilter and outcoupling from WG16.





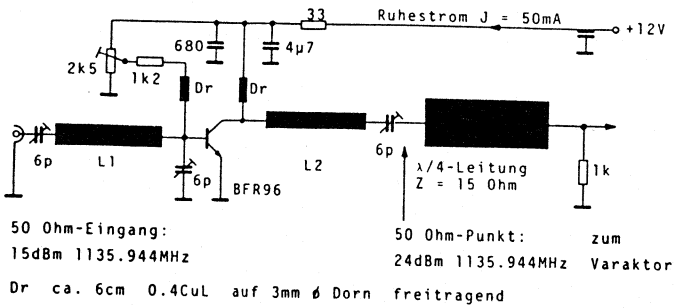
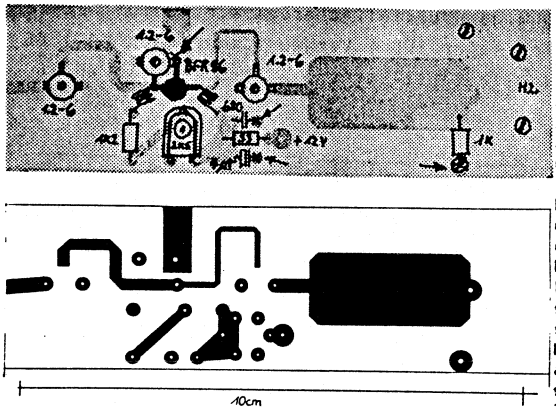


Fig.8: Schaltplan des BFR96 Verstärkers mit Transformation. Circuit diagram of BFR96 amplifier and matching network.

Fig.9: Platine des BFR96 Verstärkers mit Transformation. Epoxy 1.5mm zweiseitig, durchgehende Massefläche. Pcb of BFR96 amplifier with matchingnetwork. Epoxy double-clad 1.5mm.

Fig.10: Bestückungsplatine des BFR96 Verstärkers. Alle Bauteile werden mit kurzen Anschlüssen auf die Leiterseite gelötet. An den mit Kreuzen und Pfeilen markierten Stellen wird durchkontaktiert. Für den BFR96 wird eine passende Bohrung angefertigt. (Diese trennt auch die Leiterbahnen) Der BFR96 wird in die Bohrung gelegt und knapp am Gehäuse mit den Leiterbahnen verlötet. Es muß unbedingt darauf geachtet werden, daß ein guter, großflächiger Massekontakt zum Drehteil des koaxialen Verneunfachers hergestellt wird. (Vorsicht mit Lötlackspray).



Partplacing side of BFR96 amplifier. All components are soldered on shortest way on the line side of pcb. All marked points by "*" or arrow are through-connected. Very important is a good ground-contact between the pcb groundside and the coaxial brasstube of SRD multiplier.

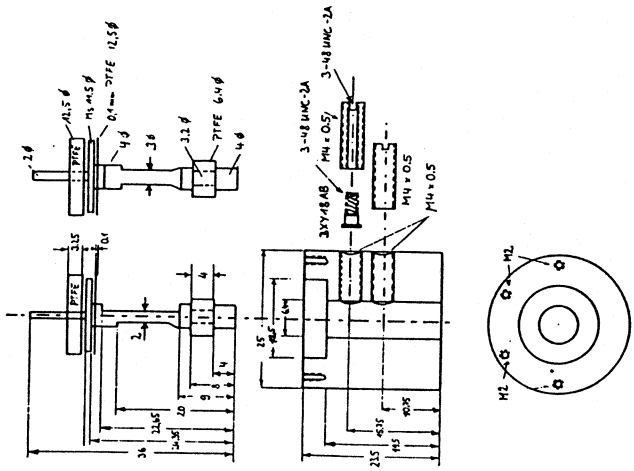
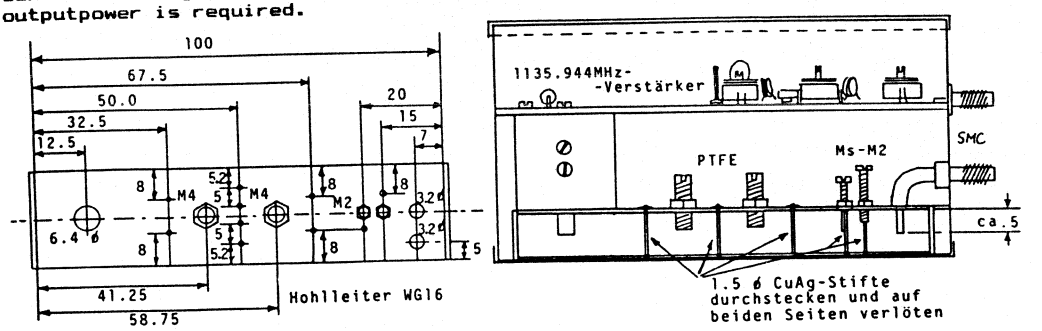


Fig.11: Koaxialer Verneunfacher nach (5). Coax-multiplier by 9 Ref.(5)

Fig.12: Hohlleiterfilter und Auskopplung sowie Gesamtaufbau des Vervielfachers im Weißblechgehäuse Typ 3A (Höhe kann modifiziert werden). Gehäuseabmessungen: 111x37x50mm. Die Empfängerauskopplung sitzt seitlich verschoben neben der mittig angeordneten Senderauskopplung.
Waveguidefilter and outcoupling as well as complete multipliersection in a box of 111x37x50mm outlines. The receiver outcoupling is placed moved from the center of waveguide while tx outcoupling is placed centered because more outputpower is required.



D) Sendemischer und GaAs FET Verstärker. TX-mixer and GaAs FET amplifier

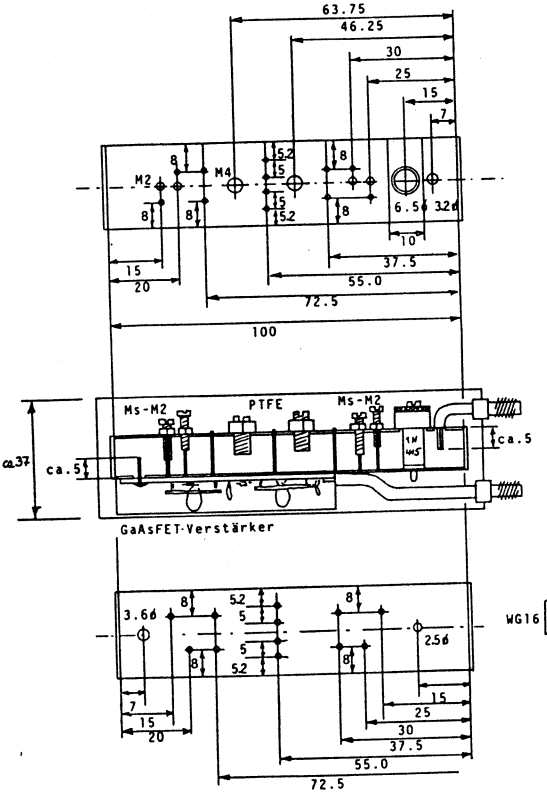
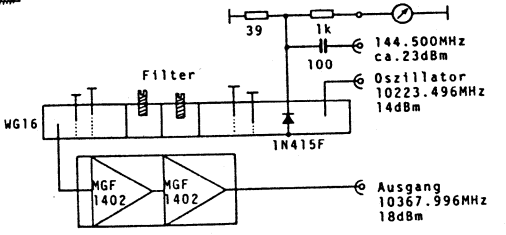


Fig.13: Mischer mit 1N415 (1N23) im Hohlleiter mit nachfolgendem 2 stufigen GaAs FET Verstärker auf Mikrostrip-line Platine.
Waveguidemixer using 1N415 (1N23) followed by a two stage GaAs FET amplifier on micro-stripline pcb.

Fig.14: Hohlleitermischer und Hohlleiterfilter sowie Gesamtaufbau im Weißblechgehäuse Typ 3 (111x37x30).
Waveguidemixer and waveguide-filter placed in a box of 111x37x30mm outlines.



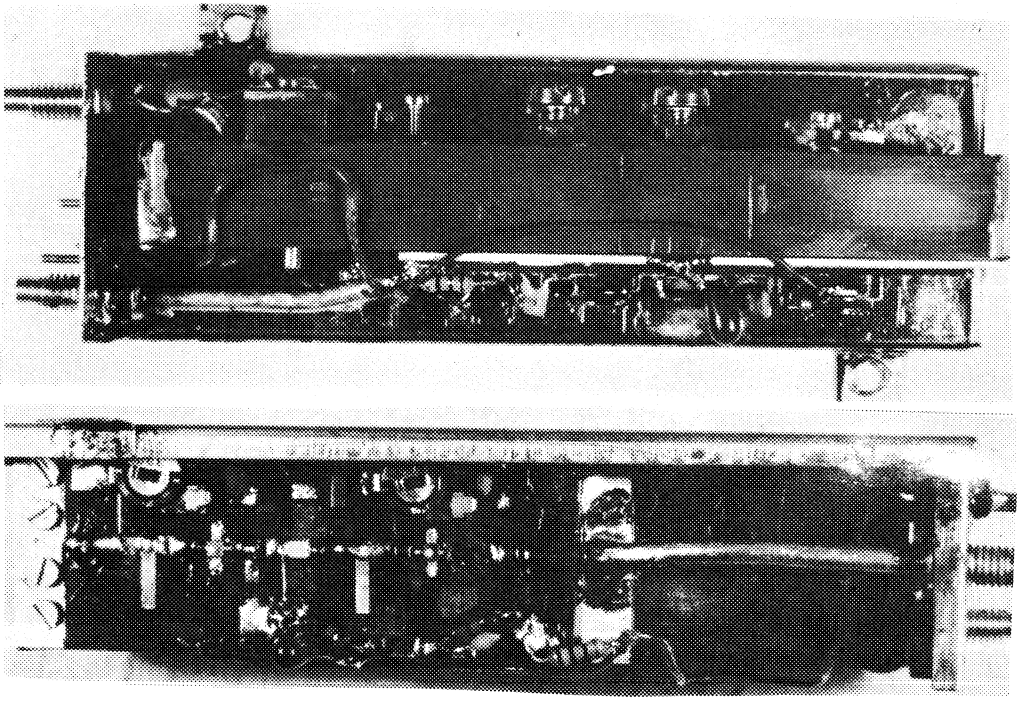
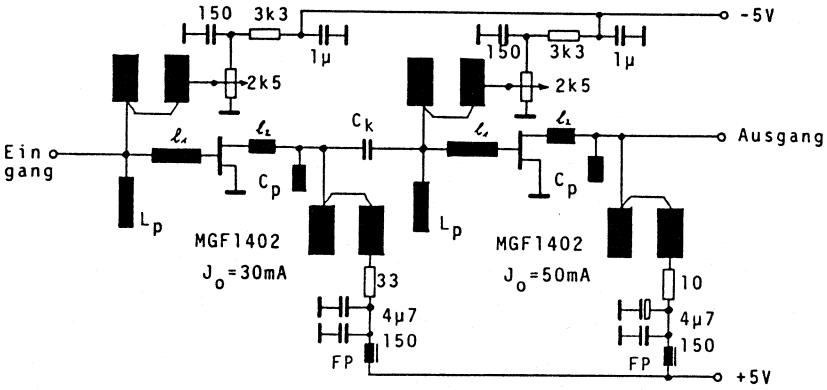


Fig.18: Zweistufiger GaAs FET Verstärker. Two stage GaAs amplifier 10 GHz.



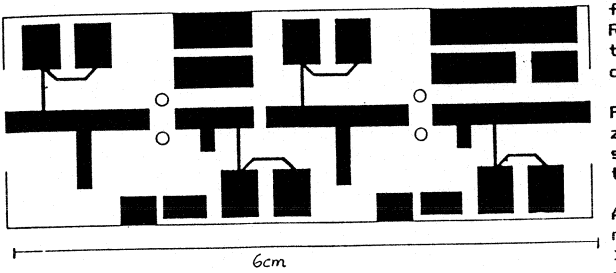


Fig.19: Platine des zweistufigen GaAs FET Verstärkers. RT/DUROID 5870 0.79mm. PCB of two stage GaAs FET amplifier on RT/DUROID 5870 0.79mm.

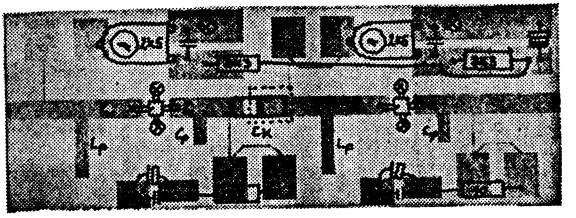


Fig.20: Bestückungsplan des zweistufigen GaAs FET Verstärkers. Partplacing of the two stage GaAs FET amplifier.

An den mit "*" gekennzeichneten Stellen werden zunächst 1.5mm Löcher gebohrt, in die dann kleine zylindrisch abgeschittene Kupferdrahtstückchen leicht "eingenietet" werden. Diese Drahtstückchen werden dann mit wenig Lötzinn mit der Kupferkaschierung verlötet. Die Sourceanschlüsse der MGF1402 werden auf 5mm Länge gekürzt und direkt mit den vorher leicht verzinnten "Kupferröllchen" verlötet. Vorsicht! Bereits beim öffnen der Verpackung der GaAs FET's sollte der Operator nebst Lötkolben und Werkzeug bestens geerdet sein! Wie in Bild 14 bereits gezeigt, lötet der Verfasser die DUROID-Platinen vor der Bestückung (aber nach dem Durchkontaktieren!) direkt mit der Massefläche auf die Hohlleiterwand. Dazu hat sich eine Kochplatte, flüssiges Lötzinn (sehr sparsam verwenden) und ein Teflonklotz zum Andrücken bestens bewährt. Wenn das Lötzinn zu fließen beginnt, wird der Hohlleiter von der Kochplatte entfernt und unter ständigem Druck auf die DUROID-Platine auf einer kalten Metallfläche zum Kühlen abgestellt. Bis jetzt haben sich keinerlei Schäden an den DUROID-Platinen eingestellt. Der gute Massekontakt zum Hohlleiter macht sich hochfrequent bestens bemerkbar. Hinweis: Wegen der guten Wärmeableitung durch die Hohlleiterwand kann es notwendig sein, beim Einlöten der GaAs FET-source-Anschlüsse den Hohlleiter zusammen mit der Platine leicht zu erwärmen! Als Koppelkondensator kann ein Cu-Streifen mit zwischengelegter 0.1mm Teflon Folie dienen. Besser (siehe Bild 22) ist ein ATC 100 Chipkondensator (9).

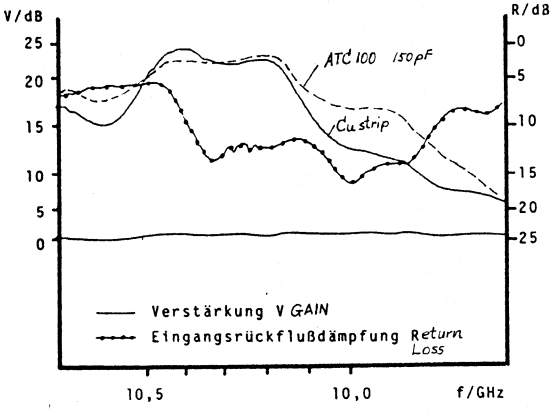


Fig. 22

At the with "*" marked points 1.5mm diameter holes are drilled which will be filled by bits of cutted copperwires and soldered on the copperplated side of pcb for through-contacting. The source terminations of the MGF1402 GaAs FET's are shorted down to 5mm lenght and will be soldered on the through-contacted bits of copperwire. Take care by handling the GaAs FET's and be sure of proper grounding your iron and yourself! As figure 14 show, the DUROID pcb is soldered directly with the ground side to the waveguide, after through-contacting. For heat up the waveguide, a use of a cooking plate is recommanded, after soldering the DUROID pcb press the pcb during the cooling process by help of a bit PTFE to

the waveguide, because a good ground-contact is necessary for function of this stage. As coupling capacitor a strip of copper can be used, isolated by a sheet of PTFE 0.1mm thick or better (see fig.22) a ATC 100 chipcapacitor (9).

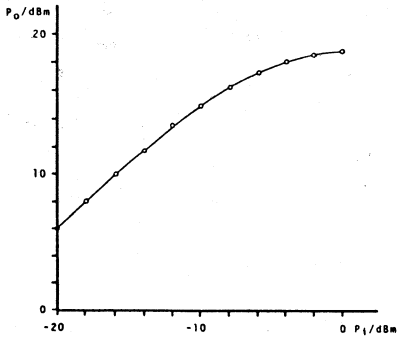


Fig.23: Zusammenhang zwischen Eingangsleistung Pi und Ausgangsleistung Pa des zweistufigen MGF1402 Verstärkers. Meßfrequenz= 10368 MHz.
Dynamic compression response of the two stage MGF1402 amplifier on frequency 10368 MHz.

E) 10GHz Vorverstärker und Empfangsmischer. Preamplifier and rx-mixer

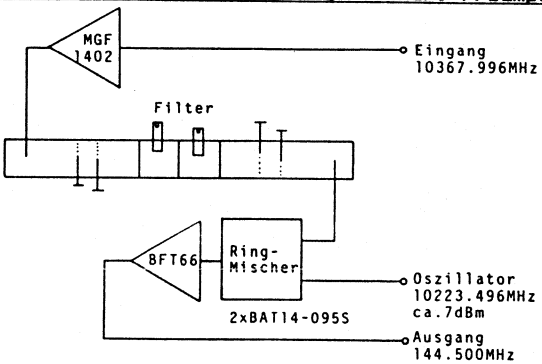


Fig.24: Prinzipschaltbild des Empfangsumsetzers. Block diagram of rx-converter.

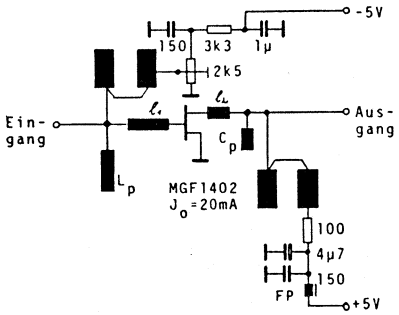


Fig.25: Schaltbild des einstufigen MGF1402 Verstärkers 10 GHz
Circuit diagram of one stage MGF1402 preamp.

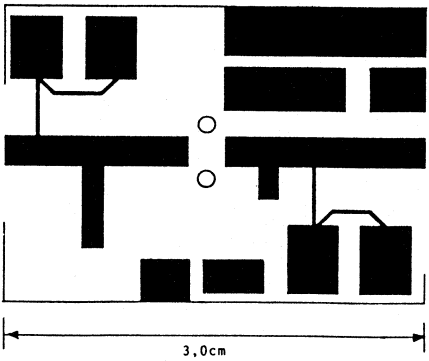


Fig.26: Platine des einstufigen MGF1402 Verstärkers 10 GHz DUROID 5870 0.79mm, Bestückung siehe Fig.20. PCB of one stage preamp.

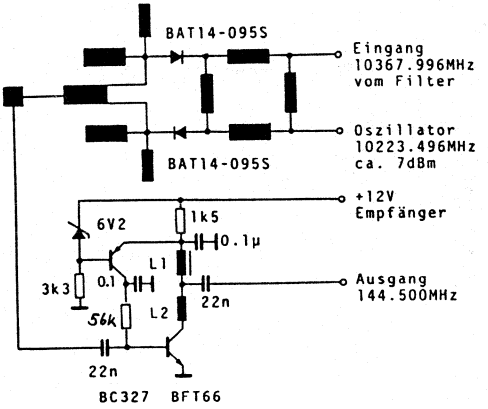


Fig.27: Rx-mixer. Empfangsmischer

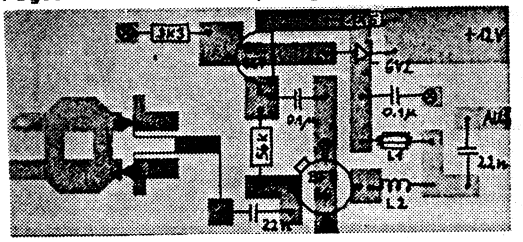
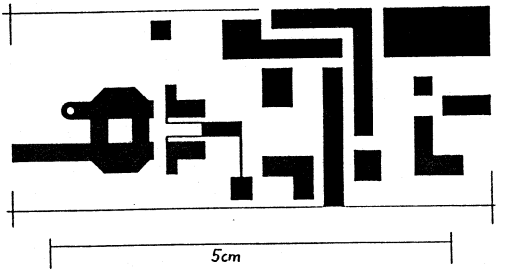
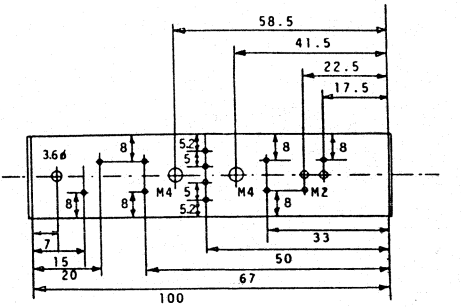
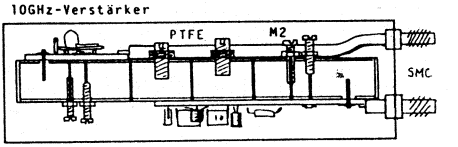


Fig.28: Bestückungsplan Empfangsmischer.
Partplacement rx-mixer.







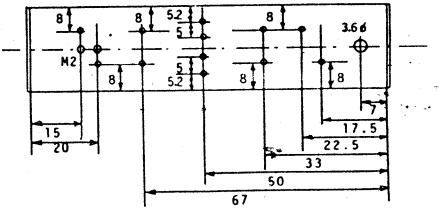
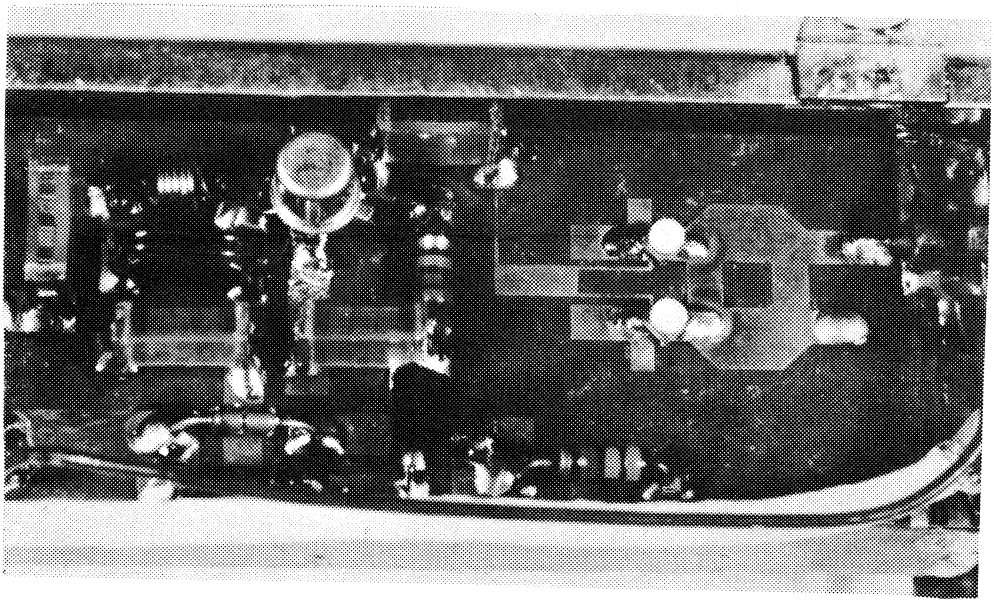


Fig.30: Hohlleiterfilter und Gesamtaufbau Empfangsmischer im Weißblechgehäuse Typ3 (111x37x30). Waveguide filter and rx-mixer section in a box of 111x37x30 mm.

Fig.29: Platine des Empfangsmischers und 144 MHz Verstärkers auf RT DUROID 5870, 0.79mm stark. PCB of rx-mixer and IF 144 MHz amplifier on RT DUROID 5870, 0.79mm thick.

Die Spule L1 besteht aus 2Wdg 0.4 CuL in 5mm Ferritperle und L2 5 Wdg 0.4mm CuL auf 3mm Dorn freitragend. L1= 2turns 0.4mm CuL in a 5mm ferrite-tube and L2= 5 turns 0.4mm CuL air coil with 3mm diameter.
Zum Bestückungsplan (Fig.28) des Empfangsmischers: An den mit "*" markierten Stellen muß nach Masse durchkontaktiert werden. Wie bei Fig.20 ausführlich beschrieben, wird auch diese Platine direkt auf den Hohlleiter gelötet und anschließend direkt auf der Leiterseite bestückt. Vorsicht! Auch die Dioden BAT14-095S sind extrem empfindlich bzgl. statischer Spannungen.
Partplacement rx-mixer: On the "*" marked the pcb is through-contacted. As already in Fig.20 discribed the pcb is soldered directly on the

waveguidefilter. Take care by soldering the mixer diodes BAT14-095S because the diodes are easily damaged by statically discharge.



F) 10 GHz Koaxrelais mit Hohlleiteradapter. Coaxrelay with waveguideadapter.

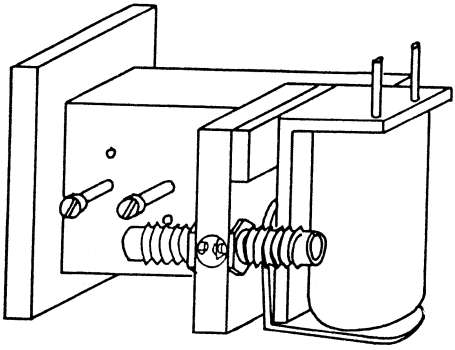


Fig.31: Übersichtszeichnung 10 GHz Relais.

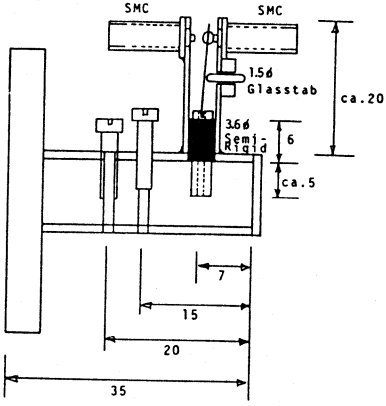
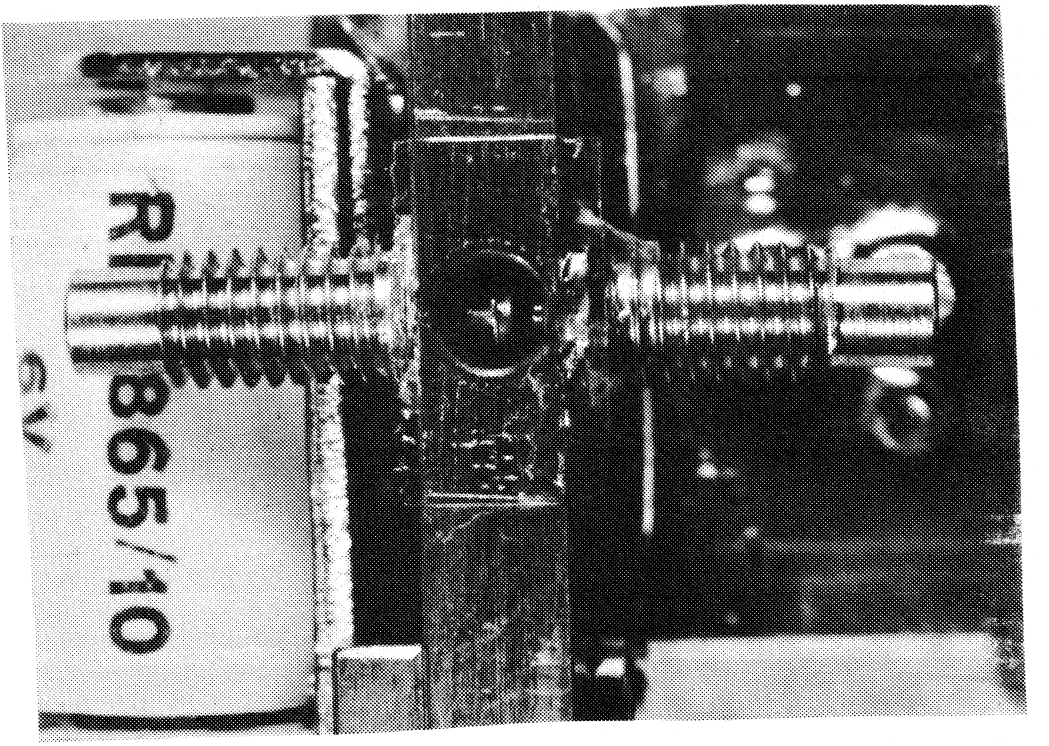


Fig.32: Details zur Konstruktion des 10 GHz Relais. Anpaßglied nach Betrag und Phase siehe (2). Construction details of the 10 GHz relay. Matching network see (2).



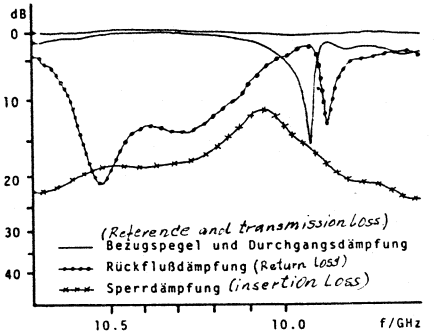


Fig.33: Meßprotokoll 10 GHz Relais Empfangszweig. Transmission response 10 GHz relay rx-branch.

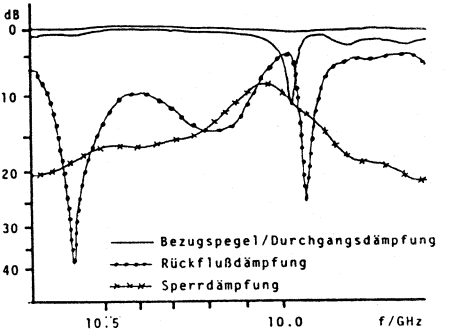
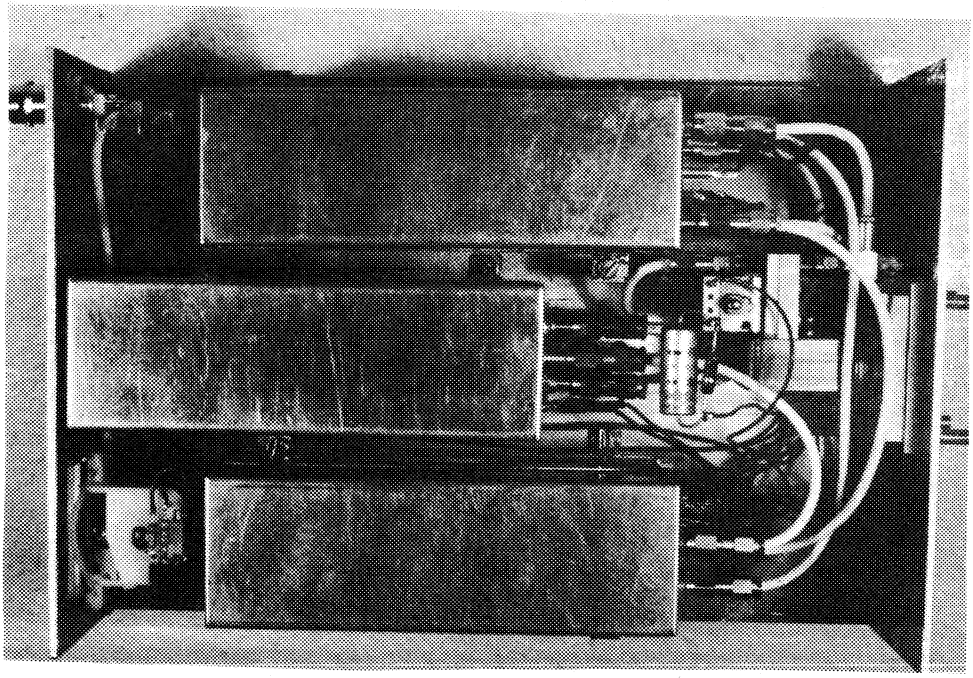


Fig.34: Meßprotokoll 10 GHz Relais Sendezweig. Transmission response 10 GHz relay tx-branch.



8) Literatur- und Bezugshinweise. References.

(1) Fleckner H. DC8UG, SSB im 10 GHz Band(1), UKW Berichte 20/1980/1 S.3
(2) Fleckner H. DC8UG, SSB im 10 GHz Band(3), UKW Berichte 20/1980/4 S.245
(3) Senckel H.J. DF5QZ, 13 cm Transverter volltrans. UKW Ber. 23/1983/2 S.205
(4) Application Note 928, Ku-band SRD multiplier, HP 620 p.Mill road, CA.
(5) Griek R. DK2VF, Münich M. DJ1CR, Frequenzverneunfacher für das 3 cm Band. UKW Berichte 18/1978/4 S.227.
(8) MGF1402 (2SK274) Municom GmbH, Schlotthauer Str.4, 8000 München 90.
(9) Chipkondensatoren ATC 100B-151-K-P-300, Municom GmbH.
(10) BAT14-095R Q 62702-D1278, Siemens Bauteile Service, Postfach 146 8510 Fürth-Bislohe.
(11) BXY18AB Q62702-X115, Siemens Bauteile Service.
(12) Weißblechgehäuse Typ3, 3711130, Typ3A 3711150, O. Schubert, Gewerbestr. 8, 8501 Roßtal.
(13) RT DUROID RT5870 0.79mm, Mauritz GmbH + Co, PF. 104306, 2000 Hamburg 1.

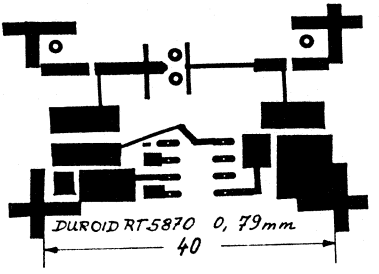
Gegen Einsendung von DM 20,-- kann bei dem Verfasser eine Folie mit sämtlichen Platinenabbildungen im Maßstab 1:1 zur Erstellung der gedruckten Platinen angefordert werden. Bitte zusätzlich einen Freiumschlag DIN A5 beifügen.
A filmlayout for all needed pcb's is available scaled 1:1 at the writer of this article. Please send 20,--DM or 10 US$ adding a stamped envelope to:

Peter Vogl, DL8RAH, Viertelweggrub 9, D-8376 Teisnach, W-Germany.

10 GHz GaAs FET amplifier using NE70083 and Microstrip Filter

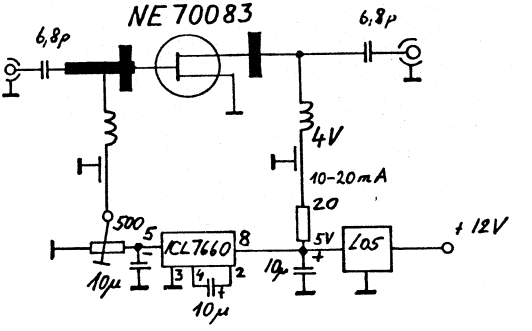
by DL7QY

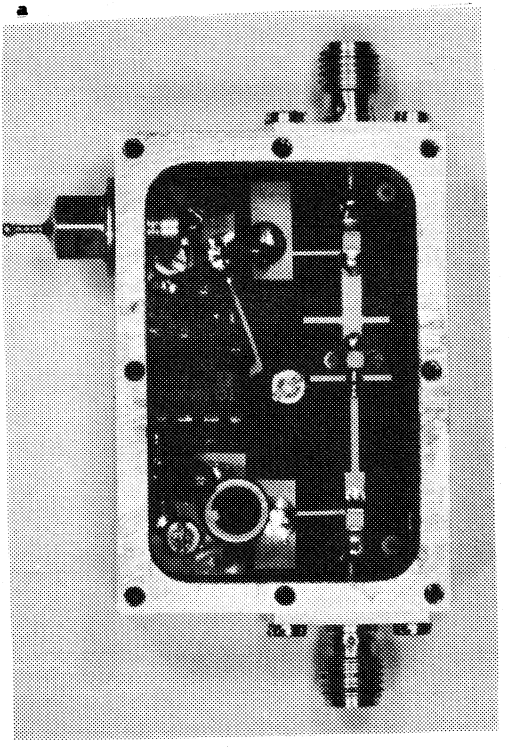
Nachfolgend beschriebener 10 GHz Verstärker arbeitet mit dem NEC GaAs FET NE70083. Der Verstärker ist auf maximale Verstärkung optimiert. Die Verstärkung beträgt 13.5 dB. Die Rauschzahl beträgt in dieser Schaltung 3.5dB. Durch eine Zuatzkapazität hinter dem Eingangskoppelkondensator gegen Masse (Giga-trimm .3-1.2pF) kann die Rauschzahl optimiert werden (ca. 2dB) bei einer Verstärkung von etwa 10 dB.
This amplifier is optimized for maximum gain of 13.5dB at 10368 MHz. In this case the nf amounts 3.5dB. At 10dB gain the noise figure will decrease to 2dB by adding a capacitance after the input-coupling capacitor to ground (.3-1.2pF).

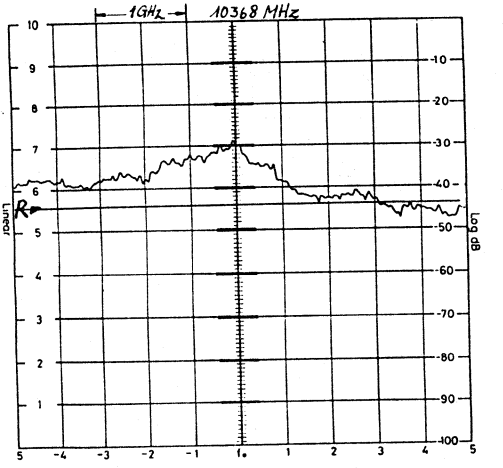


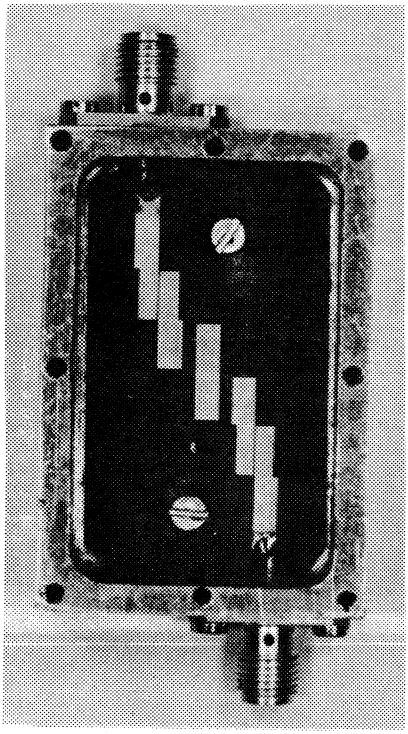
Dynamik Werte. Dynamic values:

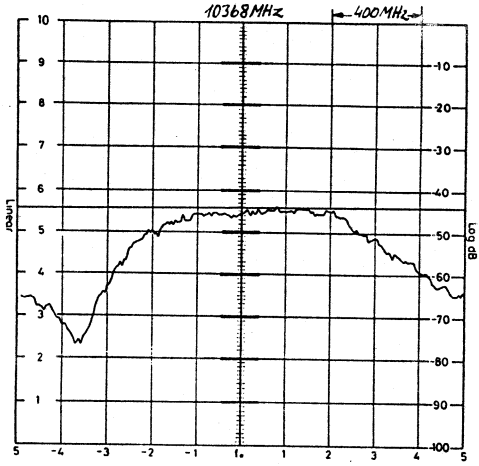
2.5mW input = 32mW output at 15mA ID
0.25mW input = 8mW output at 15mA ID
0.025mW input = 1mW output at 15mA ID

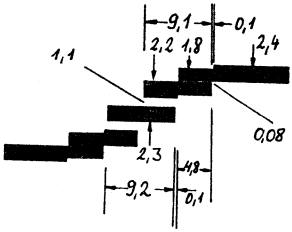


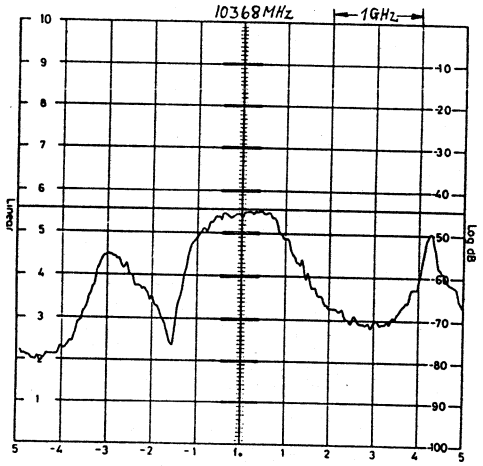












Die Bandbreite des Mikrostripfilters beträgt etwa 1 GHz bei einer Durchgangsdämpfung von ca. 1.5dB. Die Platine besteht aus RT DUROID RT5870, 0.79mm stark. Filterplatine und Verstärkerplatine können bei DL7QY bezogen werden zum Preis von jeweils 30.--DM. Der Transistor NE70083 zum Preis von 146.80 DM.

The bandwidth of the microstripfilter amounts abt 1GHz and the transmissionloss 1.5dB. The pcb is made from RT DUROID 5870, 0.79mm thick. The filter- and amplifier pcb is available at DL7QY for DM 30.-- each. The Transistor NE70083 for DM 146.80.

TECHNICAL NEWS

New 0.1 pF Beam Lead Schottky Pairs

E. HP's new HSCH-5500 series microwave Schottky beam lead pairs feature a guaranteed maximum capacitance of just 0.1 pF- possibly the lowest in the industry! Now you can achieve a low noise figure (7.0 dB maximum at 16 GHz) for instruments and system operating at extremely high frequencies. This beam lead pairs are made using a special monolithic, tri-metallization process that produces repeatable, reliable diodes with very closely matched electrical parameters. In addition, their beam lead pull strength is typically six grams. Such Schottky pairs are ideal for use in balanced mixers where high performance is a must. You can assemble them into bridge quads , star quads and rig quads for class I-, II- or III-type balanced mixers. This high-performance beam lead Schottky pairs are available at quantity discounts from your local HP distributor.

D. Das neue HP HSCH-5500 Mikrowellen Schottky beam lead Dioden Paar garantiert eine maximale Kapazität von 0.1 pF, möglicherweise die niedrigste Kapazität im Industriestandard. Rauschzahlen von 7.0 dB max. bei 16 GHz sind damit möglich geworden für Messgeräteanwendungen oder andere Systeme extrem hoher Frequenzen. Idealer Anwendungsbereich sind Gegentaktmischer mit hervorragenden Eigenschaften. Erhältlich sind diese Diodenpaare bei ihrer lokalen HP Vertretung.

Monolithic Schottkys fit the bill to 12 GHz

E. The NEC ND587 series of GaAs epitaxial Schottky barrier diodes are designed for broadband mixer circuit applications to 12 GHz. This diodes are available as model ND587T, a dual type device for single-balanced mixers, or model ND587R, a quadring type for double balanced mixers. The typical terminal capacitance is 0.26 pF at 1 MHz. The conversionloss is only 5 dB at an LO frequency of 8 GHz. The diodes are sealed in hermetic Micro-X style packages.

D. Die NEC GaAs epitaxial Schottky barrier Diode ND587 ist speziell für Breitbandmischer im Bereich bis 12 GHz entwickelt worden. Diese Dioden sind für Anwendungen als Einfachbalance Mischer (ND587T 2 Stück in einem Gehäuse), oder als Doppelbalance Mischer (ND587R 4 Stück in einem Gehäuse), erhältlich. Die typische Anschlußkapazität beträgt 0.26 pF bei 1 MHz. Die Mischverluste betragen 5 dB bei einer Oszillatorfrequenz von 8 GHz. Die Dioden werden in dem hermetischen "Micro-X" Gehäuse geliefert. *Preis:(T)= 35,-DM (R)= 45,-DM.*

Silicon device features low noise

E. Model MSC BFQ77 is a 0.8-µm-linewith silicon transistor with a noise figure of 2.8 dB at 4 GHz. The associated gain at that frequency is 8 dB.

D. Der Siliziumtransistor von MSC BFQ77 hat eine Strukturbreite von .8µ und erzielt dabei eine Rauschzahl von 2.8 dB bei 4 GHz mit einer Verstärkung von 8 dB.

HP's Low Cost Bipolare Silicon Transistor HXTR-3XXX Series

E. The HXTR-3103 from HP is an NPN bipolar transistor designed for high gain and wide dynamic range up to 5 GHz. Electrical features: fT=7 GHz, Noise Figure 1 GHz= 1.7 dB, 2 GHz= 2.5 dB, 3 GHz= 3.3 dB and 4 GHz= 4.2 dB. Gain on 1 GHz= 13.5dB. Max IC= 50 mA. The device utilizes ion implantation, self alignment techniques and Ti/Pt/Au metallization in its manufacture. The chip is provided with dielectric scratch protection over its active area. The transistor is supplied in the Micro-X (HPAC-100X), a rugged metal/ceramic package. The price at small quantities amounts 20,--DM.

D. Der NPN Silizium Transistor HXTR-3103 von HP ist für Anwendungen im Bereich bis 5 GHz mit einem großen Dynamik-Bereich entwickelt worden. Elektrische Merkmale: fT=7 GHz, Rauschzahl bei 1 GHz= 1.7 dB, 2 GHz= 2.5 dB, 3 GHz= 3.3 dB und 4 GHz= 4.2 dB. Verstärkung bei 1 GHz= 13.5 dB. Max IC= 50mA. Gefertigt durch Ionen Implantation, Selbstausrichtungs Technologie und Ti/Pt/Au Legierung. Über dem aktiven Teil des Chips befindet sich eine dielektrische Schutzeinrichtung. Der Transistor wird im Micro-X Gehäuse vertrieben, ein robustes Metall-Keramikgehäuse. Der Preis bei kleinen Stückzahlen liegt etwa bei 20,--DM.

E. The HXTR-3104 from HP is an NPN bipolar transistor designed for high output power and gain up to 4 GHz. Electrical features: guaranteed associated 1 dB compressed gain= 14 dB at 1 GHz and 19 dBm power output. Ion implantation, selfalignment techniques and Ti/Pt/Au metallization are used in its manufacture to produce excellent uniformity and reliability. The chip has a dielectric scratch protection over its active area and a Ta2N ballast resistor for ruggedness. The HXTR-3104 is supplied in the Micro-X package.

D. Der HXTR-3104 entspricht im Aufbau dem des HXTR-3103 mit dem Unterschied, daß er einen größeren Dynamikbereich aufweist und integrierte Ballastwiderstände im Emitter enthält. Garantiert wird bei einem 1 dB Kompressionspunkt 14 dB Verstärkung auf 1 GHz bei 19 dBm Ausgangsleistung.

E. The HXTR-3615 is a low cost NPN silicon bipolar transistor designed to provide low noise, high gain, and wide dynamic range performance for VHF, UHF, and microwave applications. Electrical features: Noise figure/gain on 500 MHz= 1.3/21.5 dB, 1 GHz= 1.4/16.6 dB, 2 GHz= 2.0/12 dB, 4 GHz= 3.5/7 dB. Power output at 1 dB compression (VCE=15V, IC=18 mA) = 19 dBm. Price (qty>100) = 25,--DM.

D. Der HXTR-3615 ist ein preiswerter NPN Silizium Transistor, entwickelt worden für VHF, UHF und Mikrowellenanwendungen. Die herausragenden Eigenschaften sind niedriges Rauschen bei großem Dynamikbereich. Elektrische Eigenschaften: Rauschzahl/Verstärkung: Bei 500 MHz= 1.3/21.5 dB, 1 GHz= 1.4/16.6 dB, 2 GHz=2.0/12, 4 GHz= 3.5/7 dB. Ausgangsleistung bei 1 dB Kompression (VCE=15V, IC=18 mA) = 19 dBm. Der Preis beträgt (bei> 100) ca. 25,-- DM.

E. The HXTR-3645 is an NPN silicon bipolar transistor designed for use in low noise wide band amplifier or medium power oscillation applications requiring superior VHF, UHF, or microwave performance. Electrical features: Noise figure/gain: 500 MHz= 1.2/22.5 dB, 1 GHz= 1.2/17.5 dB, 1.5 GHz= 1.4/14.6 dB, 2 GHz= 1.7/13 dB. Power output at 1 dB compression (VCE=15V, IC=18mA) on 2 GHz = 19 dBm. Price (qty>100)= 32,--DM.

D. Der HXTR-3645 ist ein NPN Silizium Transistor für Breitbandverstärker oder Oszillatoren mit niedrigem Rauschen im VHF, UHF und Mikrowellenbereich. Elektrische Eigenschaften: Rauschen/Verstärkung: Bei 500 MHz 1.2/22.5 dB, 1 GHz= 1.2/17.5 dB, 1.5 GHz= 1.4/14.6 dB, 2 GHz= 1.7/13 dB. Die Ausgangsleistung bei 1 dB Kompression beträgt bei 2 GHz 19 dBm. Der Preis bei Stückzahlen > 100 beträgt ca. 32,-- DM.

E. The HXTR-3675 is a low cost high performance NPN silicon bipolar transistor designed for use in low noise wide band amplifier from VHF to microwave. fT= typ. 6 GHz. Electrical features: Noise Figure/gain: 1 GHz= 1.2/17.7 dB, 2 GHz= 1.7/13 dB, 4 GHz= 2.8/8.6 dB. The power output at 1 dB gain compression (VCE=15V, IC=18mA) at 4 GHz is 17.5 dBm. Price (qty>100) abt. 42,--DM.

D. Der HXTR-3675 ist ein rauscharmer NPN Silizium Transistor für Anwendungen im VHF- bis zum Mikrowellenbereich. Er zeichnet sich durch folgende elektrische Eigenschaften aus: fT= 6 GHz. Rauschzahl/Verstärkung: bei 1 GHz 1.2/17.7 dB, 2 GHz= 1.7/13 dB, 4 GHz= 2.8/8.6 dB. Die Ausgangsleistung (VCE=15V, IC=18mA) bei 1 dB Kompression bei 4 GHz beträgt 17.5 dBm. Der Preis bei Stückzahlen >100 beträgt ca. 42,-- DM.

NEC's New Low Noise Bipolar Silicon Transistor NE-68XXX Series

E. The NE-68037 is an NPN bipolar silicon transistor for use in wideband amplifier application. The transistor is supplied in several packages. The NEC XXX37 is a common strip-line package. Electrical features: fT= 10 GHz! The Noise Figure on 2 GHz is 1.8 dB at 10 dB gain (VCE=6V, IC= 3mA). S-parameters are available from 200 MHz up to 2 GHz. No price at present obtainable.

D. Der NE-68037 ist ein NPN Silizium Transistor für Anwendungen im VHF, UHF und Mikrowellenbereich. Der Transistor wird in verschiedenen Gehäuseausführungen geliefert. Das NEC XXX37 ist ein Plastik-Micro-strip Gehäuse. Elektrische Eigenschaften: Transitfrequenz fT= 10 GHz! Die Rauschzahl beträgt bei 2 GHz 1.8 dB bei einer Verstärkung von 10 dB (VCE=6V, IC=3mA). Die S-Parameter sind erhältlich von 200 MHz bis 2 GHz. Kein Preis gegenwärtig bekannt.

E. The NE-68137 is an NPN bipolar silicon transistor for use in wideband amplifier and oscillation applications. Electrical parameters: fT= 9 GHz. Noise Figure on 1 GHz (VCE=8V, IC= 7mA) 1.2 dB at 17dB gain. Max IC= 65 mA. S-parameters available from 200 MHz to 2 GHz. Price at present unknown.

D. Der NE-68137 ist ein NPN Silizium Transistor für Breitbandverstärker und Oszillator Anwendungen im VHF, UHF und Mikrowellenbereich. Elektrische Eigenschaften: fT= 9 GHz. Rauschzahl bei 1 GHz= 1.2 dB bei 17 dB Verstärkung (VCE=8V, IC=7mA). S-Parameter sind von 200 MHz bis 2 GHz vorhanden. Der Preis ist gegenwärtig unbekannt.

N-Channel GaAs Schottky-MES-FET-TETRODE S3030

E. Texas Instrument's new MES-FET is designed in monolithic integrated Cascaded FET-technology. Application: Amplifiers up to 2.5 GHz, Mixers and low supply voltage rf equipment. Electrical features at 1 GHz: Noise Figure= 1.1 dB. Gain= 20 dB. Low cross- and intermodulation due to Schottky gate technology.

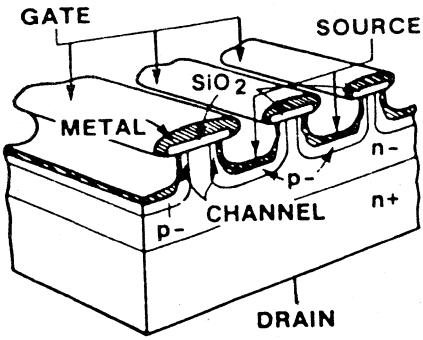
D. Texas Instrument's neuer MES-FET ist in monolitisch integrierter Kaskaden FET Technologie aufgebaut. Anwendungsbereiche: Verstärker bis 2.5 GHz, Mischer und HF Geräte, welche mit niedrigen Betriebsspannungen arbeiten. Die elektrischen Daten bei 1 GHz sind: Rauschzahl= 1.1 dB. Verstärkung= 20 dB. Kreuz- und Intermodulationsfestigkeit durch Schottky Gate Technologie.

Monolithic Integrated GaAs Broadband Amplifier Series CGY XX

E. Siemens designed GaAs integrated two stage broadband amplifiers for application up to 3 GHz supplied in a TO 12 package. Low parasitic capacitance of the bias network to port 2 gives optimum gain and flatness. Good ground connection of pin 4 and the package is the base for stable operation conditions and provides adequate heat sink. Careful handling must be assured to protect the devices against damage from excess voltage or excess current spikes. Electrical features: Operation up to 3 GHz. Oper. Voltage 3 to 6 Volt. CGY 21: 40 to 860 MHz, I OP= 210mA, gain= 20 dB, NF= 4.5 dB, power output at 800 MHz 1 dB compression= 20 dBm, secondharmonic -41dB, thirdharmonic -58dB. CGY 31: 800 MHz to 1800 MHz, I OP= 210mA, gain= 17 dB, NF= 5 dB.

D. Siemens entwickelte 2 stufige Breitband GaAs FET Verstärker bis 3 GHz verwendbar. Niedrige parasitäre Kapazitäten in der Stromversorgung sind Voraussetzung für optimale Verstärkung. Gute Erdung von Pin 4 des TO 12 Gehäuses ist Voraussetzung für stabile Arbeitsbedingungen, sowie ausreichende Wärmeabführung. Der Verstärker darf keinen statischen Entladungen ausgesetzt werden. Die elektrischen Eigenschaften sind: Betriebsbereich bis 3 GHz. Versorgungsspannung 3-6 Volt. CGY 21: 40-860 MHz, I OP= 210mA, Verstärkung= 20 dB, Rauschzahl= 4.5 dB. Ausgangsleistung bei 1 dB Kompression= 20 dBm. Erste Oberwelle -41dB, zweite Oberwelle -58dB. CGY 32: 800-1800 MHz, I OP= 210mA,

Verstärkung = 17dB, Rauschzahl= 5 dB.



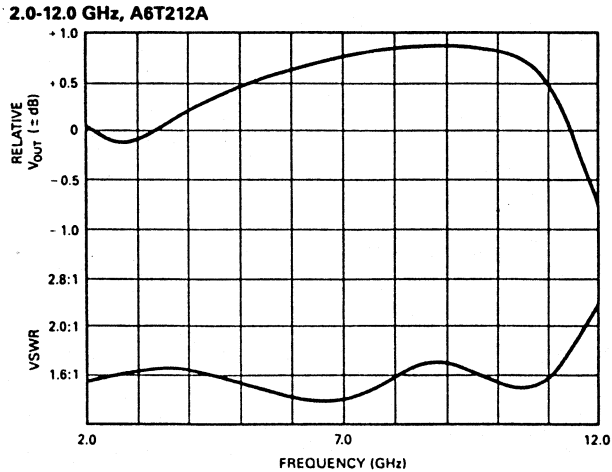
Neu von ACRIAN: I S O F E T

D. Was ist ein ISOFET? Man benütze die gleiche Topologie wie bei einem GaAs FET und verwende sie für Silizium-Leistungstransistoren, das ist die etwas vereinfachte Beschreibung. Der ISOFET eignet sich gegenwärtig für Frequenzbereiche von DC bis 400 MHz. Die Vorteile von ISOFET's *Durch die niedrige Rückwirkungskapazität (1/4 im Vergleich zu bipolaren Transistoren) werden die Anpassungsnetzwerke stark vereinfacht. *Breitbandige Anwendungen möglich. *Hoher Dynamikbereich. *Einfache Stromversorgung. *Exzellente Charakteristik bei der Verstärkungsregelung. Für das VHF Band liefert die Modellreihe VMIL Leistungen bis zu 120 W, für das UHF Band UMIL bis 60 W. Die angegebenen Leistungsverstärkungen bei VHF sind 14 dB und bei UHF 13 dB.

E. What is a ISOFET? Use the topology from a GaAs FET and employ it for a silicon power transistor, that's a simplified discription. The ISOFET is usable at present from DC to 400 MHz. The ISOFET provides following features: *Low revers transfer capacitance (1/4 in comparison to bipolare transistors), which simplifies the realization of matching networks. *Broadband use. *Wide dynamic range. *Easy to supply. *Excellent gain control characteristics. For VHF use the series VMIL is obtainable up to 120 W, and for UHF the UMIL series up to 60 W. The specified powergain on VHF is 14 dB and on UHF 13 dB.

Planare Stripline- Tunneldetektoren

D. Tunneldioden konnten bislang nur in Mesa-Technologie hergestellt werden. TRW Microwave hat einen Fertigungsprozeß entwickelt, mit dem sich Tunneldioden planar herstellen lassen. Die Applikationsmöglichkeiten der Tunneldiode haben sich dadurch stark vergrößert. Die wichtigsten Verbesserungen zur herkömmlichen Tunneldiode sind: *Höhere Durchbrennverträglichkeit. *bessere Stabilität über die Temperatur. *Unempfindlicher gegen mechanische Belastungen. *Kleine Baugröße.

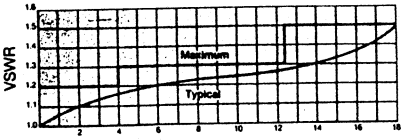


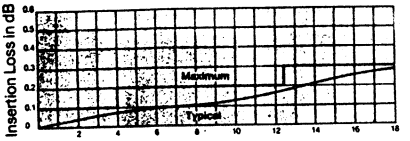
E. Until now tunnel diodes could be produced only in Mesa technology. TRW Microwave is now able to offer tunneldiodes produced in planar technology as first in the world. Planar technology provides following features: *Higher burn-out protection. *Higher temperature stability. *Mechanically insensibility. *Small outlines.

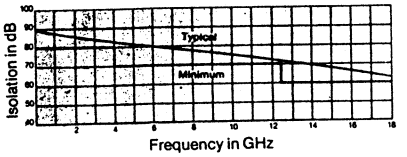
Miniatur Koaxrelais

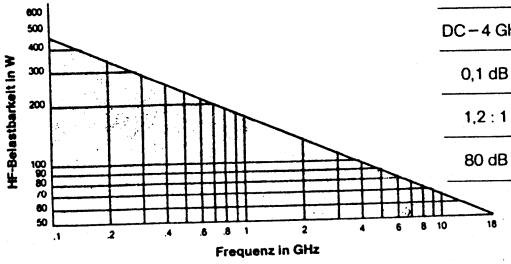
D. RLC bietet jetzt ein Koaxrelais mit SMA Buchsen an, welches über einen Frequenzbereich von DC - 26 GHz spezifiziert ist. Das Relais SPDT zeichnet sich durch kompakte Abmessungen und hohe Lebensdauer aus. Standardmäßig ist das Relais mit Schalter bedienbar oder mit 12V DC, 28V DC, 115V AC, ausgestattet. Preis bei Einzelstückabnahme ist 80 US$. Erhältlich bei Telemeter Electronic D-8850 Donauwörth, Tel:0906/4091.

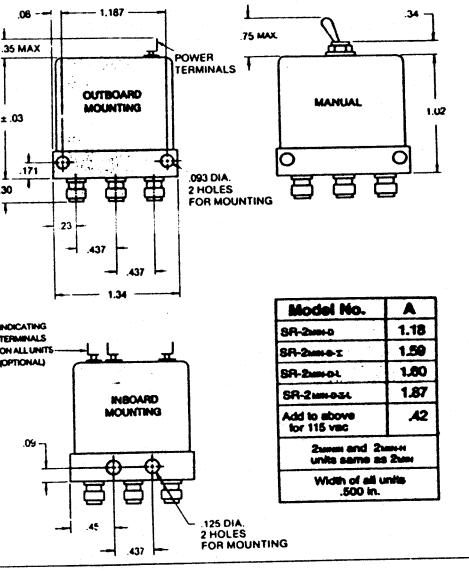
E. RLC offers now a coax relay specified from DC up to 26 GHz. This relay provides small dimensions and high reliability. It is obtainable for manual operating or driven by 12V DC, 28V DC, 115V AC. The price for small quantities amounts 80 US$ and it's distributed from Telemeter Electronic in Germany D-8850 Donauwörth, Tel:0906/4091.











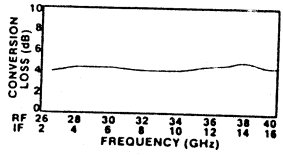
Model No.	A
SR-2MM-D	1.18
SR-2MM-D-Σ	1.59
SR-2MM-D-L	1.60
SR-2MM-D-3-L	1.87
Add to above for 115 vac	.42
2MMM and 2MM-H units same as 2MM	
Width of all units .500 in.	

DC – 18 GHz (26 GHz)

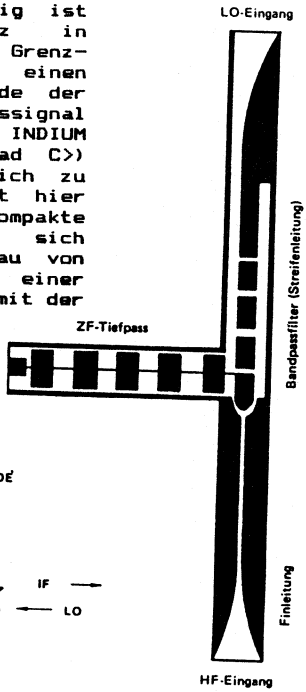
DC – 4 GHz	4 – 12,4 GHz	12,4 – 18 GHz	(18 – 26 GHz)
0,1 dB	0,2 dB	0,3 dB	1,0 dB
1,2 : 1	1,3 : 1	1,5 : 1	1,65 : 1
80 dB	70 dB	60 dB	40 dB

Breitbandiger mm-Wellen Mischer in planarem Aufbau

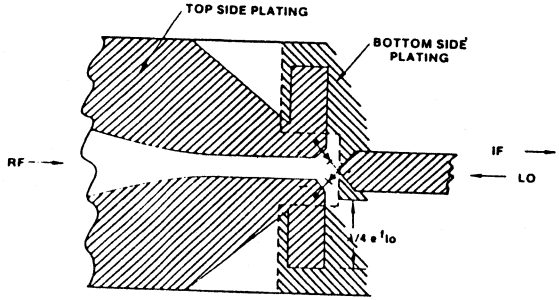
D. An Hand eines von HUGHES entwickeltem KA Band Mischers sollen die besonderen Vorteile eines planaren Aufbaus erläutert werden: Eine wesentliche Eigenschaft ist der kompakte und einfache Aufbau, bei dem ein beschichtetes Substrat zwischen 2 Gehäusehälften gepreßt wird. Diese Technik gewährleistet gute Reproduzierbarkeit und durch Reduzierung der Anzahl von Einzelkomponenten einen günstigen Preis. Mit breitbandigen und reflektionsarmen übergängen werden die Hohlleiterwellen zu beiden Mischerdioden geführt. Dem LO Zweig ist ein Bandpassfilter für 24 GHz in Streifenleitungstechnik eingefügt. Die Grenzfrequenz des ZF- Zweiges wird durch einen Tiefpass auf 18 GHz festgelegt. Am Ende der Schlitzleitung, über die das Eingangssignal zugeführt wird, befinden sich zwei (mit INDIUM <Spezial Lötzinn, Flußtemperatur 140 Grad C>) eingelötete beam lead Dioden. Im Vergleich zu Whiskerkontakten (Federkontakten) liegt hier die Serieninduktivität geringer. Die kompakte planare Bauform des Mischers eignet sich besonders für einen integrierten Einbau von rauscharmen ZF- Verstärkern sowie einer unmittelbaren Verbindung des Eingangs mit der Empfangseinrichtung. Geringe Eingangsreflektion und konstanter geringer Mischverlust beweisen die besondere Breitbandigkeit des Mischers.



Mischverluste



Planar-Layout des Mischers



E. The mixer design presented here by HUGHES yields wide instantaneous band coverage at the RF port, with selective band constraints applied to the LO and input port. The IF output is band limited via low-pass and band-pass diplexing at the LO-mixer diode junction. Inherent LO to RF isolation is achieved by proper use of balanced and single-ended transmission lines, along with well matched mixer diodes. The mixer design takes advantage of low-cost printed ciruit fabrication technology which is particulary suited to batch processing and facilitates the use of low parasitic beam lead diodes. Simple circuit mounting via "split block" housing precludes the need for multiple complex machined parts, thus further reducing fabrication costs as compared

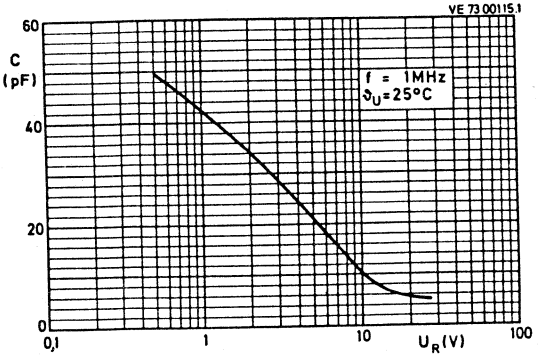
to the traditional waveguide mm-wave mixer with whisker contacted "honycomb" Schottky diodes. The beam lead diodes were soldered to the substrate using INDIUM solder whose liquide state was 140 degree C. It is worth noting that this mixer design approach leads to fully integrated multi-functional downconverters which can readily include a LO, low noise amplifier, antenna, appropriate preselection and post-selection filters, or other integrated circuitry which complement the downconverter assembly. The mixer topology lends itself to integration with other planar structures that results in further reduction in both overall size and production cost.

DI-CLAD- verlustarmes dielektrisches Platinenmaterial

D. DI-CLAD ist ein laminiertes kupferbeschichtetes Teflon (PTFE)- Glasfasermaterial. Eine Zusammensetzung von gewebter Glasfaser (Glasseide), getränkt mit Polytetrafluoräthylen, gewährleisten höchste Reinheit des Basismaterials und eine kontrolliert reproduzierbare, gleichmäßige Dielektrizitätskonstante. Eine galvanische Kupferkaschierung oder gewalztes Kupfer, einseitig oder beidseitig aufgetragen, sind Standardkontaktmaterialien. Es sind aber auch einseitige, dicke Aluminium- oder Kupferplatten zur besseren Wärmeableitung oder Stabilität erhältlich. Der hohe Qualitätsstandard wird in der Fertigung durch Reinsträume erzielt, wodurch engste Toleranzen in der Materialstärke erreicht werden. Diese Voraussetzungen, in Verbindung mit einem niedrigen Verlustfaktor, machen DI-CLAD zu einem exzellenten Produkt für HF-Streifenleitungsanwendungen. Der typische Verlustfaktor liegt im X-Band (8.2-12.4 GHz) bei Er 2.5= 0.0019. DI-CLAD 522-Er= 2.45...2.55, DI-CLAD 870-Er= 2.33 +-.02, DI-CLAD 810-Er= 10.5 +-0.25. Hersteller: KEENE Coop. USA:Erhältlich bei MUNICOM GmbH, Tel: 089/661007.

E. DI-CLAD- a laminated microwave dielectric material. DI-CLAD is a lamination of PTFE coated glass fabric with copper cladding on one or two surfaces. The composite utilizes the highest grade and purity of base materials in conjunction with high purity electro-deposed copper. This construction results in a controlled reproduceable dielectric constant. In addition, a clean room environment and high quality standards ensure closely controlled thickness tolerances. These features, in conjunction with a low dissipation factor, make DI-CLAD an excellent product for microwave stripline application. The typically dissipation factor at X-band(8.2-12.4 GHz) amounts (Er=2.5) 0.0019. DI-CLAD 522-Er= 2.45...2.55, DI-CLAD 870-Er= 2.33 +-.02, DI-CLAD 810-Er= 10.5 +-0.25. Manufactured by KEENE Coop. USA. Obtainable in Germany at MUNICOM GmbH, Tel: 089/661007.

Low Cost Varicap BBY40



VALVO's new silicon-planar-varicap BBY40 is usable for resonance ciruits up to 300 MHz. Its capacitance is 4.3 pF....32pF. Features: reverse voltage= max. 28V, forward current= max. 20mA, junction temperature max. 85 deg. C. Series resistance at C= 25pF, f= 200 MHz 0.4-0.6 Ohm. The price amounts abt. 4,--DM.

D. VALVO's neue Silizium- Planar-Kapazitätsdiode BBY40 kann in Schwingkreisen bis 300 MHz verwendet werden. Die Kapazität beträgt 4.3....32pF. Elektrische Werte: Sperrspannung max. 28V, Durchlaßstrom max. 20mA, Sperrschichttemperatur max. 85 Grad C. Der Serienwiderstand beträgt bei C=25pf und F=200 MHz, 0.4-0.6 Ohm. Der Preis der Diode liegt etwa bei 4,--DM.

Reprint from MSN (Microwave System News) Nov. 1983

GaAs FET Matrix

Low-Noise GaAs FETs

FREQUENCY (GHz)

Part Number	Gate Length µm	f_{MAX} GHz	2			4			6			8			10			12			18		
			NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG
ALPHA INDUSTRIES, INC.																							
ALF 1000	1.0	60	0.7	15	20	1.3	12.5	16	—	—	—	2.3	10.5	11	—	—	—	—	—	—	—	—	—
ALF 1003	1.0	60	0.7	15	20	1.3	12.5	16	—	—	—	2.3	9.5	11	—	—	—	—	—	—	—	—	—
ALF 1020	1.0	60	0.9	14.0	18	1.6	11.5	15	—	—	—	2.6	9.0	10	—	—	—	—	—	—	—	—	—
ALF 1023	1.0	60	0.9	13.5	18	1.6	11.0	15	—	—	—	2.6	8.5	10	—	—	—	—	—	—	—	—	—
ALF 3000	0.5	70	—	—	—	0.9	13.0	17	—	—	—	1.5	11.0	14	—	—	—	2.1	8.5	9	2.8	6.0	6.5
ALF 3003	0.5	70	—	—	—	0.9	13.0	17	—	—	—	1.5	10.5	14	—	—	—	2.2	8.0	9	—	—	—
ALF 3300	0.5	75	—	—	—	0.8	13.5	18	—	—	—	1.4	11.5	15	—	—	—	1.9	9.0	9.5	2.5	6.5	—
ALF 3303	0.5	75	—	—	—	0.8	13.5	18	—	—	—	1.4	11.0	15	—	—	—	2.1	8.5	9.5	—	—	—
AMPEREX ELECTRONIC CORP.																							
CFX13	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—	2.2	8.0	10.5	2.5	7.5	9.0	—	—	—
CFX14	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.3	8.2	10.0	2.7	6.0	8.0
AVANTEK, INC.																							
AT-8111 (AT-11000)	0.5	30	0.7	18	—	0.9	13	—	1.2	11	—	1.4	9	11	—	—	—	—	—	—	—	—	—
AT-8110 (AT-11070)	0.5	30	0.7	18	—	0.9	13	16	1.3	10	12	1.5	8	10	—	—	—	—	—	—	—	—	—
AT-8251 (AT-12500)	0.5	40	0.7	18	—	0.9	14	—	1.2	12	—	1.4	10	—	1.6	9.5	11	1.8	8.5	9	—	—	—
AT-8250 (AT-12570-1)	0.5	40	0.7	18	—	0.9	14	—	1.3	11	—	1.5	9	13	1.7	8.5	11	1.9	7.5	—	—	—	—
AT-12570-5	0.5	40	0.7	18	—	1.0	13	—	1.5	10	—	1.7	8	13	2.0	7.5	11	2.4	6.5	—	—	—	—
AT-12535	0.5	40	0.7	18	—	1.0	13	—	1.5	10	—	1.7	8	13	2.0	7.5	11	2.4	6.5	—	—	—	—
AT-10650-1	0.5	45	0.7	18	—	0.9	14	—	1.1	13	—	1.4	12	—	1.5	11	12	1.6	9.5	10.5	2.4	6	7
AT-10650-3	0.5	45	0.7	18	—	0.9	14	—	1.1	13	—	1.5	12	—	1.7	11	12	1.8	9.5	10.5	—	—	—
AT-10650-5	0.5	45	0.7	18	—	1.0	13	—	1.2	12	—	1.6	11	—	1.8	10	12	2.0	8.5	10.5	—	—	—
AT-10635	0.5	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.5	7.5	11.0	—	—	—
AT-8040	0.5	75	—	—	—	—	—	—	1.7	13	(15)*	—	—	—	—	—	—	2.4	9	(12)*	—	—	—
DEXCEL, INC.																							
DXL-2501A	1.0	—	—	—	—	1.4	13	16	—	—	—	2.2	9	11	—	—	—	—	—	7.5	—	—	—
DXL-2501A-P70	1.0	—	0.5	20	24	1.4	13	16	—	—	—	2.2	9	11	—	—	—	—	—	—	—	—	—
DXL-2502A	0.7	—	—	—	—	1.3	13	17	—	—	—	2.2	10	12	—	—	—	3.2	7	10	—	—	—
DXL-2502-A-P70	0.7	—	—	—	—	1.3	13	17	—	—	—	2.2	10	12	—	—	—	—	—	—	—	—	—
DXL-2503A	0.5	—	—	—	—	1.0	14	18	—	—	—	1.8	11	14	—	—	—	2.8	8.5	12	4.0	6	9
DXL-2503A-P70	0.7	—	—	—	—	1.0	14	18	—	—	—	1.8	11	14	—	—	—	2.8	8.5	11	—	—	—
DXL-2608A	0.6	—	—	—	—	—	—	—	—	—	—	3.0	8	11	—	—	—	—	—	—	—	—	—
DXL-2608A-P70	0.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-1503A	0.5	—	—	—	—	0.8	13	16	—	—	—	1.4	9	13	—	—	—	1.8	8	11	3.5	6	7
DXL-1503A-P70	0.5	—	—	—	—	0.8	13	16	—	—	—	1.4	9	13	—	—	—	1.8	7	10	—	—	—
DXL-0503A	.025	—	—	—	—	0.6	15	18	—	—	—	—	—	—	—	—	—	1.5	10	13	2.3	8.5	11
DXL-0503A-P70	.025	—	—	—	—	0.6	15	18	—	—	—	—	—	—	—	—	—	1.5	10	13	—	—	—
FUJITSU MICROELECTRONICS, INC.																							
FSC07FA	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FSX100FA	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MICROWAVE SEMICONDUCTOR CORP.																							
CFY-10	1.0	—	—	—	—	—	—	—	1.6	10.0	13.0	—	—	—	—	—	—	—	—	—	—	—	—
CFY-13	1.0	—	1.0	13.5	22.0	1.5	12.0	16.0	2.0	10.0	12.5	2.5	9.0	10.0	—	—	—	3.6	6.0	6.5	—	—	—

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BEACON LIST

EUROPEAN VHF UHF SHF BEACON LIST 16.05.1984

CALL	QRG (MHZ)	WW-QTH	E-QTH	POWER (W)	ANTENNA	QTF	ASL(M)	MODE
GB3LEX	10400.000	IO92IQ	ZM24J	1 ERP	SLOT WAVEGUIDE	SE	220	F2A
DL0WY	24192.805	JN67CR	GH22H	0.0005	15 DB HORN	NW	1560	A1A

PAGE - 4 - DUBUS EUROPEAN VHF UHF SHF BEACON LIST: SUPPLEMENTS SEND TO: CLAUS NEIE / D-7181 RUDOLFSBERG 24 --- PRINTED BY DL 7 QY

P_o dBm	f GHz	Max Ratings R_{TH} °C/W	T_J	V_{DS}	V_{GS}	V_{DS} nom volts	I_{DSS} nom mA	V_P nom volts	Package Type	Mfgr.'s Remarks	Price Quantity 1-100	1000
12	4	170	—	5V	−10V	3.5	55	2.5	Chip	Recessed gate structures,	$18.50	—
12	4	170	—	5V	−10V	3.5	55	2.5	Hermetic 70 mil square	broadband and low noise	22.00	—
12	4	170	—	5V	−10V	3.5	55	2.5	Chip	performance for both	12.00	—
12	4	170	—	5V	−10V	3.5	55	2.5	Hermetic 70 mil square	amplifiers and oscillators	15.50	—
10	12	180	—	5V	−6V	3.5	50	2.0	Chip	in commercial and military	26.00	—
10	12	180	—	5V	−6V	3.5	50	2.0	Hermetic 70 mil square	applications.	29.50	—
10	12	180	—	5V	−6V	3.5	50	2.0	Chip	—	37.50	—
10	12	180	—	5V	−6V	3.5	50	2.0	Hermetic 70 mil square	—	42.00	—
13	10	200	175	5	−6	3	35	—	FO-92	Avail as chip CFX13X	64.00	—
13	10	200	175	5	−6	3	35	—	FO-92	Avail as chip CFX14X	68.00	—
+21	4	100	175	—	—	3	120	−1.5	—	—	—	—
+21	4	250	175	—	—	3	120	−1.5	—	—	—	—
+20	4	160	175	—	—	3	100	−1.5	—	—	—	—
+20	4	300	175	—	—	3	100	−1.5	—	—	—	—
+20	4	300	175	—	—	3	100	−1.5	—	—	—	—
+20	4	300	175	—	—	3	100	−1.5	—	—	—	—
+18	12	300	175	—	—	3	50	−1.5	—	—	—	—
+18	12	300	175	—	—	3	50	−1.5	—	—	—	—
+18	12	300	175	—	—	3	50	−1.5	—	—	—	—
17	12	200	175	7	−5	3	50	−2	Micro-x	Low cost	19.75	16.00
8	12	250	150	5	−4	3	40	−2	50 mil stripline	Usable in Ku-band	110.00	84.00
+18	8	100	175	10	—	6	70	−2	Chip form	3.5V, 15mA for NF OPT, or 6V, 0.5 I_{DSS} for power	—	—
+17	8	200	175	10	—	6	70	−2	P70-Hermetic	—	—	—
+10	12	180	175	10	—	4	40	−2	Chip form	Good wideband gain performance thru 15 GHz. Designed for X-band performance	—	—
+10	12	300	175	10	—	4	40	−2	P70-Hermetic	—	—	—
+12	18	180	175	10	—	4	60	−2	Chip form	Super gain performance thru 18 GHz good for 20-21 GHz. Designed for maximum gain @ 18 GHz	—	—
+12	12	300	175	10	—	4	60	−2	P70-Hermetic	2501, 2502, 2503 have been qualified for and used in "Hi-Rel" programs.	—	—
+21	8	70	175	10	—	6	175	−3	Chip form	Designed for high trans-conductance for feedback applications	—	—
+21	8	170	175	10	—	6	175	−3	P70-Hermetic	—	—	—
+10	8	180	175	10	—	3	30	−1	Chip form	Designed for low noise performance	—	—
+10	8	300	175	10	—	3	30	−1	P70-Hermetic	—	—	—
+10	12	190	175	6	—	3	40	−1	Chip form	Ultra low noise. Super high gain at 20-22 GHz.	—	—
+10	12	310	175	6	—	3	40	−1	P70 Hermetic	12 GHz LNA application.	—	—
—	4.0	—	+175	8.0	−5.0	3.0	10	−1.5	FA	Low cost	—	—
12	12	—	+175	12	−5.0	5.0	45	−2.5	FA	Gain stage	—	—
—	—	—	—	—	—	—	—	—	—	New release	—	—
13.4	4.0	—	—	5.0	±5	4	60	−2.5	Cerec	—	14.50	—

GaAs FET Matrix

Low-Noise GaAs FETs

FREQUENCY (GHz)

Part Number	Gate length µm	f_{MAX} GHz	2			4			6			8			10			12			18		
			NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG
CFY-14	1.0	—	1.1	12.0	30.0	1.7	10.5	14.0	2.2	8.5	10.0	3.0	7.0	8.0	—	—	—	—	—	—	—	—	—
CFY-11	1.0	—	1.0	13.5	22.0	1.5	12.0	16.0	2.0	10.0	12.5	2.5	9.0	10.0	—	—	—	3.6	6.0	6.5	—	—	—
CFY-12	1.0	—	1.1	12.0	20.0	1.7	10.5	14.0	2.2	8.5	10.0	3.0	7.0	8.0	—	—	—	—	—	—	—	—	—
CFY-15	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.2	9.0	12.0	—	—	—
MITSUBISHI ELECTRONIC AMERICA, INC.																							
CERAMIC PACKAGE																							
MGF 1202	.8	55	—	—	—	1.4	11	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF 1203	.5	90	—	—	—	.8	14	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF 1402	.8	70	—	—	—	1.1	13	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF 1403-11-09	.5	90	—	—	—	.8	14	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF 1403-61-20	.5	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.9	11	14	—	—	—
MGF 1403-61-23	.5	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.1	11	14	—	—	—
MGF 1404-11-07	.3	100	—	—	—	.6	15	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF 1404-61-16	.3	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.5	12	15	—	—	—
MGF 1404-61-17	.3	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.6	12	15	—	—	—
MGF 1412-11-08	.7	80	—	—	—	.7	13	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF 1412-11-09	.7	80	—	—	—	.8	13	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF 1412-11-10	.7	80	—	—	—	.9	13	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CHIPS																							
MGFC 1402-(*)	.8	70	—	—	—	1.1	13	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGFC1403-(*)-09	.5	90	—	—	—	.8	14	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGFC1403-(*)-19	.5	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.9	11	14	—	—	—
MGFC1403-(*)-21	.5	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.1	11	14	—	—	—
MGFC1403-(*)-23	.5	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.2	11	14	—	—	—
MGFC1404-(*)-07	.3	100	—	—	—	.6	15	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGFC1404-(*)-18	.3	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.6	12	15	—	—	—
MGFC1412-(*)-09	.7	80	—	—	—	0.9	13	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGFC1412-(*)-10	.7	80	—	—	—	1.0	13	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEC CORPORATION/ CAL EASTERN LABS, INC.																							
NE67300	0.25	100	0.3	18.0	19.5	0.4	14.5	17.0	0.7	13.0	16.5	1.0	11.5	16.0	1.2	10.5	12.5	1.4	10.0	11.0	2.1	8.0	8.5
NE67383	0.25	100	0.3	18.0	19.5	0.4	14.5	17.0	0.7	13.0	16.5	1.0	11.5	16.0	1.2	10.5	12.5	1.6	10.0	11.0	2.1	8.0	8.5
NE71000	0.25	100	0.4	18.0	19.5	0.6	14.5	17.0	0.8	13.0	16.5	1.1	11.5	16.0	1.3	10.5	12.5	1.6	10.0	11.0	2.3	8.0	8.5
NE71083	0.25	100	0.4	18.0	19.5	0.6	14.5	17.0	0.8	13.0	16.5	1.1	11.5	16.0	1.3	10.5	12.5	1.7	10.0	11.0	2.3	8.0	8.5
NE13700	0.5	80	0.6	17.0	19.0	0.7	14.0	17.0	1.0	12.5	17.0	1.2	11.0	15.0	1.5	10.0	12.0	1.7	9.0	11.0	2.3	5.0	6.0
NE13783	0.5	80	0.6	17.0	19.0	0.8	14.0	17.0	1.0	12.5	17.0	1.2	11.0	15.0	1.5	10.0	12.0	1.9	9.0	11.0	2.3	5.0	6.0
NE70000	0.5	80	0.7	17.0	19.0	0.7	14.0	17.0	1.1	12.5	17.0	1.3	11.0	15.0	1.6	10.0	12.0	2.0	9.0	11.0	—	—	—
NE70083	0.5	80	0.7	17.0	19.0	0.7	14.0	17.0	1.1	12.5	17.0	1.3	11.0	16.0	1.6	10.0	12.0	2.2	9.0	11.0	—	—	—
NE21800	1.0	60	0.8	15.0	19.0	1.0	12.0	17.0	1.3	11.0	13.0	1.7	10.5	12.0	2.2	9.0	9.5	2.4	7.5	9.5	—	—	—
NE21889	1.0	60	0.8	15.0	19.0	1.0	12.0	17.0	1.3	11.0	13.0	1.7	10.5	12.0	2.2	9.0	9.5	2.8	7.5	9.5	—	—	—
NE72000	1.0	60	1.0	13.0	19.0	1.3	10.0	16.0	1.6	8.5	13.0	2.1	7.0	12.0	2.6	6.0	9.0	—	—	—	—	—	—
NE72089	1.0	60	1.0	13.0	19.0	1.3	10.0	16.0	1.6	8.5	13.0	2.1	7.0	12.0	2.6	6.0	9.0	—	—	—	—	—	—
NE24400	1.0	55	1.0	14.0	22.0	1.3	13.5	17.0	1.7	11.5	13.0	2.0	10.5	12.0	2.6	9.5	10.5	2.6	7.0	10.0	—	—	—
NE24483	1.0	55	1.0	14.0	22.0	1.3	13.0	17.0	1.7	11.5	13.0	2.0	10.0	11.0	2.6	9.5	10.5	3.0	6.5	9.0	—	—	—
NE38800	0.5	80	1.0	14.5	20.0	1.2	14.0	18.0	1.7	12.0	16.0	1.7	12.0	14.0	2.6	9.5	13.0	2.1	9.5	12.0	4.0	6.0	7.5
NE38883	0.5	80	1.0	14.5	20.0	1.2	14.0	18.0	1.7	12.0	16.0	1.7	12.0	13.0	2.6	9.5	13.0	2.6	8.0	11.0	—	—	—
NE46383	1.0	45	—	—	—	1.7	17.0	18.0	—	—	—	3.0	12.0	14.0	—	—	—	4.0	9.0	10.0	—	—	—
PLESSEY SEMICONDUCTORS																							
GAT 1/010 in P101 package	4		2.5	—	12	Maximum recommended frequency is 1.5 GHz									—	—	—	—	—	—	—	—	—
GAT 4 P107 package	1	85	—	—	—	—	—	—	—	—	—	2.1	7	11	—	—	—	—	—	—	—	—	—
GAT 6 P100 chip	0.5	—	—	—	—	1	15	19	—	—	—	1.5	11.5	15	—	—	—	2.2	9.5	13	3.5	7	—
RAYTHEON CO.																							
RLK 048	0.5	80	—	—	—	—	—	—	1.0	12	16	1.2	11	15	1.7	10.5	12	1.9	9.5	10	2.5	7.0	8.0
RLX 835	1.0	50	—	—	—	1.5	13	16	2.0	11	14	2.5	9.0	12	3.0	7.0	10	3.5	5.0	8.0	—	—	—
THOMSON-CSF																							
TC 1100	1	—	—	—	—	1.5	12	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TC 1101	1	—	—	—	—	1.5	12	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

P_o dBm	f GHz	Max Ratings R_{TH} °C/W	T_j	V_{DS}	V_{GS}	V_{DS} nom volts	I_{DSS} nom mA	V_P nom volts	Package Type	Mfgr.'s Remarks	Price Quantity 1-100	1000
13.4	4.0	—	—	5.0	±5	4	60	−2.5	Cerec	—	13.80	—
13.4	4.0	200	—	5.0	±5	4	60	−2.5	Metal ceramic	—	—	—
13.4	4.0	200	—	5.0	±5	4	60	−2.5	Metal ceramic	—	—	—
—	—	—	—	—	—	—	—	—	Metal ceramic	—	—	—
—	—	—	150	8	−6	3	70	−2	70 mil. ceramic stripline	—	7.45	—
—	—	—	—	6	−6	3	50	−2	70 mil. ceramic stripline	—	20.70	—
—	—	—	—	8	−6	3	70	−2	70 mil. metal-ceramic stripline	—	10.95	—
—	—	—	—	6	−6	3	50	−2	70 mil. metal-ceramic stripline	—	26.00	—
—	—	—	—	6	−6	3	50	−2	70 mil. metal-ceramic stripline	—	32.50	—
—	—	—	—	6	−6	3	50	−2	70 mil. metal-ceramic stripline	—	26.00	—
—	—	—	—	6	−6	3	40	−2	70 mil. metal-ceramic stripline	—	52.00	—
—	—	—	—	6	−6	3	40	−2	70 mil. metal-ceramic stripline	—	65.00	—
—	—	—	—	6	−6	3	40	−2	70 mil. metal-ceramic stripline	—	48.60	—
—	—	—	—	8	−6	3	70	−2	70 mil. metal-ceramic stripline	—	27.25	—
—	—	—	—	8	−6	3	70	−2	70 mil. metal-ceramic stripline	—	21.80	—
—	—	—	—	8	−6	3	70	−2	70 mil. metal-ceramic stripline	—	16.40	—
—	—	—	—	8	−6	3	70	−2	.015" x .018" x .005"	(*) Chips are available in three visual inspection grades as follows; A (−11 or −61) space grade B (−12 or −62) mil std 883 C (−13 or −63) commercial	8.80	—
—	—	—	—	6	−6	3	50	−2	.020" x .014" x .005"		20.80	—
—	—	—	—	6	−6	3	50	−2	.020" x .014" x .005"		31.20	—
—	—	—	—	6	−6	3	50	−2	.020" x .014" x .005"		25.30	—
—	—	—	—	6	−6	3	50	−2	.020" x .014" x .005"		20.80	—
—	—	—	—	6	−6	3	40	−2	.020" x .014" x .005"		43.40	—
—	—	—	—	6	−6	3	40	−2	.020" x .014" x .005"		43.40	—
—	—	—	—	8	−6	3	70	−2	.015" x .018" x .005"		17.50	—
—	—	—	—	8	−6	3	70	−2	.015" x .018" x .005"		12.45	—
14.5	12.0	190	175	5.0	−6.0	3.0	50	−1.1	Chip	—	—	—
14.5	12.0	450	175	5.0	−6.0	3.0	50	−1.1	Ceramic, hermetic	—	—	—
14.5	12.0	190	175	5.0	−6.0	3.0	50	−1.1	Chip	—	—	—
14.5	12.0	450	175	5.0	−6.0	3.0	50	−1.1	Ceramic, hermetic	—	—	—
15.0	12.0	170	175	5.0	−6.0	3.0	50	−1.1	Chip	—	—	—
15.0	12.0	450	175	5.0	−6.0	3.0	50	−1.1	Ceramic, hermetic	—	—	—
15.0	12.0	170	175	5.0	−6.0	3.0	50	−1.1	Chip	—	—	—
15.0	12.0	450	175	5.0	−6.0	3.0	50	−1.1	Hermetic, ceramic	—	—	—
17.0	4.0	170	175	5.0	−6.0	3.0	60	−2.0	Chip	—	—	—
17.0	4.0	400	175	5.0	−6.0	3.0	60	−2.0	Hermetic, ceramic	—	—	—
17.0	4.0	170	175	5.0	−6.0	3.0	60	−2.0	Chip	—	—	—
17.0	4.0	400	175	5.0	−6.0	3.0	60	−2.0	Hermetic, ceramic	—	—	—
10.0	4.0	170	175	5.0	−10.0	3.0	60	−2.5	Chip	—	—	—
10.0	4.0	400	175	5.0	−10.0	3.0	60	−2.5	Hermetic, ceramic	—	—	—
10.0	4.0	170	175	5.0	−8.0	3.0	60	−2.0	Chip	—	—	—
10.0	4.0	400	175	5.0	−8.0	3.0	60	−2.0	Hermetic, ceramic	—	—	—
10.0	4.0	400	175	8.0	−8.0	4.0	60	−3.0	Hermetic, ceramic	Dual gate FET in cascode configuration for high gain	—	—
—	—	—	—	—	—	—	—	—	P101 package	Max. recommended freq. 1.5 GHz	—	—
—	—	—	—	—	—	—	—	—	P107 package	—	—	—
—	—	—	—	—	—	—	—	—	P100 chip	—	—	—
8	12	200	175*	8.0	−6.0	4	40	1.5	.070" square	Prices are for packaged devices	60.00	—
10	12	200	175*	10.0	−7.0	5	40	1.5	.070" square, .10" sq.	Price for quantities above 100 to be negotiated	20.00	—
15	4	180	170	7	−6	3	75	−3	BMH 83	—	—	—
18	4	100	170	7	−6	3	150	−3	BMH 83	Low 3rd order intermodulation		—

GaAs FET Matrix

Low-Noise GaAs FETs

FREQUENCY (GHz)

Part Number	Gate length µm	f_{MAX} GHz	2			4			6			8			10			12			18		
			NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG
TC 1400	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—	2.5	8.5	11	—	—	—	—	—	—
TOSHIBA CORP.																							
S8831	0.5	—	—	—	—	1.1	13	18	—	—	—	1.8	10	13	—	—	—	—	—	—	—	—	—
JS8831-AS	0.5	—	—	—	—	1.1	13	18	—	—	—	2.3	10	13	—	—	—	—	—	—	—	—	—
S8804-AS	0.5	—	—	—	—	—	—	—	—	—	—	1.4	11	14	—	—	—	2.2	8.5	10	—	—	—
JS8804-AS	0.5	—	—	—	—	—	—	—	—	—	—	1.4	11	14	—	—	—	2.2	8.5	10	—	—	—
JS8818-AS	0.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.5	10.0	11	2.1	7.5	9.0
JS8819-AS	0.5	—	—	—	—	—	—	—	—	—	—	1.2	11	15	—	—	—	1.8	9	10	—	—	—
JS8819-AS	0.5	—	—	—	—	—	—	—	—	—	—	1.2	11	15	—	—	—	1.8	9	10	—	—	—
JS8830-AS	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.0	8	9.5
VARIAN ASSOCIATES																							
VSF9320	.5X240	—	—	—	—	.8	13	15	—	—	—	—	—	—	1.7	9.5	12	—	—	—	2.5	7	8.0
VSF9321	.5X240	—	—	—	—	.8	13	15	—	—	—	—	—	—	1.7	9.5	12	—	—	—	2.5	7	8.0
VSF9330	.5X240	—	—	—	—	.8	13	15	—	—	—	—	—	—	1.7	9.5	12	—	—	—	2.5	7	8.0
VSF9331	.5X240	—	—	—	—	.8	13	15	—	—	—	—	—	—	1.6	10.5	12	—	—	—	2.5	7	8.0
VSF9340	.5X285	—	—	—	—	.7	14	16	—	—	—	—	—	—	1.6	10.5	12	—	—	—	2.5	7	8.0
VSF9341	.5X285	—	—	—	—	.7	14	16	—	—	—	—	—	—	1.6	10.5	12	—	—	—	2.5	7	8.0
VSF9345	.5X285	—	—	—	—	.7	14	16	—	—	—	—	—	—	1.6	10.5	12	—	—	—	2.5	7	8.0
VSF9346	.5X285	—	—	—	—	.7	14	16	—	—	—	—	—	—	1.6	10.5	12	—	—	—	2.5	7	8.0

Dual-Gate GaAs FETs

FREQUENCY (GHz)

Part Number	Gate length µm	f_{MAX} GHz	AGC dB	2			4			6			8			10			12			18		
				NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG	NF	G_A	MAG
AVANTEK, INC.																								
AT-11200	500	21	50[1]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.5	15	(16)[2]	6.0	11	(12)[2]
AT-12000	250	30	50[1]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.5	15.5	(18)[2]	5.0	13	(16)[2]
DEXCEL, INC.																								
DXL-2704A	0.5	—	3.5	—	—	—	2	16	20	—	—	—	—	—	—	14	—	—	—	—	—	—	—	—
DXL-2704A-P70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-2704A-P70B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MITSUBISHI ELECT. AMERICA, INC.																								
MGF-1100	1.0	35	12	1.5	14	16	2.5	9	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MOTOROLA, INC.																								
MRF 966	1.0	6.0	37	2.2	13.2	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MRF 967	1.0	6.0	37	2.2	11.5	11.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEC CORPORATION/ CAL EASTERN LABS, INC.																								
NE46300	1.0	45	—	1.2	22.0	—	1.5	19.0	20.0	2.0	18.0	19.0	2.7	16.5	18.0	3.4	14.5	16.0	3.7	13.0	13.5	—	—	—
NE46385	1.0	45	—	1.2	22.0	—	1.7	17.0	18.0	2.3	16.0	17.0	3.0	15.0	17.0	3.8	13.0	15.0	4.1	9.0	11.0	—	—	—
NE46383	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE41137	—	—	—	1.3	20.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PLESSEY SEMICONDUCTORS, INC.																								
DUGAT 10/000	1	60	30	—	—	—	1.5	21	22	—	—	—	2.8	16	17	—	—	—	3.6	13	14	—	—	—
RAYTHEON CO.																								
RDX 832	1	50	30	—	—	—	—	—	—	—	—	—	—	—	—	4	10	12	—	—	—	—	—	—
TEXAS INSTRUMENTS																								
53000	2.5	2.5	55	—	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
53030	2.5	3.0	50	—	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

P_o dBm	f GHz	Max Ratings R_{TH} °C/W	T_J	V_{DS}	V_{GS}	V_{DS} nom volts	I_{DSS} nom mA	V_P nom volts	Package Type	Mfgr.'s Remarks	Price Quantity 1-100	1000
13	10	200	170	5	−6	3	60	−3	BMH 83	—	—	—
10	8	450	175	5	−6	3	50	−1	Stripline 70 mil.	—	—	—
10	8	200	175	5	−6	3	50	−1	Chip form	—	—	—
10	12	450	175	5	−6	3	50	−1	Stripline 70 mil.	—	—	—
10	12	200	175	5	−6	3	50	−1	Chip form	—	—	—
10	12	200	175	5	−6	3	50	−1	Chip form	—	—	—
10	12	450	175	5	−6	3	50	−1	Stripline 70 mil.	—	—	—
10	12	200	175	5	−6	3	50	−1.0	Chip form	—	—	—
8	18	250	175	4	−5	3	50	−1.0	Chip form	—	—	—
+15	8	271	+180	+5	−5	3	35	−2.5	Chip	R_{TH} is for chip alone	—	—
+15	8	—	+180	+5	−5	3	35	−2.5	.070 package	—	—	—
+15	8	217	+180	+5	−5	3	35	−2.5	Chip	—	—	—
+15	8	—	+180	+5	−5	3	35	−2.5	.070 package	—	—	—
+17	8	182	+180	+5	−5	3	45	−1.5	Chip	[RF data not applicable for	—	—
+17	8	—	+180	+5	−5	3	45	−1.5	.070 package	packaged FETs at above	—	—
+17	8	182	+180	+5	−5	3	45	−1.5	Chip	12 GHz]	—	—
+17	8	—	+180	+5	−5	3	45	−1.5	.070 package		—	—

P_o dBm	f GHz	Max Ratings R_{TH} °C/W	T_J	V_{DS}	V_{GS}	V_{DS} nom volts	I_{DSS} nom mA	V_P nom volts	Package Type	Mfgr.'s Remarks	Price Quantity 1-100	1000
16	12	150	300	8	−5	6	80	−2	15x17 mil chip	(1) AGC: 4 GHz, V_{GS_2} = O_v to −2V	115	100
13	12	250	300	8	−5	6	40	−2	11x15 mil chip	(2) (MAG) — max, stable gain: 10 $\log_{10} \lvert S_{21}/S_{12} \rvert$, dB	98	84
+10	8	150	175	10	—	4v	60	−3	—	Cascode configuration yields 16 dB gain at 13 GHz	—	—
—	—	—	—	—	—	—	—	—	P70-Hermetic	P70-3 terminal hermetic package with cascode bonding configuration	—	—
—	—	—	—	—	—	—	—	—	P70B-Hermetic	P70B-4 terminal hermetic package	—	—
+17	2	—	150	8	−6	3	30	−1.5	70 mil ceramic	—	Contact factory	—
+10	1.0	285	125	10	−8	5	50	−2.5	Plastic Macro-X	AGC: 1 GHz. Low cost.	3.55	—
+10	1.0	285	125	10	−8	5	50	−2.5	70 mil ceramic	AGC: 1 GHz. Hermetic	11.33	—
10.0	4.0	170	175	8.0	−8	4.0	60.0	−3.0	Chip	Space qualified	—	—
10.0	4.0	400	175	8.0	−8	4.0	60.0	−3.0	Ceramic, Hermetic	—	—	—
10.0	4.0	400	175	8.0	−8	4.0	60.0	−3.0	Ceramic, Hermetic	Cascoded configuration for high gain	—	—
—	—	500	125	10.0	−4.5	5.0	40.0	−3.0	—	Low-cost plastic package	—	—
—	—	—	—	—	—	—	—	—	P100 chip	—	—	—
15	10	130	175	10	−8	4	50	−3	Available on Carrier	Price is for packaged devices. Price for quantities above 100 to be negotiated.	$60.00	—
—	—	—	—	12V	4V	8	50	2.0	Plastic Cross Pack	—	—	<$1
—	—	—	—	12V	4V	8	70	2.0	Plastic Cross Pack	—	—	—

GaAs FET Matrix

Power GaAs FETs

FREQUENCY (GHz)

Part Number	2 Power-Out 1-dB Compression W	2 Max Gain dB	2 η	4 Power-Out 1-dB Compression W	4 Max Gain dB	4 η	6 Power-Out 1-dB Compression W	6 Max Gain dB	6 η	8 Power-Out 1-dB Compression W	8 Max Gain dB	8 η	10 Power-Out 1-dB Compression W	10 Max Gain dB	10 η
ALPHA INDUSTRIES INC.															
APX 5000	—	—	—	—	—	—	—	—	—	—	—	—	.1	7	—
APX 5050	—	—	—	—	—	—	—	—	—	—	—	—	.1	7	—
APX 6000	—	—	—	—	—	—	—	—	—	—	—	—	.25	7	—
APX 6050	—	—	—	—	—	—	—	—	—	—	—	—	.25	7	—
AMPEREX ELEC. CORP.															
CFX21	—	—	—	—	—	—	—	—	—	.08	10.0	—	.06	7.5	—
CFX30	—	—	—	—	—	—	—	—	—	.10	8	—	.10	7	—
CFX31	—	—	—	—	—	—	—	—	—	.25	8	—	.25	7	—
CFX32	—	—	—	—	—	—	—	—	—	.50	7	—	—	—	—
CFX33	—	—	—	—	—	—	—	—	—	1.0	6	—	—	—	—
FLM6472-3B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM7177-3B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM7785-3B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM3742-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM4450-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM5964-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM6472-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM7177-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM7785-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM3742-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM4450-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM5964-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM6472-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM7177-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM7785-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLX06MH-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLX12MH-12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLK06MH-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLK12MH-14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLS31MM	3.2	10	—	2.5	6.5	28	—	—	—	—	—	—	—	—	—
FLS50MM	—	—	—	4.0	5.5	32	—	—	—	—	—	—	—	—	—
FLC08ME	—	—	—	.63	9.0	35	1.26	7.5	35	—	—	—	—	—	—
FLC15ME	—	—		1.26	7.5	35	—	—	—	—	—	—	—	—	—
FLC30ME	—	—	—	2.5	6.5	35	—	—	—	—	—	—	—	—	—
FLC081WF	—	—	—	—	—	—	—	—	—	.56	6.5	27	—	—	—
FLC151WF	—	—	—	—	—	—	—	—	—	1.12	5.5	22	—	—	—
FLX03MB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLX06MB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLX12MB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLX03WG	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLX06WG	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLK03WG	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLK06WG	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
AVANTEK, INC.															
AT-8161 (AT-11600)	—	—	—	0.4	12	33	0.4	10.5	30	0.4	9	28	0.4	7.5	24
AT-8160 (AT-11611)	—	—	—	0.4	11	32	0.4	9.5	27	0.3	8	23	—	—	—
AT-11671	—	—	—	0.4	11	32	0.4	9.5	27	0.3	8	23	—	—	—
AT-8151 (AT-11500)	—	—	—	0.8	12	33	0.7	10	28	0.6	8	24	0.6	7	20
AT-8150 (AT-11511)	—	—	—	0.8	11	33	0.7	9	27	0.6	7	22	—	—	—
AT-11571	—	—	—	0.8	11	33	0.7	9	27	0.6	7	22	—	—	—
AT-8141 (AT-11400)	—	—	—	1.6	9	30	1.4	7	26	1.2	6	21	—	—	—
AT-8140 (AT-11411)	—	—	—	1.4	9	27	1.2	6.5	21	1.0	.5	15	—	—	—
IM-2935-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
IM-3742-3	—	—	—	3.2	12	32	—	—	—	—	—	—	—	—	—
IM-4450-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
IM-5764-3	—	—	—	—	—	—	3.2	10	31	—	—	—	—	—	—
IM-6171-3	—	—	—	—	—	—	3.2	10	31	—	—	—	—	—	—
IM-9178-3	—	—	—	—	—	—	—	—	—	3.2	9	30	—	—	—
IM-9984-3	—	—	—	—	—	—	—	—	—	3.2	9	30	—	—	—
IM-3742-6	—	—	—	6.3	9	27	—	—	—	—	—	—	—	—	—
IM-5464-6	—	—	—	—	—	—	6.3	8	25	—	—	—	—	—	—

12 Power-Out 1-dB Compression W	Max Gain dB	η	18 Power-Out 1-dB Compression W	Max Gain dB	η	P_o dBm	f GHz	Max Ratings R_{TH} °C/W	T_J	V_{DS}	V_{GS}	V_{DS} nom volts	I_{DSS} nom mA	V_P nom volts	Package Type	Price Quantity 1-100	1000
—	—	—	—	—	—	20	10	110	—	12	−8	10	80	−4	Chip	$32.00	—
—	—	—	—	—	—	20	10	110	—	12	−8	10	80	−4	100 mil flange pkg.	47.00	—
—	—	—	—	—	—	24	10	60	—	12	−8	10	160	−4	Chip	43.50	—
—	—	—	—	—	—	24	10	60	—	12	−8	10	160	−4	100 mil flange pkg.	58.50	—
—	—	—	—	—	—	18	11	200	175	8	−6	6	40	—	FO-92	78	—
—	—	—	—	—	—	24	10.7	100	175	12	−10	8	100	—	FO-85	138	—
—	—	—	—	—	—	27	8.5	60	175	12	−10	8	250	—	FO-85	152	—
—	—	—	—	—	—	30	8.5	30	175	12	−10	8	500	—	FO-85	216	—
—	—	—	—	—	—	20	10.7	100	175	12	−10	8	60	—	FO-85	124	—
—	—	—	—	—	—	36	7.2	7	175	15	−5	10	2200	−3.0	IM	—	—
—	—	—	—	—	—	36	7.7	7	175	15	−5	10	2200	−3.0	IM	—	—
—	—	—	—	—	—	36	8.5	7	175	15	−5	10	2200	−3.0	IM	—	—
—	—	—	—	—	—	37	4.2	5.7	175	15	−5	10	3200	−4.0	IM	—	—
—	—	—	—	—	—	37	5.0	5.7	175	15	−5	10	3200	−4.0	IM	—	—
—	—	—	—	—	—	37	6.4	5.7	175	15	−5	10	3200	−4.0	IM	—	—
—	—	—	—	—	—	37	7.2	5.7	175	15	−5	10	3200	−4.0	IM	—	—
—	—	—	—	—	—	37	7.7	5.7	175	15	−5	10	3200	−4.0	IM	—	—
—	—	—	—	—	—	37	8.5	5.7	175	15	−5	10	3200	−4.0	IM	—	—
—	—	—	—	—	—	38	4.2	4.0	175	15	−5	10	4400	−3.0	IM	—	—
—	—	—	—	—	—	38	5.0	4.0	175	15	−5	10	4400	−3.0	IM	—	—
—	—	—	—	—	—	38	6.4	4.0	175	15	−5	10	4400	−3.0	IM	—	—
—	—	—	—	—	—	38	7.2	4.0	175	15	−5	10	4400	−3.0	IM	—	—
—	—	—	—	—	—	38	7.7	4.0	175	15	−5	10	4400	−3.0	IM	—	—
—	—	—	—	—	—	38	8.5	4.0	175	15	−5	10	4400	−3.0	IM	—	—
—	—	—	—	—	—	29	12.5	30	175	15	−5	10	600	−4.0	MH	—	—
—	—	—	—	—	—	31.5	12.5	17	175	15	−5	10	1200	−4.0	MH	—	—
—	—	—	—	—	—	29	14.5	30	175	15	−5	10	600	−4.0	MH	—	—
—	—	—	—	—	—	31.5	14.5	17	175	15	−5	10	1200	−4.0	MH	—	—
—	—	—	—	—	—	34	4	13	175	15	−5	10	1400	−4.0	ME/MM	—	—
—	—	—	—	—	—	36	4	10	175	15	−5	10	1800	−4.0	ME/MM	—	—
—	—	—	—	—	—	28	4	50	175	15	−5	8.5	350	−3.5	ME	—	—
—	—	—	—	—	—	31.0	4	25	175	15	−5	8.5	700	−3.5	ME	—	—
—	—	—	—	—	—	34.0	4	13	175	15	−5	8.5	1400	−3.5	ME	—	—
—	—	—	—	—	—	28.5	8	45	175	15	−5	10	400	−4.0	WF	—	—
—	—	—	—	—	—	30.5	8	23	175	15	−5	10	800	−4.0	WF	—	—
.25	8	13	—	—	—	24	12	60	175	15	−5	10	300	−4.0	MB	—	—
.50	7	12	—	—	—	27	12	30	175	15	−5	10	600	−4.0	MB	—	—
1.12	5.5	12	—	—	—	30.5	12	17	175	15	−5	10	1200	−4.0	MB	—	—
.40	7.5	22	—	—	—	26	12	40	175	15	−5	10	300	−3.0	WG	—	—
.80	6.5	21	—	—	—	29	12	20	175	15	−5	10	600	−3.0	WG	—	—
—	—	—	.40	6.5	21	26	14.5	40	175	15	−5	10	300	−3.0	WG	—	—
—	—	—	.80	5.5	19	29	14.5	20	175	15	−5	10	600	−3.0	WG	—	—
0.4	6	19	—	—	—	+26	4	66	175	+14	−7	9	250	−3	—	—	—
—	—	—	—	—	—	+26	4	70	175	+14	−7	9	250	−3	—	—	—
—	—	—	—	—	—	+26	4	70	175	+14	−7	9	250	−3	—	—	—
0.5	6	17	—	—	—	+29	4	32	175	+14	−7	9	500	−3	—	—	—
—	—	—	—	—	—	+29	4	35	175	+14	−7	9	500	−3	—	—	—
—	—	—	—	—	—	+29	4	35	175	+14	−7	9	500	−3	—	—	—
—	—	—	—	—	—	+32	4	23	175	+14	−7	9	1000	−3	—	—	—
—	—	—	—	—	—	+32	4	27	175	+14	−7	9	1000	−3	—	—	—
—	—	—	—	—	—	+35	2.9-3.5	7.5	175	+14	−7	9	2400	−3	—	—	—
—	—	—	—	—	—	+35	3.7-4.2	7.5	175	+14	−7	9	2400	−3	—	—	—
—	—	—	—	—	—	+35	4.4-5.0	7.5	175	+14	−7	9	2400	−3	—	—	—
—	—	—	—	—	—	+35	5.9-6.4	7.5	175	+14	−7	9	2400	−3	—	—	—
—	—	—	—	—	—	+35	6.4-7.1	7.5	175	+14	−7	9	2400	−3	—	—	—
—	—	—	—	—	—	+35	7.1-7.8	7.5	175	+14	−7	9	2400	−3	—	—	—
—	—	—	—	—	—	+35	7.9-8.4	7.5	175	+14	−7	9	2400	−3	—	—	—
—	—	—	—	—	—	+38	3.7-4.2	4	175	+14	−7	9	4500	−3	—	—	—
—	—	—	—	—	—	+38	3.7-4.2	4	175	+14	−7	9	4500	−3	—	—	—

GaAs FET Matrix

Power GaAs FETs

FREQUENCY (GHz)

Part Number	2 Power-Out 1-dB Compression W	2 Max Gain dB	2 η	4 Power-Out 1-dB Compression W	4 Max Gain dB	4 η	6 Power-Out 1-dB Compression W	6 Max Gain dB	6 η	8 Power-Out 1-dB Compression W	8 Max Gain dB	8 η	10 Power-Out 1-dB Compression W	10 Max Gain dB	10 η
DEXCEL, INC.															
DXL-3501A	—	—	—	.20	12	—	—	—	—	.20	8	—	—	—	—
DXL-3501A-P70	—	—	—	.20	12	—	—	—	—	.20	8	—	—	—	—
DXL-3501A-P100F	—	—	—	.20	12	—	—	—	—	.20	8	—	—	—	—
DXL-3503A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-3503A-P70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-3504A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-3504A-P70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-3504A-P100F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-3605A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-3605A-P100F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-3608A	—	—	—	—	—	—	—	—	—	.25	8	—	—	—	
DXL-3608A-P100F	—	—	—	—	—	—	—	—	—	.25	8	—	—	—	
DXL-3610A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-3610A-P100F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DXL-3615A	—	—	—	.40	11	—	—	—	—	.32	8	—	—	—	—
DXL-3615A-P100F	—	—	—	.40	11	—	—	—	—	—	—	—	—	—	—
DXL-3630A	—	—	—	.62	11	—	—	—	—	.62	8	—	—	—	—
DXL-3630A-P100F	—	—	—	.62	11	—	—	—	—	.62	8	—	—	—	—
DXL-3640A	—	—	—	1.3	9	—	1.1	7	—	1.0	5	—	—	—	—
DXL-3640A-P100F	—	—	—	1.3	9	—	1.1	7	—	1.0	5	—	—	—	—
DXL-3680-4	—	—	—	2.2	9.5	—	—	—	—	—	—	—	—	—	—
DXL-3680-6	—	—	—	—	—	—	2.0	6.5	—	—	—	—	—	—	—
DXL-36120-4	—	—	—	3.5	9	—	—	—	—	—	—	—	—	—	—
DXL-36120-6	—	—	—	—	—	—	3.0	6	—	—	—	—	—	—	—
DXL-36160-4	—	—	—	4.0	9	—	—	—	—	—	—	—	—	—	—
DXL-36160-6	—	—	—	—	—	—	3.5	6	—	—	—	—	—	—	—
FUJITSU MICROELECT. INC.															
FSX100FA	—	—	—	—	—	—	—	—	—	.025	12	—	—	—	—
FSX51WF	—	—	—	.06	14	—	—	—	—	.06	10	—	—	—	—
FSX52WF	—	—	—	.20	14	—	—	—	—	.20	10	—	—	—	—
FSX53WF	—	—	—	.40	12.5	—	—	—	—	.40	8.5	—	—	—	—
FLSO9MM	.80	13	—	.63	9	32	—	—	—	—	—	—	—	—	—
FLS16MM	1.4	11	—	1.26	7.5	29	—	—	—	—	—	—	—	—	—
FLC301MG-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLC301MG-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLC301MG-8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM3742-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM4450-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM5964-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FLM5964-3B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M/A-COM, INC.															
MA-4F101	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MA-4F102	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MA-4F103	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MA-4F100-500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MA-4F1001	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MA-4F010	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MA-4F020	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MA-4F001-500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MICROWAVE SEMICOND. CORP.															
MSC 88000	—	—	—	0.06	12	40	0.06	10.5	30	0.05	8	25	0.05	8	22
MSC 88001	—	—	—	0.28	10	40	0.27	8	30	0.26	7.2	25	0.24	7	22
MSC 88002	—	—	—	0.54	10	40	0.53	8	30	0.52	6.7	25	.5	6.5	22
MSC 88004	—	—	—	1.0	9	40	0.97	8	30	0.94	6.5	25	.9	6.0	22
MSC 88008	—	—	—	2.0	10	40	1.8	8	30	1.6	7.0	25	1.4	6.5	22
MSC 88012	—	—	—	4.0	8	40	3.5	7.5	30	—	—	—	—	—	—
MSC 88100	—	—	—	—	—	—	—	—	—	0.07	9.5	30	0.07	8	26
MSC 88101	—	—	—	—	—	—	—	—	—	0.25	8.5	30	0.25	7	26

12 Power-Out 1-dB Compression W	Max Gain dB	η	18 Power-Out 1-dB Compression W	Max Gain dB	η	P_o dBm	f GHz	Max Ratings R_{TH} °C/W	T_J	V_{DS}	V_{GS}	V_{DS} nom volts	I_{DSS} nom mA	V_P nom volts	Package Type	Price Quantity 1-100	1000
.16	5	—	—	—	—	+22	12	100	175	12	—	8	130	−4	Chip form	—	—
.16	5	—	.030	5	—	+23	8	200	175	12	—	8	130	−4	P70-Hermetic, 70 mil	—	—
.050	7	—	—	—	—	+22	12	105	175	12	—	8	150	−4	P100-Hermetic, 100 mil	—	—
—	—	—	.090	5	—	+15	18	180	175	12	—	6	90	−4	Chip form	—	—
.10	7	—	—	—	—	+15	12	300	175	12	—	—	90	−5	P70-Hermetic, 70 mil	—	—
.10	7	—	—	—	—	+19	18	180	175	12	—	6	110	−5	Chip form	—	—
.10	7	—	—	—	—	+20	12	300	175	12	—	6	110	−5	P70-Hermetic, 70 mil	—	—
.13	7	—	.125	4.5	—	+20	16	185	175	12	—	6	110	−5	P100-Hermetic, 100 mil	—	—
.13	7	—	—	—	—	+21	18	100	175	12	—	6	140	−5	Chip form	—	—
.20	7	—	—	—	—	+22	12	105	175	12	—	6	150	−5	P100-Hermetic, 100 mil	—	—
.20	7	—	—	—	—	+23	12	70	175	20	—	8	200	−4	Chip form	—	—
.20	7	—	—	—	—	+24	8	75	175	20	—	8	220	−4	P100-Hermetic, 100 mil	—	—
.20	7	—	.200	4	—	+23	18	50	175	12	—	6	280	−5	Chip form	—	—
.40	5	—	—	—	—	+23	12	55	175	12	—	6	300	−5	P100-Hermetic, 100 mil	—	—
—	—	—	—	—	—	+25	8	40	175	20	—	8	450	−5	Chip form	—	—
—	—	—	—	—	—	+27	4	45	175	20	—	8	500	−5	P100-Hermetic, 100 mil	—	—
.40	4	—	—	—	—	+26	12	35	175	20	—	9	400	−4	Chip form	—	—
—	—	—	—	—	—	+28	8	40	175	20	—	9	450	−4	P100-Hermetic, 100 mil	—	—
—	—	—	—	—	—	+32	4	20	175	20	—	9	800	−4	Chip form	—	—
—	—	—	—	—	—	+31	6	20	175	20	—	9	900	−4	P100-Hermetic, 100 mil	—	—
—	—	—	—	—	—	+33.5	4	10	175	20	—	9	2000	−4	P300F-Hermetic, 300 mil	—	—
—	—	—	—	—	—	+33	6.4	10	175	20	—	9	2000	−4	P300F-Hermetic, 300 mil	—	—
—	—	—	—	—	—	+35.6	4.0	6.5	175	20	—	9	2000	−4	P300F-Hermetic, 300 mil	—	—
—	—	—	—	—	—	+35	6.4	6.5	175	20	—	9	3000	−4	P300F-Hermetic, 300 mil	—	—
—	—	—	—	—	—	+36	4.0	6	175	20	—	9	3600	−4	P500F-Hermetic, 500 mil	—	—
—	—	—	—	—	—	+35.5	6.4	6	175	20	—	9	3600	−4	P500F-Hermetic, 500 mil	—	—
.016	9.0	—	—	—	—	12	12	250	+175	12	−5	8	60	−2.5	FA	—	—
.05	6	—	—	—	—	18	8	150	175	12	−5	8	60	−2.5	WF/W	—	—
.13	6	—	—	—	—	23	8	100	175	12	−5	8	150	−4.0	WF/W	—	—
.25	5.0	—	—	—	—	25	8	50	175	12	−5	8	300	−4.0	WF/W	—	—
—	—	—	—	—	—	28	4	50	175	15	−5	10	350	−4.0	ME/MM	—	—
—	—	—	—	—	—	31	4	25	175	15	−5	10	700	−4.0	ME/MM	—	—
—	—	—	—	—	—	33	4.2	10	175	15	−5	10	1600	−4.0	MG	—	—
—	—	—	—	—	—	33	7.2	10	175	15	−5	10	1600	−4.0	MG	—	—
—	—	—	—	—	—	33	8.5	10	175	15	−5	10	1600	−4.0	MG	—	—
—	—	—	—	—	—	35	4.2	8	175	15	−5	10	1800	−4.0	IM	—	—
—	—	—	—	—	—	35	5.0	8	175	15	−5	10	1800	−4.0	IM	—	—
—	—	—	—	—	—	35	6.4	8	175	15	−5	10	1800	−4.0	IM	—	—
—	—	—	—	—	—	36	6.4	7	175	15	−5	10	2200	−3.0	IM	—	—
—	—	—	—	—	—	—	8	—	175	12	10	—	330	6.0	Hermetic, metal-ceramic	—	—
—	—	—	—	—	—	—	10	—	175	12	10	—	330	6.0	Hermetic, metal-ceramic	—	—
—	—	—	—	—	—	—	8	—	175	12	10	—	660	6.0	Hermetic, metal-ceramic	—	—
—	—	—	—	—	—	—	10	—	175	12	10	—	330	6.0	Chip	—	—
—	—	—	—	—	—	—	10	—	175	10	8	8	80	5.5	Hermetic, metal-ceramic	—	—
—	—	—	—	—	—	—	10	—	175	10	8	8	80	5.5	Hermetic, metal-ceramic	—	—
—	—	—	—	—	—	—	10	—	175	10	8	8	80	5.5	Hermetic, metal-ceramic	—	—
—	—	—	—	—	—	—	12	—	175	10	8	8	80	5.5	Chip	—	—
.04	6.5	20	—	—	—	20	6	60	175	10	−8	8	90	5	Hermetic	—	—
.22	6.0	20	—	—	—	24	6	50	175	10	−8	8	150	6	Hermetic	—	—
.5	5.5	20	—	—	—	27	6	35	175	10	−8	9	300	6	Hermetic	—	—
.88	5.0	20	—	—	—	30	6	20	175	10	−8	9	700	6	Hermetic	—	—
—	—	—	—	—	—	33	6	10	175	10	−8	9	1400	4	Hermetic	—	—
0.07	7.0	22	—	—	—	—	—	—	—	—	—	—	—	—	No data available for this model number		
0.25	6.5	22	—	—	—	18	12	60	175	10	−8	8	90	5	Chip carrier	—	—
0.5	6.0	22	—	—	—	24	12	50	175	10	−8	8	150	6	Chip carrier	—	—

GaAs FET Matrix

Power GaAs FETs

FREQUENCY (GHz)

Part Number	2 Power-Out 1-dB Compression W	2 Max Gain dB	2 η	4 Power-Out 1-dB Compression W	4 Max Gain dB	4 η	6 Power-Out 1-dB Compression W	6 Max Gain dB	6 η	8 Power-Out 1-dB Compression W	8 Max Gain dB	8 η	10 1-dB Compression W	10 Max Gain dB	10 η
MSC 88102	—	—	—	—	—	—	—	—	—	0.5	8	30	0.5	6.5	26
MSC 88104	—	—	—	—	—	—	—	—	—	1.0	7	30	1.0	6.5	26
MSC 88199	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MSC 88200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MSC 88201	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MSC 88202	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MSC 88204	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MSC 88300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MSC 88302	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MPF-5964-6	—	—	—	—	—	—	5.6	7	25	—	—	—	—	—	—
MPF-6471-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MITSUBISHI ELECT. AMERICA, INC.															
MGF-1801	—	—	—	—	—	—	—	—	—	0.2	9	25	—	—	—
MGF-1802	—	—	—	—	—	—	—	—	—	0.2	9	25	—	—	—
MGF-2116	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF-2117	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF-2124	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF-2124F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF-2124G	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF-2148	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF2148F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF-2148G	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF-2172	—	—	—	—	—	—	—	—	—	2.5	5.5	20	—	—	—
MGF-2205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MGF-2206	—	—	—	—	—	—	3.5	6	25	—	—	—	—	—	—
MGFC34M	—	—	—	—	—	—	5.5	4.5	20	—	—	—	—	—	—
MGFX34M	—	—	—	—	—	—	2.3	4.5	25	—	—	—	—	—	—
NEC CORPORATION/ CAL EASTERN LABS, INC.															
	dBm			dBm			dBm			dBm			dBm		
NE694 Series	20	15	40	20	13	40	20	11	35	19	9.8	30	19	9.5	30
NE69400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE69489	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE695 Series	22	14	40	22	11	40	22	9	35	22	6	30	—	—	—
NE69500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE69589	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE8000 Series	23	7	34	23	6	34	23	5	30	—	—	—	—	—	—
NE800000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE800075	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE8001 Series	26	7	34	26	6	34	26	5	30	—	—	—	—	—	—
NE800100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE800196	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE800199	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE8002 Series	29	7	34	29	6	34	29	5	30	—	—	—	—	—	—
NE800200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE800296	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE800299	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE8004 Series	32	7	34	32	6	34	32	5	30	—	—	—	—	—	—
NE800400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE800495	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE8008 Series	35.5	7	34	35.5	6	34	35	5	30	—	—	—	—	—	—
NE800898	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE9000 Series	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE900000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE900075	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE9001 Series	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE900100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE900175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE9002 Series	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE900200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE900275	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE9004 Series	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE900400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE900474	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE9008 Series	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

12 Power-Out 1-dB Compression W	Max Gain dB	η	18 Power-Out 1-dB Compression W	Max Gain dB	η	P_o dBm	f GHz	Max Ratings R_{TH} °C/W	T_J	V_{DS}	V_{GS}	V_{DS} nom volts	I_{DSS} nom mA	V_P nom volts	Package Type	Price Quantity 1-100	1000
1.0	5.5	22	—	—	—	27	12	35	175	10	−8	9	300	6	Chip carrier	—	—
—	—	—	—	—	—	30	12	20	175	10	−8	9	700	6	Chip carrier	—	—
—	—	—	—	—	—	16	15	40	175	10	−8	8	70	6	Chip carrier	—	—
0.04	7.5	25	0.03	5.5	20	20	15	35	175	10	−8	8	120	6	Chip carrier	—	—
0.13	7.0	25	0.10	5.0	20	24	15	29	175	10	−8	8	160	6	Chip carrier	—	—
0.28	5.5	25	0.20	4.0	20	26.5	15	23	175	10	−8	9	325	6	Chip carrier	—	—
0.48	5.5	25	0.40	4.0	20	29.5	15	15	175	10	−8	9	675	6	Chip carrier	—	—
0.95	5.5	25	0.80	3.5	20	20	20	25	175	10	−8	8	90	4	Matched carrier	—	—
—	—	—	—	—	—	27	20	15	175	10	−8	8	300	4	Matched carrier	—	—
—	—	—	—	—	—	37.6	5.9-6.4	4	175	10	−8	9	4500	5	Hermetic	—	—
—	—	—	—	—	—	35	6.4-7.1	6.5	175	10	−8	9	3000	5	Hermetic	—	—
0.2	7	20	—	—	—	0.2	12	—	150	8	−6	6	200	−3	100 mil. metal/ceramic	—	—
0.2	7	20	—	—	—	0.2	12	125	150	8	−6	6	200	−3	100 mil. stripline flange	—	—
0.4	7	20	—	—	—	0.4	12	42	150	11	−9	7	430	−3.5	.130x.420 stripline flange	—	—
0.4	7	20	—	—	—	0.4	12	50	150	11	−9	7	430	−3.5	100 mil. stripline flange	—	—
1.0	6	20	—	—	—	1.0	12	30	150	11	−9	8	650	−3.5	.140x.420 stripline flange	—	—
1.0	6.3	20	—	—	—	1.0	12	32	150	11	−9	8	650	−3.5	.100x.270 chip flange	—	—
1.0	6.3	20	—	—	—	1.0	12	32	150	11	−9	8	650	−3.5	.070x.236 chip flange	—	—
1.6	5	16	—	—	—	1.6	12	15	150	11	−9	8	1300	−3.5	.140x.420 stripline flange	—	—
1.6	5.2	16	—	—	—	1.6	12	16	150	11	−9	8	1300	−3.5	.100x.270 chip flange	—	—
1.6	5.2	16	—	—	—	1.6	12	16	150	11	−9	8	1300	−3.5	.070x.236 chip flange	—	—
—	—	—	—	—	—	2.5	8	10	150	11	−9	9	1950	−3.5	.140x.420 stripline	—	—
—	—	—	—	—	—	3.5	6	10	150	11	−9	8	1300	−4	.173 mil. stripline	—	—
—	—	—	—	—	—	5.0	6	6	150	11	−9	8	1450	−5	.173 mil. stripline flange	—	—
—	—	—	—	—	—	2.3	6	10	150	11	−9	9	2000	−3.5	.500x.827 stripline flange	—	—
—	—	—	—	—	—	2.3	10	10	150	11	−9	9	1950	−3.5	.250x.430 stripline flange	—	—
dBm																	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	20	2-10	115	175	10	−10	7	30	−4	Chip	—	—
—	—	—	—	—	—	20	10	188	175	10	−10	7	30	−4	0.08"	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	23	2-10	95	175	10	−10	7	75	−4	Chip	—	—
—	—	—	—	—	—	23	10	115	175	10	−10	7	75	−4	0.08"	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	23	2-10	—	175	20	−12	9	60	−5.5	Chip	—	—
—	—	—	—	—	—	23	8.4	—	175	20	−12	9	60	−5.5	Hermetic flange	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	26	2-10	—	175	20	−12	9	125	−5.5	Chip	—	—
—	—	—	—	—	—	26	7.9	—	175	20	−12	9	125	−5.5	Hermetic flange	—	—
—	—	—	—	—	—	26	8.4	—	175	20	−12	9	125	−5.5	Hermetic flange	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	29	2-10	—	175	20	−12	9	275	−5.5	Chip	—	—
—	—	—	—	—	—	29	7.9	—	175	20	−12	9	275	−5.5	Hermetic flange	—	—
—	—	—	—	—	—	29	8.4	—	175	20	−12	9	275	−5.5	Hermetic flange	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	32	2-10	17	175	20	−12	9	600	−5.5	Chip	—	—
—	—	—	—	—	—	32	8.5	17	175	20	−12	9	600	−5.5	Hermetic flange	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	35	8.5	8	175	20	−12	9	1200	−5.5	Hermetic flange	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	20	15.2	—	175	20	−12	8	40	−4	Chip	—	—
—	—	—	—	—	—	20	15.2	—	175	20	−12	8	40	−4	Hermetic flange	—	—
20	8	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	23	14.5	100	175	20	−12	8	80	−4	Chip	—	—
—	—	—	—	—	—	23	14.5	100	175	20	−12	8	80	−4	Hermetic flange	—	—
23	8	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	25	14.5	60	175	20	−12	8	150	−4	Chip	—	—
—	—	—	—	—	—	25	14.5	60	175	20	−12	8	150	−4	Hermetic flange	—	—
25	7	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	31	15.2	30	175	20	−12	8	340	−4	Chip	—	—
—	—	—	—	—	—	31	15.2	30	175	20	−12	8	340	−4	Hermetic flange	—	—
31	6	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

GaAs FET Matrix

Power GaAs FETs

FREQUENCY (GHz)

Part Number	2 Power-Out 1-dB Compression W	Max Gain dB	η	4 Power-Out 1-dB Compression W	Max Gain dB	η	6 Power-Out 1-dB Compression W	Max Gain dB	η	8 Power-Out 1-dB Compression W	Max Gain dB	η	10 Power-Out 1-dB Compression W	Max Gain dB	η
	dBm			dBm			dBm			dBm					
NE900873	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NE3716 Series	—	—	—	37.8	5.5	30	37.8	5.5	30	—	—	—	—	—	—
NE371698	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ3742-3	—	—	—	35	11	35	—	—	—	—	—	—	—	—	—
NEZ4450-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ5055-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ5459-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ5964-3	—	—	—	—	—	—	35	9	35	—	—	—	—	—	—
NEZ6472-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ7178-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ7984-3	—	—	—	—	—	—	—	—	—	35	7	30	—	—	—
NEZ3742-6	—	—	—	37.8	10	33	—	—	—	—	—	—	—	—	—
NEZ4450-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ5055-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ5459-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ5964-6	—	—	—	—	—	—	37.8	8	33	—	—	—	—	—	—
NEZ6472-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NEZ7178-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RAYTHEON CO.															
RPX 2322	—	—	—	.4	12	—	.3	11	—	.25	9	—	.16	8	—
RPX 4328	—	—	—	—	—	—	—	—	—	—	—	—	.5	8	—
RPX 4331	—	—	—	—	—	—	—	—	—	—	—	—	1.0	7	—
RPX 4333	—	—	—	—	—	—	—	—	—	—	—	—	1.5	6	—
RPX 4334	—	—	—	—	—	—	—	—	—	—	—	—	2.0	6	—
RPX 6035	—	—	—	—	—	—	—	—	—	—	—	—	3.0	6	—
RPX 6036	—	—	—	—	—	—	—	—	—	—	—	—	4.0	5	—
RPK 9027	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RPK 9030	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RIM 3742-3	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—
RIM 5964-3	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—
RIM 6471-3	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—
RIM 7178-3	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—
THOMSON-CSF															
TC 3200	—	—	—	0.05	22.3	—	0.05	21	—	—	—	—	—	—	—
TC 3201	—	—	—	0.1	21.4	—	0.1	20	—	—	—	—	—	—	—
TC 4200	—	—	—	0.2	18	—	0.2	16.4	—	—	—	—	—	—	—
TC 5200	—	—	—	0.5	21.9	—	0.5	20	—	—	—	—	—	—	—
TC 3400	—	—	—	—	—	—	—	—	—	—	—	—	0.05	22	—
TC 3401	—	—	—	—	—	—	—	—	—	—	—	—	0.1	21	—
TC 5501	—	—	—	—	—	—	—	—	—	1	20	—	—	—	—
TC 9301	—	—	—	—	—	—	—	—	—	0.05	—	—	—	—	—
TC 9302	—	—	—	—	—	—	—	—	—	0.1	—	—	—	—	—
TC 9303	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TC 9311	—	—	—	—	—	—	—	—	—	—	—	—	0.05	—	—
TC 9312	—	—	—	—	—	—	—	—	—	—	—	—	0.1	—	—
TC 9402	—	—	—	—	—	—	—	—	—	—	—	—	0.05	—	—
TC 9403	—	—	—	—	—	—	—	—	—	—	—	—	0.1	—	—
TC 9501	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TC 9502	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOSHIBA CORP.															
S8812	—	—	—	—	—	—	—	—	—	0.05	10	7	—	—	—
S8803	—	—	—	—	—	—	—	—	—	0.2	7	20	—	—	—
S2740	—	—	—	—	—	—	—	—	—	0.5	6	17	—	—	—
S2741	—	—	—	—	—	—	—	—	—	1	5	12	—	—	—
S8820	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S8821	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S8822	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S8823	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S8825	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S8826	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S8827	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S8828	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VARIAN ASSOCIATES															
VSF9342	—	—	—	—	—	—	.158	15	63	.148	12.5	51	.132	10	—
VSF9343	—	—	—	—	—	—	.158	15	63	.148	12.5	51	.132	10	—

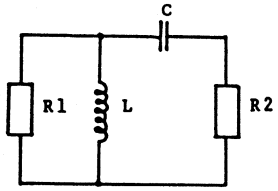
12 Power-Out 1-dB Compression W	Max Gain dB	η	18 Power-Out 1-dB Compression W	Max Gain dB	η	P_o dBm	f GHz	Max Ratings R_{TH} °C/W	T_J	V_{DS}	V_{GS}	V_{DS} nom volts	I_{DSS} nom mA	V_P nom volts	Package Type	Price Quantity 1-100	1000
dBm																	
—	—	—	—	—	—	34	15.2	—	175	20	−12	8	600	−4	Hermetic flange	—	—
34	6	25	—	—	—	—	—	—	—	—	—		—	—	—	—	—
—	—	—	—	—	—	37.8	3.5-8.5	45	175	20	12	9	2400	−5.5	Hermetic flange	—	—
—	—	—	—	—	—	35	4.2	8.0	175	20	−14	9	1200	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	35	5.0	8.0	175	20	−14	9	1200	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	35	5.5	8.0	175	20	−14	9	1200	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	35	5.9	8.0	175	20	−14	9	1200	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	35	6.4	8.0	175	20	−14	9	1200	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	35	7.2	8.0	175	20	−14	9	1200	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	35	7.8	8.0	175	20	−14	9	1200	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	35	8.4	8.0	175	20	−14	9	1200	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	37.8	4.2	4.5	175	20	−14	9	1800	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	37.8	5.0	4.5	175	20	−14	9	1800	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	37.8	5.5	4.5	175	20	−14	9	1800	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	37.8	5.9	4.5	175	20	−14	9	1800	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	37.8	6.4	4.5	175	20	−14	9	1800	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	37.8	7.2	4.5	175	20	−14	9	1800	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	37.8	7.8	4.5	175	20	−14	9	1800	−3.5	Hermetic Flange	—	—
—	—	—	—	—	—	22	10	130	175	15	−10	10	140	−4	Various	$ 30	—
—	—	—	—	—	—	27	10	40	175	15	−10	10	250	−4	Various	$100	—
—	—	—	—	—	—	30	10	20	175	15	−10	10	500	−4	Various	$120	—
—	—	—	—	—	—	32	10	15	175	15	−10	10	750	−4	Various	$160	—
—	—	—	—	—	—	33	10	10	175	15	−10	10	1000	−4	Various	$200	—
—	—	—	—	—	—	35	10	7.5	175	15	−10	10	1800	−4	Various	$320	—
—	—	—	—	—	—	36	10	5	175	15	−10	10	2400	−4	Various	$400	—
—	—	—	0.5	6	—	27	18	60	175	12	−10	9	250	−4	Only available on	$200	—
—	—	—	1.0	5	—	30	18	30	175	12	−10	9	500	−4	carriers or as dice	$400	—
—	—	—	—	—	—	—	—	—	—	—	—	10	2400	−3	0.5" stripline	—	—
—	—	—	—	—	—	—	—	—	—	—	—	10	2400	−3	0.5" stripline	—	—
—	—	—	—	—	—	—	—	—	—	—	—	10	2400	−3	0.5" stripline	—	—
—	—	—	—	—	—	—	—	—	—	—	—	10	2400	−3	0.5" stripline	—	—
—	—	—	—	—	—	17	6	140	170	9	8	7	60	4	BMH 77 P	—	—
—	—	—	—	—	—	20	6	75	170	9	8	7	120	4	BMH 77 P	—	—
—	—	—	—	—	—	23	6	45	170	9	8	8	250	4	BMH 77 P	—	—
—	—	—	—	—	—	27	6	25	170	9	8	8	500	4	BMH 77 P	—	—
—	—	—	—	—	—	17	10	140	170	9	8	7	50	4	BMH 60-BMH 77 P	—	—
—	—	—	—	—	—	20	10	75	170	9	8	7	100	4	BMH 60-BMH 77 P	—	—
0.9	15.4	—	—	—	—	30	11	15	170	10	8	8	1000	4	BMH 60-BMH 77 P	—	—
—	—	—	—	—	—	17	8.5/9.6	140	170	11	—	10	40	—	BMH 60	—	—
—	—	—	—	—	—	20	8.5/9.6	75	170	11	—	10	80	—	BMH 60	—	—
—	—	—	—	—	—	17	9/10.2	140	170	11	—	10	40	—	BMH 60	—	—
—	—	—	—	—	—	20	9/10.2	75	170	11	—	10	80	—	BMH 60	—	—
—	—	—	—	—	—	17	10.2/11.7	140	170	11	—	10	40	—	BMH 60	—	—
—	—	—	—	—	—	20	10.2/11.7	75	170	11	—	10	80	—	BMH 60	—	—
—	—	—	—	—	—	17	11.7/12.5	140	170	11	—	10	40	—	BMH 60	—	—
0.05	—	—	—	—	—	20	11.7/12.5	75	170	11	—	10	80	—	BMH 60	—	—
0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	BMH 60	—	—
—	—	—	—	—	—	17	8	100	175	15	−5	10	75	−4	Stripline	—	—
—	—	—	—	—	—	23	8	60	175	15	−5	10	150	−4	Stripline	—	—
—	—	—	—	—	—	27.5	8	30	175	15	−5	10	450	−4	Stripline	—	—
—	—	—	—	—	—	30	8	18	175	15	−5	10	1200	−4	Stripline	—	—
—	—	—	—	—	—	35.5	5.1	7.5	175	15	−5	10	3000	−3.5	Stripline 500 mil	—	—
—	—	—	—	—	—	35.5	6.4	7.5	175	15	−5	10	3000	−3.5	Stripline 500 mil	—	—
—	—	—	—	—	—	35.5	7.2	7.5	175	15	−5	10	3000	−3.5	Stripline 500 mil	—	—
—	—	—	—	—	—	35.5	7.9	7.5	175	15	−5	10	3000	−3.5	Stripline 500 mil	—	—
—	—	—	—	—	—	38	5.1	4	175	15	−5	10	5600	−3.5	Stripline 500 mil	—	—
—	—	—	—	—	—	38	6.4	4	175	15	−5	10	5600	−3.5	Stripline 500 mil	—	—
—	—	—	—	—	—	38	7.2	4	175	15	−5	10	5600	−3.5	Stripline 500 mil	—	—
—	—	—	—	—	—	38	7.9	4	175	15	−5	10	5600	−3.5	Stripline 500 mil	—	—
.120	9	33	.100	5	25	+20	6-18	182	180	7	−6	3	6	5	—	—	—
.120	9	33	.100	5	25	+20	6-18	182	180	7	−6	3	6	3	—	—	—

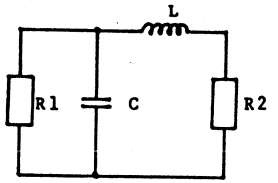
MICROCOMPUTER NEWS

HP-41 program for L - matching network

by Ulf Hülsenbusch DK2RV

E. This program caculates the values for a matching L-network in high-pass or low-pass configuration.
Input parameters : f in Hz- R1,R2 in Ohm- R1>R2.
Output parameters: C in Farads- L in Henrys- b in Hz.
The bandwidth is determinated by the ration to be matched and can not be selected independently! For a matching ratio greater than 4, the slope of the attenuation approches 12 dB/octave.





$$L = R1/(2\pi f\sqrt{R1/R2-1})$$

$$C = 1/(2\pi f R2\sqrt{R1/R2-1})$$

$$b = f/\sqrt{R1/R2-1}$$

$$L = R2\cdot\sqrt{R1/R2}/(2\pi f)$$

$$C = \sqrt{R1/R2}/(2\pi f)$$

```
                    XEQ "LNET"
FREQUENCY=?
          1.296+09    RUN
R1>R2=?
                75    RUN
R2=?
                50    RUN
LP=0 HP=1?
                 0    RUN
LOWPASS
L= 4.34E-9
                      RUN
C= 1.16E-12
                      RUN
BW= 1.83E9
                      RUN
FREQUENCY=?
        432+06        RUN
R1>R2=?
               240    RUN
R2=?
                50    RUN
LP=0 HP=1?
                 1    RUN
HIGHPASS
L= 45.4E-9
                      RUN
C= 3.78E-12
                      RUN
BW= 222.E6
```

D. Dieses Programm berechnet L- Netzwerkanpassungen für Hoch- und Tiefpassanwendungen. Die Ein- und Ausgabeparameter können dem englischen Text entnommen werden. Die Bandbreite wird durch das Anpassungsverhältnis bestimmt. Für ein Anpassungsverhältnis von größer 4 beträgt die Flankensteilheit annähernd 12 dB/Octave.
Reference: Appreciating the L matching network by Ernie Franke, WA2EWT, HAM RADIO Sept. 1980.

```
01♦LBL "LNET"
02♦LBL 03
03 ENG 2
04 "FREQUENCY=?"
05 PROMPT
06 2
07 *
08 PI
09 *
10 STO 00
11 "R1>R2=?"
12 PROMPT
13 STO 01
14 ENTER↑
15 "R2=?"
16 PROMPT
17 STO 02
18 /
19 1
20 -
21 SQRT
22 STO 03
23 "LP=0 HP=1?"
24 PROMPT
25 GTO IND X
26♦LBL 00
27 "LOWPASS"
28 AVIEW
29 RCL 03
30 ENTER↑
31 RCL 02
32 *
33 RCL 00
34 /
35 "L= "
36 ARCL X
37 AVIEW
38 STOP
39 RCL 02
40 /
41 RCL 01
42 /
43 "C= "
44 ARCL X
45 AVIEW
46 STOP
47 XEQ 02
48 GTO "LNET"
49♦LBL 01
50 "HIGHPASS"
51 AVIEW
52 RCL 03
53 RCL 00
54 *
55 1/X
56 ENTER↑
57 ENTER↑
58 RCL 01
59 *
60 "L= "
61 ARCL X
62 AVIEW
63 STOP
64 X<>Y
65 RCL 02
66 /
67 "C= "
68 ARCL X
69 AVIEW
70 STOP
71♦LBL 02
72 RCL 00
73 RCL 03
74 /
75 2
76 /
77 PI
78 /
79 "BW= "
80 ARCL X
81 AVIEW
82 STOP
83 GTO 03
84 .END.
```

TROPO NEWS

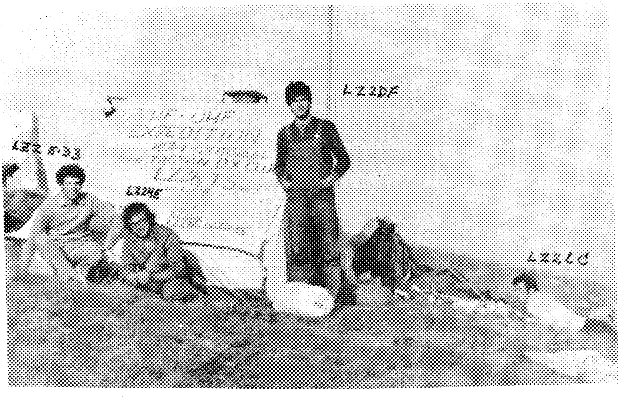
2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m

DL6LAU (FO42f) (ex DH1LAC) wkd on Feb. 13th SM6OUH GR, SM6NOC GS, LA5YJ FT, SM4KVM HT, SM5HL IS, SM4CLU GT, SM6MRZ GS, OH1DP LU, SM0HAX JT, SM5DIC IT and OH2MQ MU. tks fer info Carsten.

IW2BNA (EF36b) wkd in 1983 on Jan. 22nd GW4GSS YN75j, GW4HBZ/p YN75f and GW4RWR/p YN75f. On May 15th DF8KW DL76j. On May 16th DJ9UX DL66e. On June 4th EA3DXR BB07g and F6KKH/p AC20c. On June 5th YU4BYZ/4 IE59f. On June 7th F1GKW/p BK44c, TO2YT BK44c, F2SD BK42d, F6BBO BI13h, F6CER BI12f, F6GKQ BI23e, F6GIL AI67d, F1KLQ AI67d and ON1NA BK14d. On June 24th F1BUS AD29j. On June 25th F1BPS AE10d. On July 9th DL2KAL/a DK23g, DG5KBD DK22h and DF8JD DL66b. On July 7th EA6IF CA71a, EA6RCM BZ37j and F6CTW BI12f. On July 25th EA6IF CA71a. On July 28th I2CVC HB18b. On Aug. 6th I2VRN/IB0 GA05c. On Sep. 18th DK2GR FJ64c. On Sep. 23rd G4DHF ZM19f, F1ADD BJ80j, G6ECM AL56b and F1EXP BK16d. On Sep. 25th G8DDY ZK35h, G4SMX AL67e, G6ECM AL56b, G4MJC AK12f, F1DDA/p AJ60j and G6OVL XK57h. On Sep. 26th F1FHI ZH63d and F6GNR ZH63g. On Oct. 8th IC8CQF HA32g. tks fer info Walter.

LZ2DF, Mike reports about 2 DX-peditions to LD66j he made with his club LZ2KTS. He writes:...For our first expedition to LD, 2016m a.s.l., we were 5 members: LZ2DF, LZ2HE, LZ2LC, LZ2KZA and LZ2-E-33. We made 270 QSO's - 240 on 2m with 7countries (YO, YU, LZ, HG, OK, UO5, OE3) and 30 QSO's on 70cm with 4 countries (LZ 25, YO 1, YU 1, HG 3). This was during the Alp/Adria-Pobeda-38 VHF-UHF Contest. For our second expedition to LD on Sept. 3rd-4th during VHF 1st Region Contest we were 8 members: LZ2DF, LZ2HE, LZ2PZ, Vlad LZ2KZA, YL Vanya LZ2KZA, YL Iva LZ2KTS, Ivan and Donko in our club LZ2KTS. The propagation was very good. I heard F6FHP AE21G >1500km 599 via Tropo but we had strong QRM and didn't make a QSO. During the second expedition "KOM" we made 167 QSO's with 9 countries.

D.: LZ2DF, Mike, berichtet über 2 Expeditionen, die er mit seinem Club LZ2KTS nach LD66J gemacht hat. Bei der ersten Expedition während des Alpen/Adria VHF-UHF-Contests bestand die Gruppe aus 5 Mitgliedern: LZ2DF, LZ2HE, LZ2LC, LZ2KZA und LZ2-E-33. Auf 2m wurden 240 QSO's mit 7 Ländern hergestellt (YO, YU, LZ, HG, OK, UO5, OE3), auf 70cm waren es 30 QSO's mit 4 Ländern (LZ 25, YO 1, YU 1, HG 3). Bei der zweiten Expedition nach LD am 3. und 4. Sept. (VHF Region I Contest) waren es 8 Mitglieder (Calls s.o.). Die Ausbreitungsbedingungen waren sehr gut. LZ2DF hörte F6FHP AE21g >1500km 599 via Tropo. Wegen starkem QRM kam kein QSO zustande. Bei dieser Expedition wurden 167 QSO's mit 9 Ländern gemacht.



On Sept. 3rd we wkd: HG8U JG, YU2DG JF, HG4KYB JH, HG5TI JH, YU7BCD/5 KA, HG8UWG KG, YO5KAS/5 LG, SV2JL/4 LZ, HG8KCP KG, SV1DH/a MX, HG3NX/p JG, UO5OBE/p OF, HG3NL/p JG, HG7KLC/p KH, HG0KLZ/3 JG, HG0UOL/p KI, YU3TCW/3 HG, HG0MD KH, YO2KJF/2 KG, HG0HF KH, HG6KVP/p JH, YO4AUL OE, OE3LFA II, HG9RM KI and OK3KIN JI.

On Sept. 4th HG9KOB/p KI, SV1PL/3 LY, YU2JNA/2 IF, YU4EBL/4 ID, SV1RC/3 LY, YU2SYA IF, YU3IH IG, SV1RL/3 LY, I3LID/3 FF, I3LDP/3 FF, SV1JY/a LY, OE6TGD/p HH,

YU4ALM/4 JD, YU1OO KC, I3YXQ/3 FF, YU2DI JF, YU2SOP IF, YT3a HF, YU6AA/6 JC, YU2ARS/2 HE, YU3C HG, SV2ON LA, YU2JL HD, SV4RO/4 LZ, YU3DIS IG and OE4AZ ??. tks fer info Mike.

OK1MBS (HK48a) wkd in 1983 on Jan. 22nd F6GCJ AG, F6GLH ZI, F6IBX XI and F6AXE YH. On Jan. 23rd GM4GLD ZR. On June 5th YU2JL HD. On July 20th F1FIH. On Oct. 22nd G4UOE ZP. On Oct. 24th UB5DCN LI and UB5DAA LI. tks fer info Standa.

PA3BIY (CM) wkd >600km in 1983 on Aug. 28th at 1817 EI8EF VO49j 529 53. On Sep. 25th at 1900 F1ADT/p BF12g 59+ 59+, 1932 F6FHO/p BF16a 59 59, 2245 SP2FAV JO76f 539 539 and 2358 Y23TD GM07b 519 539. On Sep. 26th at 0654 SP5AD KM66g 559 519, 0708 OK2VSF JJ33d 53 55, 0805 OK1KWX IJ37h 519 539, 0810 OK1KPA HK79d 539 529 and 1042 F1BPK AD01h 59 58. On Oct. 22nd at 1243 OK1JKT/p GK46c 559 52 and 1633 SP6FUN IL53c 539 539. On Oct. 23rd at 0408 OK2GY/p IJ18d 549 539, 0412 OK2KYC/p JJ31d 559 529, 0430 SP9MM JK65b 539 429 (QSB), 0452 SP9DSD JK55e 559 539, 0500 SP6LB HK 529 529, 1124 SP1AAY IO62g 559 549 and 2155 UP2BJB LP06d 559 559. On Nov. 2nd at 2037 SP3GCL IM45e 529 519. On Dec. 4th at 0951 GU6EFB YI48c 59 59, 1740 SM6KEG FR11j 54 57 and 1850 SM7LNJ GP36h 559 559. On Dec. 28th at 2130 F6ETI YH24c 539 56. On Jan. 21st 1984 at 1708 DK0TU GM37e 539 559. On Feb. 13th 1984 at 2338 SM5CNQ HS46c 419 539. tks fer info.

SM0HJZ (IT60h) wkd on Feb. 13th 1984 OZ1HNE FR, OZ1EXE FP, PA3DJV DN, OZ1KBG FP, DD3BI DN, PA3BRI DN, PA0RDY CM, DF2BV EN, PE1GBT DN, DH3LAM EO, SP2AOZ JO and at 1720 OZ1CLL GP23c 559 579 (at the same time as Aurora on this day). tks fer info Jonas.

SM7GWU (HS75c) wkd in 1983 on Jan. 23rd DK4TG DL63h 559 549, PA3BRS CM70c 529 519, PA0BLD CM55j 529 529, PA0RDY CM45e 569 559, DJ4UF DK21a 549 539, DK2BJ DK11e 549 539, PA3BDY CM78d 56 56 and PE1ILC CL34g. On Jan. 24th PA0FTF CK10e 569 559, PA2GFL DM65a 529 519, DG5OB FM03b 56 56, DF8AV FM73c 53 52, DF9OO/p EL09g 58 59, DB8OV EM50d 57 57, DL7RF GM37d 58 53, Y24XN/p GK32d 569 559 and Y23TD GM07b 539 529. On July 2nd OH1AU/MM JV57f 539 539. On July 27th Y30BLI/p HO71f 53 53. On Aug. 6th UR2DW KS60c 559 559, UK2RBM MT43g 559 579 and R2PR KP20a 579 599. On Aug. 30th G4LOH ZM26h and G3CHN YK61b 53 53. On Sep. 26th OK1KKH/p HJ06c 52 54. On Oct. 23rd G4DCV AL67d 55 56, F6FLB/p AK09j 55 55, G6ECM AL56b 53 52, G4BAH AM77j 52 54, G8KUC AL56j 57 55, ON4AMY CL76g 54 53, OK2KYC/p JJ31d 569 559, PA3CWL CM59b 579 539, PA3BAH DM41f 53 55 and DK1BM DM67a 599 599. tks for info Stefan.

SP1FPG (HN33c) wkd on Sept. 25th 1983 F6EOQ/p YI34j, TO6HRP YI35d, F1ARR ZI13h and F9NW AJ46a. On Sept. 26th 1983 F6FYZ BI02f, F6GLH ZI72j, F6FHP/p AE21g, F1FHI ZH63d, HB9AMH/p DH66c, F6DWG BJ41j and LX1GR DJ12a. tks fer info Henryk.

70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70

DG1NZ (FJ56j) wkd >500km on Oct. 1st 1983 PA3BPC/p CM, PA0GN/p DN and PE1HQO DN. On Oct. 2nd I5WJW/6 GD, PA0RDY CM and PA3BLS CM. On Oct. 22nd PE1ALA CM, DD2QM EO, G6SVJ/p ZN and OZ1HDA ER. On Oct. 23rd PE1DAB CN and OZ9SL FP. On Nov. 19th PE1CKK CM and PA0BYL DN. On Nov. 25th PE1CKK CM. On Jan. 12th 1984 PE1HQO DN. On Jan. 13th PE1HQO DN. On Jan. 21st PA3DIJ DN. On Jan. 28th PA3DIJ DN. On Feb. 18th PA3DIJ DN. On Feb. 19th DB1BP DN. On Feb. 22nd PA0BDK CM. On Feb. 26th PA3DIJ DN and DB1BP DN. On March 3rd PE1CQX DM, PA0PLY/A CM, PA0EZ CM, PA0GUS/p CN, PE1CMO CL and PE1JSE CL. On March 4th DF9LN FO, PE1ITR CM and PA0BRS CM. On March 24th PA3DIJ DN and PE1CKK CM. On April 14th PE1HXK/A DN. On April 22nd DK2NH FN and DC9HD FN. tks fer info Wilfried.

G3PBV (YK32b) wkd (>1000km) on Dec. 4th 1983 OZ3ZW FO, SM7DKF GP and OZ1CSI HP. tks fer info Dave.

SM7GWU (HS75c) wkd in 1983 on Jan. 24th DF1OH EM57j 59 59, DJ7YP EM73j 55 55, DK0BZ EM80a 53 53, DK2AR EM80a 53 53, DF1XU FN22j 54 51, DB8OV EM50d 53 53, DF6HT FN31g 53 53, DC8AM EM49e 57 53, DK6AS FM44d 59 59 and DF3AR FM53e 59 58. On March 3rd OH6NU MW69g 559 559. On Oct. 23rd DL7QY FJ61e 57 53. tks Stefan.

MICROWAVE NEWS

DF9PY (DK65g/JO30IE) ist jetzt auch auf 23cm QRV. Steuergerät IC202, selbstgebauter Transverter (PA 3 X BFQ68, Vorstufe CFY13) und 23-ele-Tonna.

DG1NZ (FJ56j) wkd >200km on 1296 MHz on Oct. 1st 1983 PA0EZ hrd. On Oct. 2nd DC0ZF/p EK. On Dec. 4th DL3YB/A EM. On Dec. 29th F6DZK AI 668 km odx. On Dec. 30th DK1LIV EL and OE2CAL GH. On Jan. 2nd 1984 DD8DA DL, DB2VY DJ and DK5IE EJ. On Jan. 3rd DD8DA DL and DF5JJ DL. On Jan. 4th PA0EZ CM and DD8DA DL. On Jan. 5th DB2VY DJ and DD8DA DL. On Jan. 6th DD8DA DL, DF5JJ DL, DK8VR DJ and DB2VY DJ. On Jan. 7th DB2VY DJ, DD8DA DL and DL1EBR DL. On Jan. 8th DD8DA DL. On Jan. 12th PE1HQO DN 52 52. On Jan. 13th PE1HQO DN 53 31. On Jan. 21st PA3DIJ DN (ex PE1HQO) 54 53. On Jan. 28th test with PA3DIJ DN , NIL. On Feb. 18th PA3DIJ DN 51 51. On Feb. 19th DC9XO EM 56 52. On Feb. 25th OE5JFL GI 54 53. On Feb. 26th PA3DIJ DN 53 31. On March 3rd DF1EQ DL 55 53. On March 4th DL0HC/p DL 53 41, DF3EE DL 55 41, DL1EBR DL 57 52, HB9BBD/p EH 53 51 and DL3ZAJ EK 51 51. On March 24th PA3DIJ DN 55 52. On March 25th PA0EZ CM 53 42. On April 1st DK1UV EL 53 51. On April 22nd DL4OX FM 52 53, DG3OO FM 51 41 and DC4BK EN 51 51. On April 23rd DL3YB/A EM 53 42. Wilfried ist QRV auf 23cm seit 1.10.83, 6el Flächenantenne 10W HF, 2m Spiegel (Eigenbau), Multi-Oktavstrahler, 2C39BA 60W HF, Pre-amp NE82079. Wilfried schreibt: ...die Verbindungen auf 23cm mit PA3DIJ ex PE1HQO in DN71a 547km klappten auf Anhieb, nur am 28.1.84 war kein Signal zu hören. tks fer info Wilfried.

First HB - DL on 5760 MHz in SSB
DJ5AP hat am 26.2.1984 von der schwäbischen Alb in EI74b, wo er sich mit DK4DG befand, das erste QSO auf 6cm in SSB mit HB9MIO/p, der sich auf dem Säntis DH80e befand, getätigt. QRB 102 km, Rapporte 59 57. Station bei HB9MIO/p: Bausteine von DB3UU, TX mit 200 mW HF, RX mit Vorstufe CFY 13, Antenne: 70 cm Parabolspiegel mit Rohrstrahler. Station bei DJ5AP: Sendemischer nach DF5QZ, etwa 5 mW HF(!), als Empfangskonverter wird ebenfalls der Sendemischer benutzt, lediglich die ZF (144 MHz) wird umgeschaltet. Antenne wie bei HB9MIO/p. DJ5AP (EI74b) and HB9MIO/p (DH80e) made the first on 6cm in SSB, QRB 102km, reports 59/57, between DL and HB. Station of HB9MIO/p: units from DB3UU, TX with 200mW RF, RX with pre-stage CFY 13, antenna: 70cm diameter parabolic reflector.Station of DJ5AP: TX-mixer by DF5QZ abt. 5mW RF (!), TX-mixer is used as well as RX-converter. The IF (144 MHz) only is switched. Same antenna as at HB9MIO/p was used.

DK1KR (FN) hat am 6.2. 1984 Y23BD (GM05f) auf 23cm gearbeitet. QSL liegt vor. QRB 186km, Stn bei Y23BD 30W, 1.2m Parabolspiegel; Stn bei DK1KR 20W 23el F9FT). Beidseitig denkbar schlechteste condx 51 51. tks fer info Walter.

DL7QY (FJ61e)wkd in SSB or CW on 1296 MHz: On 3.3. HB9AMH (DH) 52 54. On 5/6. May: HB9AQ/p (DH) 44 57, HB9AMH/p (DH) 59 59, HB9MIO/p (DH) 55 59, DL0HC/p (DL) 54 52 and DJ3ZU (DL) 59 58. On 2320 MHz 3.3. DJ5AP/p (EH) 59 59 and DL0UL/p (EI) 59 59. On 5/6. May: DK0BC (EI) 59 59, DC9BU (EK) 59 59, DK0HT/p (EK) 54 54, DL0UL/p (EI) 59 59, DK0NA (FK) 57 59 and DF2CA (FK) 519 52. On 3456 MHz 3.3. DJ5AP/p (EH) 55 59. On 5/6th May: DC9BU/A (EK) 59 59 and DK0NA (FK) 51 52. On 5760 MHz 3.3. DK0BC (EI) 59 59. On 5/6. May: DK0BC (EI) 59 59 and DK0NA (FK) 519 519. On 10368 MHz in SSB on 6th May DK0NA (FK) 52 52.

G3PBV (YK32b) wkd via Tropo on 1296 MHz (>300km) on Dec. 2nd 1983 G4CCH ZN. On Dec. 3rd G8SSL/A ZM and G4STO ZN. On Dec. 4th PE1CQQ DM, PA0EZ CM and PE1HWO CL. On Dec. 28th F1FHI ZH, DK5IE EJ and DJ6GQ EI. On Dec. 29th PE1HQO DN. tks fer info Dave.

G4FRE (AL07a) hrd on 3456.150 MHz on Dec. 5th 1983 the beacon DB0JO. The equipment was 2xNE645 preamp (by G3WDG) to interdigital converter, antenna was a flat array of 6 full wave dipoles on a piece of polyguide pcb, Gain: 11-7dB, antenna was held out of shack window! But no DL activity on either 70cm or 3456 MHz at this time. tks fer info.

AURORA NEWS

2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m

DF9CY (EL02e) wkd:

12.03.83

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
1654	SM5EFP	HT50e	55A 55A	0	1702	SM5MIX	HS66G	55A 54A	0
1656	LA8SJ/p	GU62d	56A 58A						

25.03.83

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
1435	SM5MIX	HS66g	55A 54A	20	1445	LA6VBA	ES26g	57A 55A	20
1442	LA3UL	FT78h	54A 53A	20					

10.06.83

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
1532	SM5CBN	HS56c	54A 55A	20	1542	LA5IBA	FT68f	55A 55A	20
1537	SM5EFP	HT50e	54A 57A	20	1610	SM5MGW	HS56b	42A 57A	20

04.02.84

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
1527	SM5GLC	HS48d	55A 55A	15	1537	LA6VI	FT43a	53A 57A	15
1529	LA1YCA	DS31d	54A 57A	15	1547	SM0FMT	IT50f	55A 54A	15
1533	UR2NW	IT74d	53A 44A	15	1555	LA6VBA	ES26g	53A 54A	15

hrd: UR2RIW, RQ2GAG, SM6EAN. tks fer info Christoph.

DL2OM (DK49j) wkd: (all in CW)

04.02.84

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
1520	OZ1CLL	GP23c	53A	0	1542	OZ1FTY		41A	0
1535	SM6EAN		55A	0	1545	GM4HIG	YR80a	51A	0
1537	SM7KNK	HP32c	56A 57A	0					

tks fer info Roland.

DL6LAU (FO42f) (ex DH1LAC) wkd:

04.02.84

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
1547	LA5MT	GU21j	59A 56A	0	1701	OH2BGD	MU	52A 53A	0
1550	G3LTF	AL11d	55A 55A	0	1704	OH2TI	MU65g	55A 55A	0
1553	UQ2NXK	MR42f	55A 55A	0	1706	UK2RBM	MT42j	52A 57A	0
1554	OH3MF	MU23j	54A 55A	0	1709	OH1TW	KV20g	52A 52A	0
1556	OH3TR	LV50g	55A 55A	0	1716	LA5LBA	FT68f	56A 55A	0
1558	OH2BC	LU	55A 55A	0	1722	GM3JFG	XR20d	55A 55A	0
1600	LA2YT	FU62g	55A 55A	0	1746	SM6EAN	FR30j	53A 54A	30
1601	OH3RW	MU25b	52A 52A	0	1749	GM4OGM	YP05h	51A 55A	30
1611	GM3XOQ	ZT02j	55A 55A	0	1904	UR2NW	LT7??	55A 57A	10
1613	LA6VT	FT42c	55A 55A	0	1907	SM3KIF	IU22a	55A 55A	10
1615	OH2MQ	MU25f	57A 57A	0	2340	LA1BR	FU15h	54A 54A	10
1658	LA2DK	EU23d	55A 55A	0	2344	SM5MIX	HS66g	54A 55A	10

10.02.84

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
2014	OH2MQ	MU25f	55A 56A	0	2019	LA1TI	FU14g	56A 55A	10

13.02.84

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
1505	OH2MQ	MU25f	54A 54A	0	1552	SM5KWU	IT34h	55A 55A	0
1518	LA1TI	FU14g	55A 56A	0	1536	SM4CLU	GT18j	51A 52A	0

G3LTF (AL) wkd:

04.02.84

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
1550	DL6LUA	FO	54A 55A	40	1837	SM5KWU	IT	52A 43A	5
1600	RQ2GAG		55A		1842	SM4IVE	HT	57A 53A	0
1708	GM3JFG	XR	55A 55A	25	1848	GM4TXX	XP	43A 44A	
1725	GM6LXN	YS	54A 56A	20	1858	LA8AK	DS	54A 53A	15
1740	GM4OBD	YR	52A 52A	20	1914	SM4GVF	HT	57A 57A	0
1746	GM4ILS	YR	57A 57A	20	1918	SM0HAX	JT	55A 53A	0
1758	GM4UPL	XR	41A 55A	20	1920	SM7EBI	HR	53A 53A	0
1810	LA4IAA	CS	54A 54A	18	2313	SK6AB	FR	55A 55A	35

10.02.84

GMT	CALL	QTH	RST	QTF	GMT	CALL	QTH	RST	QTF
1806	SM5KWU	IT	54A 55A	0	1913	GM3WOJ	XR	55A 55A	0
1808	GM4DMA	YR	55A 55A	10	1917	GM4IAO	YR	58A 57A	10

1820 GM4GVF HT 57A 55A 350
1839 GM5MIX HS 52A 52A 55
1847 GM0FMT IS 42A 52A 0
1903 GM4IVE HT 58A 55A 355

13.02.84
1915 OZ1FGP EQ 54A 54A 20

25.02.84
1615 GM4OBD YR 54A 55A 18

04.04.84
1715 LA6ZW ES 55A 55A 25
1717 OZ1FGP EQ 55A 55A 25
1724 GM3ZXE YQ 58A 59A 5
1730 PA2VST CM 55A 55A 35
1731 G4HGI YN 55A 55A 25
1740 GM4GVF HT 58A 57A 5
1742 GM4LFA XP 54A 55A 5
1748 LA8SJ FT 55A 56A 10
1756 GW3LDH YN 56A 57A 30
1800 F6DWG BJ 54A 55A 50
1803 PA0BLD CM 58A 58A 50

05.04.84
0020 G3UVR YN 55A 55A 30
1600 LA6HL CS 55A 56A 15
1612 RQ2GAG MQ 55A 52A 20
1647 GM4ILS YR 57A 54A 10

1922 LA2OJ FT 52A 53A 10
2247 LA6HL CS 55A 56A 10
2254 LA8BJ FT 53A 53A 10

1920 GM4OBD 55A 54A 15

1811 ON4ASL BL 56A 55A 50
1815 G4KUX ZO 56A 55A 35
1821 G4BSW AL 55A 56A 25
1845 PA3AEF CL 54A 20
1846 G6GN YL 55A 56A 0
1925 GM3OBD YR 59A 59A 30
1927 GM3ZXE YR 59A 59A
1936 SM6CMU FR 57A 58A 350
1941 SM0FMT IT 54A
2100 SM0HAX JI 55A 0

1705 OZ1FGP EQ 54A 55A 30
1710 GM4FDM XP 54A 53A 15
1710 LA8SJ FT 57A 57A 0
1805 PA0OOS/A DN 55A 34A 40

On 50 MHz:
23.03.84
2244 GW3LDH YN 56A 54A 330
tks fer info Peter.

05.04.84
0033 GI3RXV WO 54A 5 3A 310

PA3BIY (CM)wkd:
10.12.83
1710 GM6LXN YS22f 58A 59A 0

1838 SM4GVF HT76a 54A 56A 330

04.04.84
1540 GI4OPH XO33j 53A 54A 10

1545 GM4HIG YR80a 53A 57A 10

10.02.84
1756 GM5KWU IT34h 53A 54A
tks fer info.

PE1JSE (CL34f - JO21HM) wkd all stations in SSB:
05.04.84
1524 GM6LNM XP07e 56A 57A 50
1545 GM6WQC XR10d 57A 55A 50
1603 OZ1HNE FR53j 57A 56A 45

1613 OZ1FJJ FR71f 52A 57A 40
1635 GI8YDZ WP67b 51A 55A 35

hrd: EI4AEB (WN49g), GM4NFC (XP48e), G6ZHC, GM6VXB (YR30c) and GI4GVS.
tks fer info Jac.

SM0HJZ (IT60h) wkd:
16.01.84
1733 OH5BB OV71c 55A 55A
1737 OH2AYG OU56a 55A 55A

1753 OH8NV MY88b 55A 55A
1824 OH6BV LX24j 53A 55A

28.01.84
1523 UA3MBJ SS78e 55A 57A
1532 OH6UH LX24c 55A 56A
1544 OH8NV MY88b 57A 58A
1546 OH8RQ MY23j 54A 58A

1559 RQ2BAG MQ81g 55A 55A
1604 UR2RQT MS80e 59A 59A
1606 RA1ASK PT82j 55A 57A
1609 UA3OG UR15f 55A 55A

30.01.84
1705 SM4CLU GT18j 41A 52A

1841 OH5BB OV71c 52A 52A

02.02.84
1735 OH2BGJ MU65a 53A 54A
1741 OH8PJ MY23e 54A 57A
1745 OH6XC KX79a 54A 55A
1750 OH6BV LX24j 59A 59A

1759 UR2RIW LS82e 54A 55A
1810 UA3MBJ SS78e 53A 57A
1819 SM5OJR/5 ?? 55A 55A
2133 OH5BB ON71c 59A 59A

1756 OH8GW/6 MW39a 59A 59A

04.02.84
1618 OH3TM LV39f 57A 57A
1620 OZ1GMP FQ61c 55A 55A
1624 OH5NM OV64j 57A 58A
1628 OH6YF KN49h 53A 59A
1630 PA0OOS/A DN63c 55A 55A
1647 DL3AAL FO44d 55A 42A
1653 OZ1EYX GO73h 54A 58A
1922 G3LQR AM67d 55A 54A

10.02.84
1649 SM3KJV JX54e 57A 59A
1653 OH6BV LX24j 57A 59A
1705 SM5EFP HT50e 42A 56A
1708 LA4B FU75e 55A 57A
1734 OH4AB NW56e 53A 59A
1748 OH2BGD MU55f 53A 56A
1754 OH2BZI MU64c 42A 53A

13.02.84
1701 RA1AMD PT12h 55A 55A
1711 OH3IM LV59c 57A 59A
tks fer info.

SM7GWU (HS75c) wkd:
16.01.83
1511 SM2LIY JX34d 42A 41A
1532 LA3EU DW24a 54A 55A

17.01.83
1347 OH6KJ MW59e 55A 57A

05.02.83
1158 LA6QBA ET05c 59A 55A
1214 Y23FG FM69g 57A 57A
1217 UB5PAZ ML73a 56A 56A
1258 UA1WDX OR12b 43A 55A
1301 Y22IC GN28d 57A 59A
1304 Y21VC HN42g 54A 54A
1308 OH5AI OV65h 54A 55A
1311 OH1BJ KV49b 56A 57A

06.02.83
1342 OH6UP KX79a 55A 56A

07.02.83
1221 OH3TM LV39f 54A 56A
1230 UA1AP PT23h 43A 53A
1234 OZ3ZW FO18e 54A 54A
1304 DJ9YE EN14a 57A 59A
1312 OH3QC MV51f 57A 57A
1327 PA3CGR DM65b 54A 55A
1335 OL7BDQ JJ24j 52A 52A
1347 OH6ZAD KW37f 53A 55A
1355 SM4DHB GT48e 42A 53A
1401 DJ4UF DK21a 53A 53A
1416 SK7DA GP17A 53A 52A
1420 OH6KJ MW59e 55A 57A

13.02.83
2239 SK2KW KY65c 55A 53A

15.02.83
1500 SM3IZB JX54e 54A 55A

21.02.83
1620 UQ2GMD LR73c 54A 55A

01.03.83
1800 SM3JAW JX56f 59A 59A
1802 SK3MF IN86f 59A 59A
1803 OH6AH LW15g 55A 55A
1804 LA1K FX42c 59A 56A

2150 RQ2BAB MQ81g 59A 59A

1926 DL3AAL FO44d 55A 55A
1930 GM3JFG XR30d 57A 55A
1942 DL5BAC EN55d 55A 55A
1945 PA2VBT CM24j 57A 57A
1948 DJ1KE EN58c 42A 55A
1950 DL4AO EM06d 52A 52A
2000 PA0RDY CM45e 56A 55A

1802 GI4TAP XO31g 53A 53A
1810 DL8BAB EN76f 55A 55A
1822 PA3BGM DN61c 53A 56A
1828 DJ4UF DK21a 53A 54A
1954 OH6PA KW47a 57A 57A
2011 UR2RQT MS80e 53A 55A

1713 OH2BOF MU65g 55A 58A
1720 OZ1CLL GP23c 55A 57A

1553 OH3QC MV51f 42A 43A

1349 OL7BDQ JJ24j 57A 57A
1352 DK9OA EM26d 57A 53A
1357 OK1QI HK70g 55A 58A
1400 OK1VKA HK76g 54A 56A
1403 PA3ANZ CM46a 55A 59A
1407 UR2RFX MT45e 55A 59A
1512 GM3WTA YR68b 56A 56A
1543 LA2BBA GU61g 53A 52A

1422 OH7TM/2 MU64a 53A 57A
1427 DL0IV GM47d 54A 55A
1431 OH1XW KV50H 54A 55A
1435 UR2GZ MS04b 57A 57A
1438 SM4JEW GT59b 58A 58A
1448 UQ2GEK MR20d 55A 55A
1454 RC2WBH OP45g 54A 56A
1457 OK8BAA JJ13b 53A 53A
1526 PA3BXH CM10j 55A 55A
1532 LA2DK EU23d 54A 53A
1550 UQ2GMD LR73c 53A 55A

2257 LA8EN FX42d 53A 53A

1628 UQ2RQT MS80e 55A 59A

1851 SM3JGB HV60h 57A 57A
1855 SK2KW KY65c 55A 55A
1858 LA8WF FT83o 57A 54A
1905 OH2TI MU65g 55A 55A

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1806 OH3TR LV50g 56A 57A
1808 OH2BBH MU63e 55A 59A
1815 SM3GXM HX63h 57A 57A
1819 OH6AA KX79h 55A 559
1821 LA5MK FX43g 57A 55A
1823 OH6KJ MW59e 57A 59A
1828 OH6PA KW47a 57A 57A
1831 OH1AF KV39g 56A 57A
1834 LA9L FT06H 55A 52A
1838 OH6CH NV01d 56A 55A
1839 OH6ZAD KW37f 53A 53A
1841 SK4AO HU39a 59A 57A
1842 LA6CU CU47j 57A 59A
1845 OH3MF MU23j 55A 53A
02.03.83
1309 OK1KCI HK79d 53A 57A
1313 OH2BYA MU46f 54A 57A
1317 DF6OB FM44c 57A 53A
1439 LA6PLA/p FT03c 57A 57A
1443 OK1GMW ?? 43A 55A
1450 DF8AE EM73e 55A 52A
05.03.83
1520 LA1K FX42c 55A 53A
1525 OH1ZAA KV38h 53A 52A
28.03.83
1342 LA5MT FW46f 55A 55A
29.03.83
1437 PA0XMA DM 53A 52A
1446 LA2CBA FW74h 53A 55A
1453 LA8KV FW27c 55A 56A
07.04.83
1621 LA6MP FT15h 53A 43A
04.05.83
1400 SK2NR/2 HZ27a 43A 33A
11.05.83
1734 G4CJG ZO22h 55A 53A
24.05.83
2142 LA2BBA GU61g 55A 53A
13.06.83
1639 OH5LK NU 53A 54A
1653 PA3CGR DM65b 53A 51A
07.08.83
2356 OH9VE/7 OW39b 55A 55A
08.08.83
0102 UR2RIW LS02e 55A 55A
0116 UR2RQN KS60c 57A 58A
0123 OY9JD WV07h 54A 55A
0210 SK2KW KY65c 57A 57A
0236 OH7EU NX26g 57A 55A
21.08.83
1349 SM0FSK/3 GY30b 54A 54A
19.09.83
2145 SM2LCI KY12b 56A 53A
04.10.83
1447 UA1XM NR19g 56A 59A
1500 UA3DHC TQ71c 58A 57A
1506 UC2AA NN18d 56A 59A
1511 UA3IDQ QQ64d 57A 55A
1520 YZ5ML GL79h 55A 55A
1522 UA1WDX OR12b 57A 59A
1523 UB5PAZ ML73a 56A 58A
1530 OK2STK JJ12d 57A 57A
13.10.83
1441 OH6BV LX24j 54A 54A

1918 SL3ZYS/3 LV11a 55A 54A
1923 OH6MK LX24e 55A 55A
1927 SM3GHD GW70e 59A 59A
1929 LA8SJ FT05j 57A 57A
1937 OH1BJ KV49b 57A 57A
1939 OH2BXE MU56h 54A 53A
1943 LA9LG ET29j 53A 53A
1946 LA3JA ET18f 54A 57A
1948 OH3RU MU14d 55A 57A
1950 SM5AOG IU70a 53A 53A
2000 OH2BAZ MU54h 57A 59A
2004 LA9BM EU32g 57A 54A
2009 OH1AU LU42a 55A 55A
2011 SM3AZV IX79c 55A 55A

1531 OK1KRA HK72a 58A 59A
1645 PA0DOG CM55j 53A 55A
1649 DL4BBR DM50c 53A 52A
1652 DK6JU DL47g 57A 57A
1654 LA4IAA CS09h 54A 54A

1527 SK2KW KY65c 53A 53A
1538 OH6MY KX57a 54A 55A

1512 LA6QBA/p GV41e 57A 56A
1626 LA8ZX FT 52A 53A

1449 SM2ILF KY26e 56A 45A

2200 OH3LX LV 43A 53A

1657 DJ4UF DK21a 53A 53A

0308 OH6CH MX56h 55A 56A
0324 OH3LX LV38d 57A 57A
0338 UR2DW KS60c 57A 59A
0355 OH7PS OX67h 45A 55A
0405 UQ2BFZ NR 43A 55A

2156 SM2BLD JX09e 55A 57A

1535 UK2CBB NO55f 58A 57A
1605 SP6AZT IL76h 54A 55A
1608 PB0ACG CL27h 55A 52A
1611 DL7UK/A GM47c 53A 54A
2007 SM3AZV IX79c 55A 55A
2016 OH6CY MW70h 56A 56A
2019 SM3AF IW47e 53A 55A

17.10.83
1320 UR2ED MT45j 43A 59A
1328 UQ2OBD ?? 33A 55A
1340 OK1KHI/p HK29b 55A 53A
1410 UR2JL MT45a 55A 56A
1413 DL5DAV DL57e 53A 52A
1428 RA1ASK PT03a 54A 57A
1432 PA3CBR DM65b 54A 55A
1435 PI4TWN DM65a 55A 52A
1440 OH1QX KV50h 55A 55A
1444 OH1BK LV52a 57A 59A
18.10.83
1434 OH6JJ KX79g 56A 57A
1439 OH1KA KV50h 57A 57A
1515 SK4AO HU39h 58A 58A
1522 UA3MBJ SS78e 56A 55A
1545 OH3FA OV71j 53A 55A
01.11.83
1906 LA1K FX42c 55A 52A
2020 SM3AZV IX79c 56A 44A
2023 OH3TR LV50g 57A 57A
2104 SK2KW KY65c 55A 55A
09.11.83
1602 SM3OHU IV51j 55A 55A
13.11.83
1528 SM2LIY JX38e 54A 55A
14.11.83
1329 OH4JJ KX79g 55A 55A
1332 SM4CLU GT18j 57A 58A
1403 SM5EFP HT50e 59A 59A
1409 SM4JEW GT59b 56A 57A
10.12.83
1620 OH2BYJ MU56f 54A 57A
1624 OH9VE/7 OW39b 56A 57A
1632 OH6PA KW47a 57A 56A
1640 SM2LTA JY02g 55A 51A
1647 DL8NBI/p FK69b 55A 51A
1653 SM4OCV HT25h 59A 59A
11.12.83
1413 OH2AWS MU66a 54A 55A
1419 OH6CY ?? 42A 53A
1425 LA2CBA FW 52A 53A
1432 RC2WBH OP45g 54A 43A
1443 DF8AE EM 54A 55A
12.12.83
1452 OH5BB OV71c 53A 54A
1520 SM4CE GT12d 55A 54A
18.12.83
1838 OH7PS OX67h 42A 52A
1859 OH6AYS LX16d 54A 53A
tks fer info Stefan, but please add for the future QTF.

SP1FPB (HN33c) wkd:
28.03.84
1804 LA3VU ET23f
1809 OH2IQ MU25f
tks fer info Henryk.

UA1ZCL (RC08c) wkd
03.02.84
2149 UA9XAN AX39e 59A 59A 35
2158 UA9XAN AX39e 59A 59A 55
2205 UA9XAN AX39e 55A 55A 60
04.02.84

1453 OH3BY MV79d 55A 55A
1456 OH6QP LW24c 55A 55A
1523 LB8IB FT05j 57A 57A
1543 RA1AMV PT02e 55A 55A
1600 UP2AN MO27b 57A 56A
1627 LA1DY FT06h 58A 54A
2233 UA3MBJ SS78e 56A 55A
2249 UK1CAA PU73d 55A 56A
2326 SK2KW KY65c 55A 53A

1602 UC2ABN NN18e 56A 58A
1605 UC2AIB NN18a 57A 59A
1608 UP2BIG LP07j 58A 59A
1614 UA1TEA PS37e 53A 53A

2108 OH2MQ MU25f 55A 57A
2117 UA1ASA PU73g 55A 57A
2124 SK3MFA IW06f 55A 55A
2127 LA1AL EX56j 55A 54A

1532 OH1QX KV50h 43A 54A

1415 UR2QY LT74d 55A 55A
1421 UR2IB MS58b 53A 59A
1430 LA5LBA FT68f 57A 55A
1433 OH8SW/6 MW39a 55A 57A

1658 DJ4UF DK21a 55A 53A
1713 SM3MZY IU06g 54A 53A
1719 G4ANT AM27c 55A 55A
1725 PA0HWM CK10e 45A 55A
1743 PA0XMA DM44h 55A 55A

1451 SP6ASD HL39c 55A 55A
1506 OH1QX KV50f 54A 56A
1514 SM2MZD KY72c 53A 52A
1530 LA6VI FT42c 55A 55A
1543 SK4AO HU39h 57A 54A

1527 OH2BYZ MU 53A 55A
1537 SM4FPD GT47a 53A 52A

1911 OH6CN LX36a 52A 53A
1952 OH6QR MW31j 54A 55A

1816 LA6VBA ES26g
1911 SM4GVF HT76a

2235 SM3AZV IX79c 56A 45A 295
2257 SM3AZV IX79c 32A hrd 295

DUBUS 2/84

AURORA NEWS

1301	SM4GVF	HT76a	31A	41A	235	1431	UA9FFQ	CT	31A	57A	118
1319	SM5KWU	??	31A	53A	240	1444	UA4NM	YS	42A	55A	115
1330	SM5MIX	HS66g	41A	45A	240	1448	UA9CKW	EQ14c	41A	54A	115
1403	SM4GVF	HT76a	52A	53A	232	1500	UA9FCB	BS	31A	59A	113
1413	SM4GVF	HT76a	52A	hrd	243	1515	UA9FAD	CR02	53A	hrd	115
1425	UA9GL	CR02h	52A	59A	118	1534	RQ2GAG	MQ01g	55A	55A	228!
1428	UA9FAD	CR02	54A	56A	118	1603	SM4GVF	HT76a	42A	43A	246
11.02.84											
0051	SM2JAE	KZ58c	59A	59A	325						
13.02.84											
1607	SM4GVF	HT76a	52A	53A	250	1712	SM4GVF	HT76a	53A	54A	250
29.2.84											
2040	UA9XEA	AX39	59A	59A	30	2104	OH9VE/7	OW39b	55A	57A	315
2053	OH8UV	NY49d	57A	57A	0	2117	OH6HJ	KX78	53A	57A	310
2101	SM2DXN	KX11a	58A	58A	320						
06.03.84											
1814	OH6AI	LX16j	55A	55A	320	2127	SM2INV	KB12a	55A	55A	325
1815	SM2ILF	KY26e	59A	59A	320	2130	OH8RQ	MY23j	55A	56A	340
1819	SK2AU	KY25c	52A	hrd	320	2135	OH6AI	LX16j	55A	55A	340
2100	SK2AU	KY25c	55A	55A	315	2138	OH8AA	MZ79f	58A	59A	350
2103	OH8NV	MY08c	55A	57A	315	2139	OH8RH	MY67c	55A	57A	350
2107	SM2ILF	KY26e	59A	59A	325	2140	OH7EU	NX26g	55A	59A	350
2118	OH6MK	LX24e	52A	55A	325	2142	SK2KW	KY65c	57A	55A	350
2121	OH7SQ	NX38b	52A	54A	325	2146	OH7UE	OW40h	58A	59A	350

tks fer info.

70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70

PA3DIJ wkd :

04.02.84									
1550	GM3JFG	XR30b	52A	52A	28	OZ7IGY	FP39b	51A	hrd 35

WORLD WIDE VHF UHF SHF TOP LIST

---------- RETURN TO DL7QY ----------

CALLSIGN: QTH LOC:

BAND	N.O.S.W.	TROPO ODX	AURORA ODX	METEOR SCATTER ODX	SPORADIC E ODX
2M		KM	KM	KM	KM
70CM		KM	KM	KM	KM
23CM		KM	KM	KM	KM
13CM		KM	KM	KM	KM
9CM		KM	KM	KM	KM
6CM		KM	KM	KM	KM
3CM		KM	KM	KM	KM
1.3CM		KM	KM	KM	KM

RETURN TO DL7QY, CLAUS NEIE, D-7181 RUDOLFSBERG 24.---------- ODX = BEST DX----------N.O.S.W. = NUMBER OF SQUARES WORKED.

For Top List rules see page 168

MOON BOUNCE

BY DF 7 VX

Conditions: The conditions were not particularly spectacular,but the activity levels on 144,432,1296 and 2320 MHz were resonable good. There were also a number of new stations present wich made operation interesting for many "EME newcomer and oldtimers".

The big news for Feb.1984 is K6MYC/KH6s expedition to the island of Kona. Based on the best information available at the time of this writing,75-Qso s on 144MHz and 37-Qso s on 432MHz were completed.

Contest News: Jan ,DL9KR is the World-wide-winner in the single operateur section on 432MHz. More info in the next magazin.

CEFALU conference: VHF-UHF-Working Group; DL7YC,Manfred (member of the DARC-VHF-UHF-WG) was charged with the task of investigating the possibility of obtaining worldwide agreement on a common timing sequence for moonbounce on all bands. If there are some comments,please send your info to DL7YC or to me.

Here now the activity Reports.

""2 meter EME news""

HB9QQ: Pierre sent a short info about his contacts. 18.Ø3.84 he worked: WA4NJP 0/0; N4GJV 0/0; Ø6.Ø4.84 : UA1ZCL 0/0; Ø7.Ø4.84 : OZ1EME 0/0; DL8DAT 0/0; K1WHS 439/0; SM4IVE 0/0; all random Qsos !

F1HI + F6DRO: Some words about ARRL-contest 83; We were active tonight during the whole contest;conditions were not as good as 1982. Improvment this year was a 8874-Poweramp.abt 600 watts but still 1dB loss in the transmitting feedline;Equipment is now: 4x16el F9FT + 8874 + BF981 + 250Hz B.P.-Filter.
Worked: 29.1Ø.83 SM5FRH - I2ODI - SM2GGF - W5UN - YU3USB ; 3Ø.1Ø.83 OZ1EME - K9HMB - F6CJG ; 26.11.83 SM4GVF - SM7BAE;
Hrd: LA1TN-G4DZU-OH7PI-EA3ll-I4BXN-PAØCIS-YU1AW-UA3TCF-ZS6AVL-WB5LBT-WB5ERD-WA4NJP-UA1ZCL-KB8RG-JAØJCJ-K2OS-OK1MBS-F6BSJ;
19.Feb.1984: Improvment was a new 2 meter converter and a preamp. with 3SK124 Good echos from time to time,but low activity. So we wkd. W5UN - LA1TN (new)
Hrd: N7DB(?)-K6JYO(?)-DL8DAT-F6BSJ-SM7BAE-KB8RQ; In 1984 improvements will be 8 times 13el-F9FT with low loss coupling and perhaps 800 watts on the transmitting side.

HB9CRQ: Dan reports:2Ø.Ø3.83 first EME-Qso with HB9SV 0/0; 14.Ø5.83 VE7BQH 0/0; Ø1.Ø8.83 OH7PI 0/0; 3Ø.1Ø.83 W5UN 0/0; 26.11.83 K9HMB 0/0; I2ODI 0/0; K1FO 0/0; HB9SV 0/M; WA1JXN/7 0/0; 12.Ø2.84 K1WHS 0/0;
I am planing a new antenna(8x16el 144MHz and 8x21el 432MHz).For the moment I am using 8x9el,Ant preamp with Ø.3dB nf,1KW PEP. Unfortunately I cannot be qrv during July,August and September because QRL. But I will be qrv again starting October with the new antennas. Then I will have a plenty of time,so I am looking forward to make many skeds. So please write to HB9CRQ,Dan Gautschi,box12 CH-5737 Menziken,or listen for me on VHF-Net.

LA9BM: Following stations worked: Ø1.Ø1.83 HB9SV; Ø2.1Ø.83 W7IUV; 29.1Ø.83 K1WHS; 3Ø.1Ø.83 SM2GGF; 26.11.83 LA1TN (first LA-LA), I2ODI, YU3USB, UA1ZCL 27.11.83 SM7BAE,SM4GVF,WA1JXN/7; 15.Ø1.84 W5UN; All qsos with "O" report.
Heard: WA8ONQ-DL3YB-SM2JAE-WA2GSX-DF9RJ-SM5FRH-OZ1EME-DK1BM-SM4IVE-OH7PI-K9HMB-WA4NJP-KB8RQ-WØRWH-G3POI-UA3TCF-Y22ME-I4BXN-SM2ILF-K1FO-F6CJG-VE7BQH-SM2CKR-YU3ZV-WA6MGZ- and DL8DAT. Equipment is: Tx 500watt, Ant. 4x9el F9FT-yagi + MGF1402. All QSOs are random,only I2ODI made by a sked.

IV3HWT: Lucio is a newcomer on EME. He starts his activity in the second part of the EME-contest.Working conditions:TX FT101zd+Transv.+2x4CX250B at 2.8 Kv appr.1Kw outp.; RX FT101zd+Conv.+BF981-Ant.mounted+250Hz IF-Filter. ANT. - 4 x 16elF9FT 4.30x4.30 spaced azimut+vertical manuel rotation. It is possible to hear from time to time my own echos.
Worked in the EME-contest 83 : I2ODI 559/0; SM2GGF; SM7BAE; SM5FRH; WA1JXN/7; K6MYC; YU3USB; Stations hrd: UA1ZCL-SM2ILF-OH7PI-W5UN-K1MNS-YU1AW-W6MBT-VE7BQH

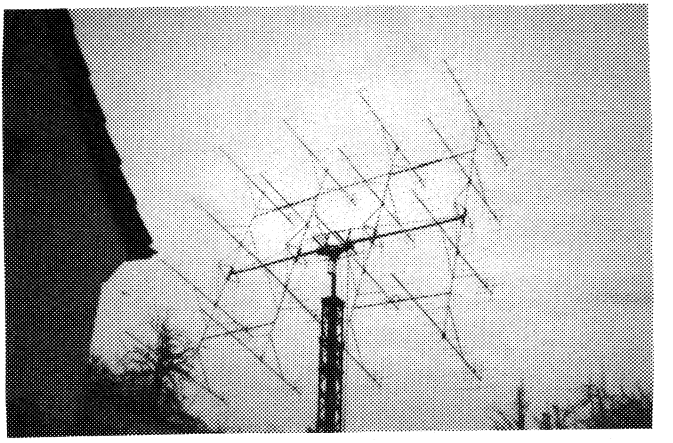
Worked all on random: 15.Ø1.84 UA1ZCL ; K1WHS ; YU3ZV; Hrd: WB5LBT,HB9SV; 21.Ø1.84 K1WHS ; SM7BAE (439/519); W5UN ; Hrd: WA4NJP,VE2DFO; 22.Ø1.84 VE2DFO ; VE7BQH (419/419) ; WA6MGZ ; Hrd: KB8RQ ;

OZ5VHF: Group; Here are a report from our EME-activity.
We have now been qrv via the Moon nearby for one year and worked in 85 QSOs 56 different Stations.In the first period of 1984 we contact the following. Jan.84 : OK1MBS ; DL8DAT ; K9MRI ; K6MYC ; FeB.84 : SM2GGF ; JAØJCJ ;UA1ZCL; OK1MBS ; DL8DAT ; OK2TU ; WA4NJP ; K2OS ; K9HMB ; and SM2JAE ; March 84 : UA9FAD ; K6MYC ; WD8ISK ; and IV3HWT ;
The rig at OZ5VHF : TS700s + MGF1200 + a pair of 8874 Tubes and 8 x 16el.yagi feeding with 7/8" helixcable.

F9HS: Claude writes: I put up 4 x 17el Tonna yagis in the first days of Mar. The Amp.is a single 4CX350 with about 400watts out. RX-frontend has 0.44dB NF I can hear my own echos sometimes when condx. are good around perigee and QRM is very low. On 13.Ø3.84 my first QSO with YU3USB O/O (random).
15.Ø3.84 SM4IVE O/O ; DL8DAT 429/429 ; SM2GGF 559/339 (random); LA1TN O/O (random); 17.Ø3.84 K1WHS O/O(random); Ø7.Ø4.84 SM4IVE O/O(random); Ø8.Ø4.84: DL8DAT 339/329(random); SM4GVF O/O(random); KB8RQ O/O(random); Ø9.Ø4.84 F6BSJ 439/319(random); 14.Ø4.84 K6MYC O/O(random); VE7BQH O/O(random); UA1ZCL O/O 16.Ø4.84 W5LUU M/M; Qsos with SM5CNQ,VE2DFO,Y22ME and UA3TCF are not comp. Heard: HB9SV- SM2ILF-K1GVM-WA1JCL-SM7BAE-WD8ISK-I1RSQ-K2OS-KXØo- W5UN;

DL8DAT: Manfred starting on Moonbounce in 1982 with 8 times 14 elm.Parabeams After some EME-work he starts in Spring 83 to make some improvement at first with the Antennasystem.The new Tower (18-meters) consists of an old crane. Dimension of the new Antenna is now vertical 10.8 m and horizontle 12m. The max.Elv.went up to 80 degrees. I am using RG213+RG218 to feed the Ant. But from the main powerdivider I must put "85-meter" of 60 Ohm Flexwell to the Two-Tube-Amp.The Transistor for the Preamp. is a CFY 14. Transmitter is the FT225RD + Driver (2x2C39). On the receiving side I am using the R4C(Drake) + Converter + AF-Filter.

Here the 16 times 14 elm. Parabeams! Biggest 2m-EME-Ant. in DL!



I got some trouble (qrm) with a nearby High-Voltage-Line. But it was possible to work some new Stations.
Now the impressive List! Dec.1983: UK5JAX ; K9TI ; K9MRI ; K9RX ; K5WE ; W5LUU ; W7PU ; LA9FY ; WA2GSX ; WB5LBT ; K6MYC ; W9BOZ ; YV5ZZ ;
Jan.1984 : OK1MBS ; DJ5MS ; UR2RQT ; SM5CNQ ; K2OS ; VE2DFO ; VE1UT ; WA4NJP JA9JCJ ; UB5JIN ; UB5JW ; UA6LJV ; EA3ADW ; Z6AVL ; SM5MIX ; SM3AZV ; SM3LGO; WB6ESQ ; Feb.84 : OK2TU ; F6BSJ ; W5JTL ; K9YV ; W6XJ ; W1JR ; W7C ; K1GVM; W4DMK ; K6MYC/KH6 ; KD6R ; SM5CFS ; K6JYO ; F6CJG ; K1BKK ; WA4CQG ;
March 84: UA9FAD ; UA4NM ; ON7RB 1 LA9BM ; K2IP ; WA5LIE ; SM2ILF ; OZ1ASL ; UD6DFD ; SM2CKR ; F9HS ; OH6CH ; YU3WV ; F1HI ; PE1AGJ ; G4PUF ; WD8ISK ; WA4PNW ; April 84: WA1JXN/C6A ; SM3AKW ; LA1K ; HB9QQ ; DF3RU ; K3MD ; KPØM; K6PVS ; RO5OAA ; PA2VST ; G4ERG ; CT1WW ; OK1KRA ; K1IKN ; W4ODW ; UG6AD ; W5UWB ; F1PHI ; WB4KNF ; WD4DGF ; now its ending for today. My working status now : 151 different Stations.

Thank you for super Info Manfred!

DL8MAS: I am qrv on EME since October 1983 with 4 times 11 elem. DL6WU-yagis At the feedpoint I am using a preamp with S3030 (0.7dB)NF. The output power is about 700 watt. (wich is not enough)
My first QSO I did with SM2GGF on 26.1Ø.83 Report on both ends: 0/0 ;
Wkd also: SM5FRH 0/0 ; Hrd: KB8RQ-UA1ZCL; 29./3Ø.1Ø.83 (EME-Test) : I wkd K1WHS 0/0 ; SM2GGF 0/0 ; W5UN 0/0 ; WA1JXN/7 0/0 ; VE7BQH 0/0 ; YU3USB 0/0 ; K9HMB 0/0 ; I2ODI 0/0 ; Hrd: HB9SV-LA1TN-SM7BAE-SM5FRH-KB8RQ-OK1MSB-OK2TU PAØOOB-G3POI-DJ5DT-OZ1EME; 26./27.11.83 Wkd: SM5FRH 0/0 ; OZ1EME 0/0 ; after that I must go qrt because of heavy wind. Hrd:: HB9SV- LA1TN-SM4IVE- and UA1ZCL; 14.Ø1.1984 QSO: K1WHS 0/0 ; 15.Ø1.84 QSO: YU3USB 0/0 ; called K1FO; 18.Ø1.84 called YU3ZV - got only QRZ? 21.Ø1.84 Wkd. SM7BAE 0/0 ; W5UN 0/0 ; Hrd and called KB8RQ-DL8DAT- W5UN-WA1JXN; 22.Ø1.84 Hrd: VE7BQH-WA6MGZ ; 11.Ø2.84 Hrd and called : DK1EM-DL8DAT-UA1ZCL-HB9SV-OZ1EME-WA1JXN-SM2GGF-K1WHS; All QSOs I worked on random but it was not very easy to got good results with qrp-power.

LZ1QM: A long letter is comming via DL9KR to me. He reports: At 27.11.1983 I worked my first EME-Qso. Station on the other side was I2ODI. Signal report was solid "O". We Hrd: W5UN- SM2GGF-YU1AW-K1FVD?-K6MYC and many other signals The rig is very simple; I am using the TS770s with a BF981 Frontend,a single 4CX250B and only one 16el.yagi. For the near future I will build up 4 times 7 el. Quad-Antennas and a high power Amp. with two Tubes.

SP5CJT: Here is very big news! On May 5. he got his FIRST EME QSO with SM7BAE. I loose the other two skeds with SM2GGF and DL8DAT because of thunder storm. I will be QRV again on May 27. between 02.00 and 06.00 utc. At the present time I am Using 2 x 3,2lambda yagis but soon I will set up 4 yagis.

SP5CIC/SMØ: Paul worked on May Ø6. SM2GGF and SM7BAE with only a single 19 element Cushcraft Boomer. I could copy also very well DL8DAT in the sked with my Brother.

432-432-432-432-432-432-432-432-432-432-432-432-432-432-432-432-432-432-432-432

F1FEN: EME-Report from Locator "JN25JC" I worked: 14.Ø2.84 K6MYC/KH6 M/M; 17.Ø2.84 DF7VX 0/0 ; I5MSH 43/44 SSB; 18.Ø2.84 DK1PZ 0/339 ; ON4DY 0/0 ; 12.Ø3.84 WA1RWU 559/559 ; 15.Ø3.84 DK1PZ 339/439 ; 16.Ø3.84 WA1RWU 559/559 WA1RWU 43/43(SSB) ; K5AZU 0/0 ; W1ZX/3 0/0 ; 17.Ø3.84 SM2JCP 0/459 ; W1JR 0/0 ; K2UYH 45/45 (SSB) ; WB3ESS 0/M ; W7GBI M/439 ; G3LTF 0/0 ; VK5MC 0/0 ; 18.Ø3.84 N4GJV 449/459 ; W5HUQ 0/0 ; HB9G 439/549 ; K3QCQ 0/0; 19.Ø3.84 W6ABN ;

OE9XXI: Peter reports 12./13. Feb.84 we worked DK1PZ 449/449; F1PHI 449/449; K9HMB 449/449 ; KL7WE 549/0 ; and G3SEK. Nil in the sked with K6MYC/KH6 ,but heard him later working LX1DB. Also hrd: K5WXN-K2UYH-WBØTEM-VE7BBG-and K5AZU. On the 14. at 04.11 K6MYC/KH6 (0/M- but not sure about final rogers.because of Moonset)! Hrd: G3WDG-N9AB-and K5PF.
On the 17./18.Feb.84 we contacted : HB9SV 549/449 ; G3LQR 0/- partial(qrm) ; F1PHI 449/449 ; DF3RU 439/449 ; G3HUL 439/0 ; G3LTF 549/539 ; SM5CPD 449/439; ON4DY 449/449 for initial 79:and country 21; DL7QY 549/429 ; W6ABN 549/339; K2UYH 559/449 ; WB3ESS 0/T partial; K5AZU 439/559 ; and WØRAP 0/0 initial 80; Hrd: W8IDU-DK1PZ-W5ITI-K4PKV-W7FU-N4GJV-OK1KIR-N9AB-HB9G and F6CGJ ;

F6CGJ: I worked my first EME-QSO on 26.11.83 ; The signal from DL9KR peaking 559. The rig consists of 8 times 20 elem.yagi, K2RIW-Amp. with 1KW, and a NE 720. In the near future I will try to improve and modify my system a little bit.

F1PHI: Jean Paul writes something about the problems with the "SYLEDIS-Navigation System. It is located at the French coast and in the south of England. The System causes QRM every 15kHz and is affected by Amateur station working on 432MHz. So it is extremly difficult to work on EME when the Moon is close to the horizont. (Remarks by DF7VX : It is possible under low Tropo condx to copy the QRM here in QRA- EL24c !!)
Now my activity: Ø1.1Ø.83 Wkd I5MSH 0/529 ; YU1AW 559/439 ; OE5JFL 0/0 (random); Ø2.1Ø.83 F1FEN 0/M (sked); 29.1Ø.83 (Contest) DL9KR 529/449; YU1AW 529/539 ; JA6CZD 449/449; OE5JFL 429/439 ; OE9XXI 0/0 ; G4EZN 0/0 ; I5MSH 519/449 ; 21.11.83 K5JL 0/0 and 41/52 on SSB random! 15.Ø1.84 N4GJV 0/M random; 2Ø.Ø1.84 HB9SV 0/0 random; 21.Ø1.84 G3LTF 0/0 ; F1FEN 519/0 ; SP5CIC/SMØ 0/0 random; G3SEK 0/M random; W5ITI 0/0 random; DJ6MB 0/0 random; 22.Ø1.84 DK1PZ M/0 ; Ø9.Ø2.84 DL9KR 549/459 and 44/43 on SSB; N4GJV 449/0 ; 12.02.84 DK1PZ 0/0 ; OE9XXI 449/449 ; 13.Ø2.84 K2UYH 549/449 ; 14.Ø2.84 K6MYC/KH6 0/M not complet; 16.Ø2.84 K5AZU 0/0 ; 17.Ø2.84 I5MSH 44/43 on SSB; F1FEN 51/51 SSB ; OE9XXI 449/449 ; DL7QY -/0 (NC) ; 18.Ø2.84 ON4DY 0/0 on a sked; 19.Ø2.84 K5JL 449/449 ; SM2JCP 0/0 ; W6ABN 0/0 W5ITI 449/449 ; All contacts on random. Working status now : 54 QSOs with 32 different Stations. On 17.March I got a super SSB-QSO with K2UYH report was 55/53. Al looks like a Tropo Signal. My Rig: 16 x 21elem.yagi +NE 244 + a single 4CX250B with 500 watts Rf.

DJ6MB: Uwe worked during the November part of the contest: F1FEN 0/0 ; HB9SV 339/0 ; OE9XXI 0/0 ; F9FT 349/339 ; SMØDJW 439/449 ; DJ9DL 339/339 ; 27.11.83 F2TU 449/449 ; SP5CIC/SMØ M/0 ;
Closed the station at 01.30 for some sleep.Back at7.00 I found no signals and no echos. So I thought condx must be bad. The next two hours I have heard nothing. After that time I am moving outside to see whats going on with my antenna. And here are the mistake-the Ant.-position was Ø degree,but the Rotorcontrol is pointing to the 40 degree mark.
In Dec.83 I am agn qrv. So wkd: DL9KR 53/52 on SSB; G3LTF 439/439 ; OE5JFL 539/439 ; Jan.1984 wkd: 20.Ø1. VK5MC 0/0 (new + nr.54) ; SM2JCP 529/529 (new + nr.55); 21.Ø1. G3LTF 439/439 ; F1PHI 0/0 (new + nr.56) ; JA9BOH 339/339 ; My working status now: 121 EME-QSOs with 56 different Stations. 120-QSOs only on random!! In the next time I will improve my Ant. and will build up 12 times 21 elem. Yagis.

DF9CY: Chris reports: 11.12.83 hrd fb my own echos at apogee. 17.12.- hrd KL7WE -K5JL-G3LTF ; 16.12. Worked: G3LTF 0/M (nr.12) ; hrd my echos down to 70w. 23.12. hrd DF7VX-DL9KR-DJ9DL-G3LTF-DL7APB ; wkd: DL9KR 44/45 on SSB ; 24.12. G3LTF 0/M ;
I had to return the power-amp to DK1UV.....and I became EME-listener again. So I hrd: 21.Ø1.1984 DL9KR-DF7VX-F1FEN-G3HUL-F1PHI-DJ6MB; 22.Ø1. N9AB-K5JL -N4GJV; 16.Ø3.84 OK1KIR-F1FEN-I5MSH-F1PHI-HB9G-SK4BX-OE5JFL-WA1RWU ; 17.Ø3.84 G3SEK'SM2JCP-W1JR-K2UYH-SP5CIC/SMØ- G3LQR-G3LTF-N4GJV-K2UYH-ssb- 18.Ø3.84 I5MSH-DL9KR-CT1WW; Ø7.Ø4.84 DL9KR-VK5MC-DF7VX-HB9G-DJ6MB-SP5CIC /SMØ-DK1PZ-SM2JCP-LX1DB-WA1RWU-OK1KIR-KU4F-K2UYH-W8WA-W6ABN ;
Ø5.May hrd DL9KR-N4GJV-OE5JFL ...found condx not the best and poor activity and some water in the lower antenna-connections,wich degraded sunnoise by 4 dB. I have a very limited Moon-window and I need more than 15 degree Elev. in the east and 35 degrees Elev. in the west.

DK8MA/p: DK8MA/p ist eine VHF-UHF Contestgruppe deren Operator DK8MA,Tilly DL9MCC Hans, DL1MBV Bernhard und DB5ML Michael sind. Nachdem im Juni 83 beschlossen wurde am EME-Contest teilzunehmen,begannen arbeitsreiche Monate. Es entstand eine PA nach K2RIW,die H-Konstruktion für die 16 Antennen mit Azimut und Elevationsschwenkung wurde angefertigt,die Koppler gebaut und die Speisekabel konfektioniert. Am 22./23. Oct. wurde die Antenne aufgebaut und das Shack eingerichtet. Am Abend des 23. wurde die PA in Betrieb genommen und die ersten Echotests durchgeführt,welche aber wegen des fehlenden Vorverstärkers nicht zum Erfolg führten. Außerdem mußte festgestellt werden,daß die PA bei höheren Leistungen nicht einwandfrei arbeitete.
Am 24.Oct. war es dann soweit! Nach der Installation des VV. wurden um 21.00 die ersten Echos gehört. Wie ein Versuch mit einem Viertel der Leistung ergab,lagen sie gut 6 dB über dem Rauschen.Am 28.Oct. wurden die letzten Änderungen vorgenommen,ab sofort diente ein 10m Stück 3/8"Flexwell als Speiseleitung und Peter DJ6XH stellte seine PA mit einer TH308 zur Verfügung. Um 23.13utc wurde mit YU1AW (529/449) die erste Verbindung getätigt.
Als erste Station im Contest wurde um 01.00utc OE9XXI (O/O) gearbeitet. Es folgtenam 29.10.83 YU1AW 529/449 ; DL9KR 529/439 ; HB9G O/O ; OE5JFL 529/439 ; OH6NU O/O ; N9AB O/M ; K4QIF O/O ; K2UYH 429/449 ; N4GJV O/O ;
30.10.83 JA4BLC O/O ; JA9BOH O/O ; DJ9DL O/O ; DJ6MB O/O ; G3LTF O/O ; G4EZN O/O ; JA6CZD 549/549 ; OK1KIR O/O ; I5MSH 529/449 ;
26.11.83 UA3LBO O/O ; DK1PZ 539/449 ; F2TU O/O ; HB9SV O/O ; I2COR O/O ;
Gehört wurden: YU2RGC-KAØY-W5ITI-LXØWCY-VE4MA-W6ABN-K5AZU-ON4DY-KL7WE-SMØDJW-DJ8QL-K9HMB-DL6NAA-F1FE ;
Am 26.11.83 um 8.13 war der Contest für uns leider zu Ende. Im Heftig tobenden Sturm war eine Abspannung gerissen,was den Verlust der Antenne zur Folge hatte.Wir hoffen jedoch nach den nötigen Reparaturarbeiten 1984 wieder dabei zu sein.
Die Zusammenarbeit mit Bernhard DL8MAS, der auf 144 MHz 10 QSO's und 9 Multiplikatoren erreichte,ergab zusammen mit den 24 QSO's und 14 Multiplikatoren von DK8MA/p eine Gesamtpunktzahl von 78200.

DK8MA/p nach dem heftigen Sturm

144-SWL-144-SWL-144-SWL-144-SWL-144-SWL-144-SWL-144-SWL-144-SWL-144-SWL-SWL-PA-3249 : Here some info from Herni. I received 11.3.84 F6BSJ; 12.3.84 UA1ZCL ; DL8DAT ; 17.3.84 VE7BQH ; OK1MBS ; K7KOT ; 7.4.84 : WA1JXN/C6A ; SM2GGF ; VE7BQH ;
PA3BIY : he was qrv on 6./7. April with my 4 times Flexa-Yagis (11el)! We are using only 500watts and so it was possible to work VE7BQH and SM2GGF. The comment from PA3BIY : Antenna from PA-3249 works very nice!
After the Sked was something wromg with the Preamp. but we heard on 7.4.84: SM4IVE and on 8.4. SM2ILF without the Preamp.but 40m of H-100-cable.

1296-1296-1296-1296-1296-1296-1296-1296-1296-1296-1296-1296-1296-1296-1296

OE9XXI: Peter is very activ with his improved Dish. So he wkd:
Ø2.1Ø.83 GW3XYW 449/449 ; WB5LUA 549/549 ; WA8NLC 349/349 ; YU1AW 449/559 ; OE5JFL 549/549 ; VE7BBG 54/54 on SSB! LXØWCY 549/559 ; OE5JFL 44/44 on SSB 21.1Ø.83 DL7YC M/M only 2m Dish; 22.1Ø.83 OE5JFL 44/55 SSB ; 25.1Ø. HB9BGN O/M ; 19.11.83 F6EZA 439/0 ; 25.11.83 559/459 ;
Now ARRL-EME-Contest: 3Ø.1Ø.83 K2UYH 449/449 ; OE5JFL 549/549 ; HB9SV O/O G3LTF 549/549 ; HB9BGN O/M ; DFØEME 329/449 ; W7GBI 549/549 ; WA8NLC 449/559 ; LX1DB 559/559 ; YU1AW O/O ; VE7BBG 54/54 SSB ; YU2RGC M/O ; VK5MC 449/0 ; OK1KIR O/O ; 26.11.83 OE9FKI M/M (3m Dish MGF 1402,4x2C39+linpol) ; 27.11.83 SM6CKU 449/339 ; DJ8QL O/O ; WB5LUA 549/559 ; K4QIF 439/439 ; G4CCH M/O (2,4m Dish ,MGF1402, 6x2C39=450w + circ.pol.)
Hrd: N6CA (16xLoop Yagis,260w)
17/18.Feb.1984 : VK2AMW O/O for initial nr.37 ; OK1KIR 439/449 ; DJ8QL 439/0 WA8NLC 339/449 ; and VE7BBG 549/549 ; Heard were N6CA and W7GBI .

2300-2300-2300-2300-2300-2300-2300-2300-2300-2300-2300-2300-2300-2300-2300

OE9XXI 2,3 GHz EME Report: Peter schreibt, Wir waren am 17.und 18.Dec. 1983 für den verabredeten EME-Versuch mit DFØEME auf 2320,2 MHz qrv.
Mit dem 8,6-meter Spiegel ,gespeist von einem lin.pol.Horn und einem 2-stufigen Vorverstärker mit MGF 1412 arbeitete unser Empfangssystem sehr gut. Wir verzeichneten 14,5dB Sonnenrauschen, 4dB(therm) Rauschen von der Erdoberfläche(und konnten auch therm.Rauschen des Mondes feststellen)! Der Output mit einer YD1304 PA betrug 130 watt (entspr.60 bis 80 W am Horn). Angesteuert wurde über eine 2C39-Treiberstufe (18)Watt von einem selbstgebauten Transverter.
Die eigenen Echos waren mit max.13dB über Rauschen (in 200 Hz Rx-Bandbreite) zu empfangen. Wir waren in der Lage Echos noch bei 5-Watt (entspr. ca.3W am Horn) Output festzustellen.
Am 17.Dec. um 23.30 startete die DFØEME-Gruppe ihre Testsendungen.
Wir empfingen das Signal mit max: mehr als 25dB!!!!! über Rauschen bei 200Hz Rx-Bandbreite. Es war dies das stärkste Signal,das wir jemals via Mond empfangen haben. Unglücklicherweise waren die Signale mit einem starken "Chirp" behaftet-wir konnten jedoch auch mit reduzierter Leistung bei DFØEME ausgezeichnete Signale ,was die Eingangsspannung betraf,empfangen.
Um 23.45 hatten wir unseren ersten 13cm-EME-Kontakt komplett mit Rapporten "O/M" (DUBUS - gratuliert herzlich!!!)
Scheinbar hatte DFØEME Probleme mit ihrem Empfangssystem.

Here a suggestion for 2300MHz-EME-Activity:
Frequencies: around 2320.150 and/or 2304.050 (crossband NA-EU)
Polarization: circular like 1296-EME standart

Stations qrv at present: DFØEME , LX1DB , OE9XXI ; G3WDQ* hrd at EME-Net
Stations to be activ in the near future : OK1KIR,WB5LUA,PAØSSB,WA4HGN;
Stations interested on 13cm-EME : WA8NLC,VE4MA,OZ9CR,W1JR,OE9FKI,G3LTF,W4hhk, SP5CIC/SMØ,VE7BBG and more .

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DK1UV: Dieter is now qrv on 432MHz-EME; He wkd: N4GJV, DL9KR, OE5JFL, and some others. His Rig: YL1050-PA+MGF1402+4xDL6WU-Yagis with open wire Feedline
CT1WW: Tiago is fully operation with 8-Yagis. He wkd: I5MSH, G3LTP, and DL9KR on 432MHz. UB5GBY and UY5HF also very new on 70cm-EME. UY5HF received only 10dB of sunnoise with his 8 times 21elem. Yagis. DK1PZ: Heinz writes that he can get 13dB!! of sunnoise with only his 4 Yagis. Its also possible with his Antennasystem to receive the cosmic-Noise-soures (Cass. etc) with 3- to 4dB all the Days. DF9CY: Chris build up a new Power-Amp.!

73's Hellmuth DF7VX

Es INFORMATIONS

DF9CY (EL02w) wkd in 1983 on June 11th at 1200 SV1DH/A MX01g 59 59+, 1230 SV1JZ LY71e 52 54, 1232 SV1DO LX19c 52 hrd and 1236 SV1EX LX77 55.
On June 17th at 1625 9H1CG HV 55, 1627 GI3TLT XO33 59+ (back of beam), 1630 UB5JIZ QF18j 57, 1633 GI4SIP XO 59 (back of beam), 1642 UA6YAF TE 599 599 (>2358km), 1650 UY5HF QG24f 59 59, 1654 UA6ACG TE 55 59, 1656 UB5GOZ ?? 53, 1659 UB5JIZ QF 59++ hrd agn, 1702 UB5JMZ RE01f 57, 1707 UB5GHU ?? 53, 1715 UB5GFS RG?? 53 59, 1717 UB5GHU QG24f 549 599 and 1720 RB5GEY QG24f 55.
On July 15th at 1710 I7KOE JA62e 59 59, 1712 I8GAF IY11c 59, 1715 I8ASQ ?? 56, 1717 I7TUS IZ52f 59, 1722 I2KSX/8 HY40h 59 59, 1723 IT9JLU/9 HY 54, 1726 I8KNO IY21g 59++ and 1837 IT9JLU/9 HY68h 59 59 (one hour after the end of main opening).
On Aug. 4th at 1617 EA1BLA VD39 59 59, 1633 EA1ED ?? 53, 1634 EA1M?? ?? 57, 1635 EA1BBA ?? 53, 1647 EA1QJ VD 59 59, 1647 EA1TA VD58a 59 59 and 1648 EA1BLA VD39 59 59. tks fer info Chris.

EA4AAW (WZ49g) wkd in 1983 on June 11th at 1723 9H1BT HV 59 59, 1728 9H1FL HV 59 59, 1734 9H1FW HV 59 59, 1738 9H1CG HV 59 59, 1740 9H1CD HV 59 59 and 1803 EA8XS GO 59 59.
On July 2nd at 1144 OK3KZR IJ 59 59, 1144 OK9ZR IJ 59 59, 1146 DL5MAE FJ 59 59, 1148 DC6AH GI 59 59, 1150 DF9RJ GI 59 59, 1150 DF9MVC GI 59 59, 1155 I3LGP ?? 59 59, 1155 OK1FM GJ 59 59, 1218 DF6IY EI 59 59, 1221 OE5EFM HI 59 59, 1223 OE5KE HI 59 59, 1223 OE5DL GI 59 59, 1224 DL4WAA EJ 59 59, 1225 DF8IK EJ 59 59, 1226 DF5BN EJ 59 59, 1227 DB8UF EH 59 59, 1228 OE3WH IG 59 59, 1229 OK2KAU JJ 59 59, 1231 OK2BTI JJ 59 59, 1232 OK2BRP JJ 59 59, 1233 SP9AI JJ 59 59, 1234 OK2KWI JJ 59 59, 1235 OE5EFM ?? 59 59, 1242 DK6AS FM 59 59, 1301 DK1DO FM, 1303 DK1KO FN 59 59, 1304 DL1EAF DL 59 59, 1304 DL8AB ?? 59 59, 1306 PA3AWV DM 59 59, 1313 PA2GFL DM 59 59, 1313 PA3CGR DM 59 59, 1314 PE1ACB DM 59 59, 1315 PA3CDD DM 59 59 and 1318 DK1OM DM 59 59.
On July 4th at 1753 I6ECT ?? 59 59, 1756 I0EEO ?? 59 59, 1757 IU9AOR HV 59 59, 1809 I6WJB HC 59 59, 1813 YU2RIT ID 59 59, 1814 I0UZF GD 59 59, 1836 IT9TU HY, 1839 IT9DTU/9 HY 59 59 and 1841 IU9AOR ?? 59 59.
On July 7th at 1455 9H1BW HV, 1456 9H1ED HV, 1502 IW9AJZ/IH9 GW, 1509 9H1FL HV, 1523 9H1GK HV, 1530 9H1KI HV, 1550 IW9AWS GX, 1827 EI2CA WM, 1828 GI6ATZ XO, 1829 GI2RAP XO, 1832 GI4OMK XO, 1834 GI4OPH XO, 1838 GM3WCS YQ, 1840 GX3BW YO, 1843 GW6DDB XW, 1843 GW8FKB XW, 1845 GW8VPY XM, 1847 GI8GWH XO, 1849 GM4SGB YQ, 1851 GW3WYY XL, 1852 GW3YUJ XW, 1856 GW8ELR XL and 1917 G4DOL YK.
On July 10th at 1037 IW9CR/I0-SMY XV 59 59, 1837 9H1GB HV 59 59 and 1837 9H1CG HV 59 59. On July 15th at 1744 IW9AWR GX and 1835 I7ECT HB.
On July 16th at 1610 I2FAK EF, 1611 IW2ABM FE, 1613 I3PGA FF, 1614 IW2BEH ??, 1616 I2ZTI EF, 1619 YU3C HG, 1623 I3LGP ??, 1624 DK3ZB ??, 1704 DK4MM EK, 1710 HG5KDQ JH, 1713 HG1YA IH, 1716 HG1W IW, 1718 OE8QF HG, 1721 HG1KVM IH, 1722 OE6LOG HG, 1723 HG4YF JH, 1724 OE6WIG HG, 1725 OE6WVG HG, 1727 HG2KRD IH, 1728 HG5CJ JH, 1729 HG7PR JH, 1738 HG8ET KG, 1739 HG8CE KG, 1740 YU2RJP ??, 1741 YU2FF HF, 1743 YU2EZA IG, 1744 YU2DA IG, 1746 YU3TKB HF, 1747 YU2LOG IG, 1748 YU3DLF/3 HG, 1749 YU3TKB HF, 1750 YU2SZZ IG, 1751 HG8KCP KG, 1829 I2WSG EF, 1831 IW2BXY FF, 1833 I3LGP GP, 1834 YU3ORQ HF, 1834 IW2BXY FF and 1836 IV3HWT GF.
tks fer info.

OK1MBS (HK48a) wkd in 1983 on June 7th at 1501 EA6MR CZ. On June 10th 1622 EA4QR YA. On June 15th at 1615 EA3LL AB, 1629 EA5DFY AY and 1700 EA3DXU BB.
On July 15th at 1612 9H1FL HV, 1615 9H1GB HV, 1616 9H1GP HV, 1617 9H1B HV, 1621 IT9BV HX, 1626 IT9XIX HX, 1628 9H1E HV, 1629 9H1BT HV, 1632 I8TUS IZ, 1635 IT9DTU/9 HY, 1638 9H5I HV, 1640 IW9AYW HX, 1643 9H1FN HV, 1644 9H1CG HV, 1645 IW9AIG/9 GY, 1646 IT9JLG GY, 1649 IT9WPO HX, 1651 9H1GK HV, 1654 IW9ANR GX, 1657 IW9ABZ GY, 1701 IT9UBA GX, 1705 9H1? HV and 1718 IT9OAA GY.
On July 16th at 1724 EA5BPC ZY. On July 21st at 1146 9H1GB HV, 1151 9H1CG HV, 1152 9H1HV HV, 1156 9H1CG HV and 1158 9H1FL HV. tks fer info Standa.

SP1FPG (HN33c) wkd on June 15th 1983 at 1613 EA6AU BZ55d and on July 2nd 1983 at 1944 LZ1KKA/p LC. tks fer info Henryk.

CT1HW (HB63b) hrd on May 16th 1983 on 90 MHz from 1800 to 1900 Germany 59.
On June 9th he hrd on 102 MHz from 1000 to 1200 Italy 59.
On June 10th on 102 MHz from 1600 to 1800 Italy 59.
On June 15th 1983 at 0800 on 102 MHZ Italy, Jugoslavia and Arabia with 59. Then he wkd via Es in SSB on 144 MHZ at 0825 I4MKN GE73b 59, 0826 YU2IQ HE77h 59, 0827 YU2NDV GF79d 59, 0829 IW2BXY FF61f 59, 0852 IW1AKP GX 59, 0941 IW9AJZ GY67c 59, 0941 IS0SCB EZ66a 59, 0944 IW9ANS GX25a 59, 0953 IW9AOR HY58j 59, 0954 I8YZO HY40a 59, 0955 IS0RHF EZ67h 59, 0956 IW9AQS GX13g 59, 1510 IW5AVM FE16e 59, 1511 I3TJQ ?? 59, 1512 YU2LOG IG54f, 1514 YU3UQX ?? 59, 1515 YU2?Q ?? 56, 1516 YU2UL J? 59, 1608 HG8CE KG 59, 1609 HG8KAX ?? 57, 1610 HG8UG ?? 57, 1611 YU3TBA HG64b 59, 1613 YU3ZW IG 59, 1614 YU3CAB ?? 59, 1615 HG5AIR ?? 59, 1616 YU3EW IG22f 59 and 1617 YU3TCK IG22f 59.
On June 16th he hrd on 90 MHz from 0700 until 0900 England 59.
On June 17th on 102 MHZ from 1000 to 1100 Italy 59.
On June 20th he wkd on 70 MHz at 0732 G3ENY YM38d 59, 0738 EI6AS ?? 59, 0745 GW3LDH ?? 57, 0832 GW4HXO ?? 57, from 0900 to 1000 he hrd EI4RF WN38c 59 (Beacon Dublin),wkd 0913 G4TCX ?? 59, 0917 G4JCE ZK16g 59, 0925 G4KNJ ?? 59, 0958 G3UVR YN55j 59, 1419 G4BPY ?? 55 and 1734 GM4DIJ YP04c 59.
On June 30th he hrd on 100 MHz from 0930 to 1100 Italy and on 90 MHz from 1300 to 1400 Germany.
On July 1st he wkd on 70 MHz from 0030 to 1045 GW3HHW 53, G3UMH ?? 53 and G3ENY ?? 53.
On July 2nd he hrd from 0900 to 1300 on 100 MHz Germany 59. Then he wkd on 144 MHz at 1139 YU4GJK/p4 JE53e 59, 1148 YU2CRS ?? 59, 1149 I4UJB GE 59, 1149 I4MEY GE 59, 1150 I3NO ?? 59, 1151 IW4ARD GE73f 59, 1152 I4FDX ?? 59, 1153 IK4BCZ GE 59, 1155 OK3KAP/p JI24f 59, 1157 OE3LFA II52g 59, 1200 OK3CNW GE 59, 1200 OE3SRA ?? 59, 1201 OE5DDL GI 59, 1202 OE5DLL ?? 59, 1203 OE3EFS HK69g, 1214 DL8MAS FI79h 59, 1214 DD9YB ?? 59, 1215 DK5RV GI18c 59, 1215 OK2KZR IJ32j 59, 1216 DL5AAV ?? 59, 1217 DB5ML FI67g 59, 1218 DC0MJ FI60j 59, 1218 DJ5MS GI51e, 1218 DC6AH GI15g 59, 1219 DK1MAC HJ47e 59, 1219 DF9RJ GI13j 59, 1220 DL5MCG GI55a 59, 1221 OK2VMD IJ54g 59, 1221 HG1KZC ?? 59, 1221 OK1YA/p HJ35d 59, 1221 DG9MAQ FI45d 59, 1222 OK1NH GJ59j 59, 1223 OK2PW IJ32f 59, 1223 DF7RX FI10j 59, 1223 OK1KWP/p HJ47e, 1224 OK1KKH HJ07j 59, 1224 OK1KCB/p HJ04c 59, 1225 OK1KGS/p HJ35j, 1225 DJ4EJ EI03c 59, 1225 DD5KD EI55j, 1226 DG8GP EI66h, 1226 OK1KSH/p IK62b, 1227 DK9TU EI62h, 1228 DJ3TF ?? 59, 1229 DL4RBK FJ50g, 1230 OK1KCR HJ19d 59, 1230 DF0AS FJ39d 59, 1230 DC9NH FJ 59, 1231 DL9NBE FJ46d 59, 1232 OK1K? ?? 59, 1233 DL1GBF EI46e 59, 1234 OK1KDO/p GJ54b 59, 1234 OK1DFA ?? 59, 1235 DG8SAB EI27? 59, 1235 DG6SAE EI 59, 1238 DD8NG FK60e 59, 1239 DG6NAA FK68e 59, 1240 Y24XN/p CK43f, 1240 DF6IY EI02a 59, 1241 DL2NBO FK70b 59, 1242 DL6NAA FK 59, 1242 DJ9EV EJ77g 59, 1243 DB8UY FJ08e 59, 1243 DK2DB EI03g 59, 1244 OK1KQK/p GK53b 59, 1244 DL6NAA FK 59, 1245 DC4WP ?? 59, 1246 DG8NAQ FJ56h 59, 1246 DG7NR ?? 59 and 1248 DL4RBF ?? 59.
On July 5th he hrd on 102 MHz Italy 59+ and wkd on 144 MHz at 0945 I0LYL GB23c 59, 0947 I8MSY HA22d 59, 0948 I8REK HA12h 59, 0949 I0WWJ GB22a 57, 0951 I0AWZ ?? 56, 0953 IW8BOS GB22a 57 and 1009 I0AKP GB13? 57.
On July 7th he hrd on 102 MHz from 0630 to 0930 Italy 59, from 1500 to 1700 again Italy and Malta 59, and from 1700 to 1900 on 100 MHz England 59. Then he wkd on 70 MHz at 1615 G4IDE YM30e 55, 1620 G3VIP ZL 55, 1720 G4IDG YM40a 57, from 1723 to 1814 he wkd GU2HML ?? 57, G4BAO AM61b 57, EI6AS ?? 57, G4KUX ?? 58, GW3LDH ?? 57, GM3PYQ ?? 56, 1814 GM3WOJ YP72c 59 and 1840 G3UHH ZN08c 59.
On 144 Mhz he wkd at 1840 G6EZI ZL31j 59, 1842 G4DOL YK28e 59, 1843 G4AWU ZN45? 59, 1843 G4DHF ZN13? 59, 1844 G6DYL ?? 59, 1844 GBKBQ ?? 59, 1845 G4IGO YL38c 59, 1846 G4TIF ZM53e 59, 1846 G4SOX ZM517 59, 1848 G4KLX ZN73e 59, 1849 G4NQO ZN68a 59, 1850 GBKBQ YL77h 59, 1850 G?NKU ?? 59, 1850 G6MBY ?? 59 and 1851 G4LOH ?? 59.
On July 16th he wkd on 144 MHz at 1714 YU2RCS GF 59, 1715 YU2RJP IF11g 59, 1715 YU2RQQ ?? 59, 1716 YU7AR KF01e 59, 1717 YU7QCN ?? 56, 1718 YU7KMN JF16e 57, 1718 IV3HWT GF18c 59, 1718 YU7JUV JF19g 59, 1719 YU2QU IF03? 59, 1720 YU1AWW ?? 59, 1720 YU7AU KE04? 59, 1720 YU7BCX KF 57, 1721 YU2AAX GF69h 59, 1722 YU2BRS JF50? 57, 1723 YU7KQN JF07e 59, 1725 YU7PXO ?? 56, 1725 YU2SG ?? 55, 1725 YU2SET IF45g 55 and 1726 YU2CCB IF35c 59.
On July 17th he wkd on 70 MHz at 1149 G4IDQ YM15b 59 and G4JLH ZK24b 59.

On July 21st he hrd from 0800 to 0900 on 100 MHz Italy 59.
On July 22nd he hrd from 0700 to 0730 on 90 MHz France 59 and wkd on 50 Mhz at 0725 G4GLT ?? 59.
On July 23rd he wkd on 70 MHz at 0900 G4IDE YM30e 59.
On Aug. 3rd he wkd on 50 MHz at 0720 GW3MHW ?? 59.
On Aug. 4th he wkd on 50 MHz at 0725 G5KW ?? 579.
And on Aug. 16th he hrd on 100 MHz from 1000 to 1200 Germany 59.
tks fer info Tiago.

F6DWG (BJ41j) wkd in 1983 on May 31st at 1519 LZ2KBJ LD05d 59 59. On June 6th at 0936 I8TUS IZ71j 59 59. On June 7th at 1400 9H1CB HV13b 59 59, 1404 IT9LQM GX25a 59 59, 1405 IW9ANS GX25a 59 59, 1407 9H4P HW72f 59 59, 1411 9H1FBS HV03e 59 59, 1418 9H1FX HV13a 59 59, 1419 9H1CB HV13d 59 59, 1420 9H1B HV03e 59 59, 1429 9H1FL HV13j 59 59, 1432 IT9TBH GY67d 59 59 and 1456 IT9GSF GY77c 59 59.
On June 12th at 1238 LZ1AG MC63e 599 579, 1242 LZ1CDL MC 599 599, 1243 LZ1QH MC64d 599 599, 1405 LZ2XU MD64d 599 599, 1411 LZ2XW MD79h 519 529, 1443 LZ2XU MD44e 599 599 and 1444 LZ2KAD MC17b 599 599.
On June 15th at 1457 YU5RA KB08j 599 599, 1459 LZ2XU MD44e 599 599, 1459 SV1IQ LX09a 59 59, 1533 SV3QD LY43f 59 59, 1601 9H1GB HV13a 59 59, 1605 SV8JE KY53f 55 55, 1635 LZ1XS NC48a 599 599, 1637 YU7AWH JF70a 599 599, 1640 LZ2QA OD42a 599 599, 1642 YO7DL LE60g 599 599, 1649 IC8DJG HA32b 59 59, 1652 YU1OO KC 59+ hrd and 1701 YU1NPO KE13d 59 59.
On June 16th at 1359 EB7NK YW28g 59 59. On June 17th at 1546 9H1FL HV13b 59 59, 1547 9H1B HV13e 59 59, 1550 IT9JLU HX24a 59 59 and 1558 IT9LFR HW13e 54 59.
On June 20th at 1712 9H1ED HV03e 59 59, 1713 9H1B HV02e 59 59, 1715 9H1FN HV03e 59 59, 1735 IT9ZGY GY67j 59 59, 1736 IT9GSF GY77b 59 59, 1738 IW9ANS GX25a 59 59, 1743 9H1BW HV03e 59 59, 1747 IT9UBA GX59a 59 59, 1749 IW9AND GY67c 59 59 and 1753 9H1GB HV13h 59 59.
On June 22nd at 1657 YO2FP KF27a 59 59, 1658 YO2BP KF27h 59 59, 1659 YO7CBJ QRM 59 59, 1659 YU7EW KF25f 59 59, 1701 LZ2CW MD43f 599 599, 1702 YO7DL LE60g 599 599, 1703 YU1PSF KE13f 599 599, 1705 YU1IW KE 59 59, 1707 YU1AV QRM 599 599, 1708 YU1BKL KE13 599 599, 1709 YU7MBT JF70a 59 59, 1711 YU7AJH JF70a 59 59, 1712 YU1OAM KE13j 59 59, 1713 YU7AU KE14h 59 59, 1713 YU7BCD KE14h 59 59, 1713 YU1ONR KE13d 59 59, 1713 YU7PFF JF 59 59, 1714 YU2DKE JF23f 59 59 and 1715 YU2BOP JF23j 59 59.
On June 28th at 1518 YO7CTI LF77f 59 59. On July 2nd at 1000 I8TUS IZ71j 59 59, 1649 RC2WBR NP75g 59 59, 1653 UA3LAW PO26g 599 599, 1731 LZ1KDZ NC23c 599 599, 1733 LZ1UBK ?? 59 59, 1733 LZ1KDZ NC23c 599 599, 1745 LZ2FA ND40f 599 599, 1746 LZ1UGL MC48g 599 599, 1746 LZ1QA/p OD42c 599 599, 1804 YO3JJ NE41c 599 599, 1819 UY5Oe SK71e 599 599 (ODX 2448km) and 1916 SM1BSA JR34g 599 599.
On July 3rd at 1009 LZ2FA ND40f 599 599. On July 8th at 1520 UB5EFS RI11e 59 59, 1530 UB5GBY QG 59 59, 1533 UY5HF QG24f 59 59, 1534 UB5GBN QG24f 59 59, 1539 UB5JIW RF71g 599 599, 1542 UB5GCF QG27b 59 59 and 1543 UB5GHB QG09b 59 59.
On July 15th at 1656 9H1GK HV16j 59 59, 1702 SV2EN LY40a 55 58 and 1721 SV1OE JA62a 59 59. On July 19th at 1455 9H1FI HV 59 59, 1457 9H1GB HV 59 59, 1906 9H1GK HV 59 59 and 1910 9H4B HW72b 59 59. On Oct. 28th at 1253 YU7NTU KF42d, 1256 YU7QEC KF76f 59 59, 1257 YU7QED KF43f, 1300 YU7GMN KF27d 59 59 and 1333 YU7MAU JF50j 59 59. tks fer info.

LA9BM (EU32g)wkd via Es on June 17th 1983 at 1625 F1BHP ZG65c 59 59 ssb 1711 km. On June 20th at 1708 I5MRA FD22g 59 59 ssb 1882 km. On July 8th at 1629 YU1OHK KE25e 59 59 ssb 1950 km. tks fer info Lmif.

ON1IM (BL79c) wkd in 1983 on June 6th at 1344 I8TUS IZ52f 59 59 (1 min. refl.). On June 15th at 1600 IS0SCB EZ66a hrd, 1608 F0HI/FC ?? hrd, 1635 YU1EV KE13d 59 59, 1641 LZ2VR LD05a 59 59, 1644 YU1IW KE36b 59 59, 1649 IW1AKP/p/IF9 GX02j 59 59, 1650 IW9ANS GX25a 55 55, 1654 IT9VHS GY24j 59 59, 1655 IW9AIB GY27d 55 59, 1657 9H1GB HV12a 55 59, 1658 9H1BT ?? 52 hrd, 1659)h1ES HV13a 53 55, 1700 YU1OO KC10b 59 59, 1706 YU1OHV KD60c 59 59, 1711 YU1PPF KE49? 59 59, 1712 YU1EXY KE13j 59 59 and 1713 YU1BRV ?? 55 hrd.
On June 16th at 1349 EB7NK YW28g and 1350 EA7AG ?? 51 59 (2 min. refl.)
On June 17th at 1550 9H1BT HV12b 59 59, 1551 9H1CD HV03e 59 59, 1552 9H1FL HV13j 51 53 and 1558 IW1AKP/p/IF9 GX02j 52 53.
On June 20th at 1739 9H1KD HV13h 53 59, 1740 9H1BK ?? 52 hrd, 1743 IW9ANS ?? hrd, 1741 9H1BT ?? hrd (short refl.) and 1749 IW9AKP/p/IF9 GX02j 52 53.
On June 21st at 1637 YU1PRV KD16d 53 59, 1640 YU2CB ?? hrd, 1645 YU1EN JE37j 59 59, 1650 YU4BMN JE34j 55 55, 1655 YU4WFM ?? hrd, 1656 YU1OO KC10b hrd, 1703 YU5NR KB08a 52 59, 1706 YU1OO KC10b hrd, 1711 4N4DX ?? hrd and 1724 4N4ZAH JC47h 59 hrd.
On July 2nd at 1157 9H1BT HV12b 59 59, 1203 9H1GK HV12h 51 59, 1745 UB5ZEE PH80a 59 59, 1747 OH2BTQ MU66h 58 58, 1755 OH5IY NU03d 51 57, 1756 UC2ABN ?? 53 hrd and 1756 UB5GBY QG24f 59 hrd.
On July 8th at 1514 UB5GBY QG24f 59 59, 1521 YO4AUL ?? 53 hrd QRM, 1528 UB5GCF ?? 54 hrd, 1530 UB5JIN ?? hrd 59 and 1535 YU6CBN/p/6 ?? 56 hrd. tks fer info.

Here a list of contacts wkd from SP6 via Es in 1983:
SP6ARE (IL65d) hrd on June 7th at 1605 EA5MH. On July 15th he hrd at 1651 9H1GZ 59,wkd at 1655 IW9ANS GX 59, 1700 IW9ACT GY 59, 1705 IW9AIG/9 GY 59, 1715 IT9JU/9 HY 59, 1715 IW9AJZ/IH9 GW, 1718 IT9JLG GY 59 and at 1722 end of the event. On July 29th he wkd at 1930 RA6LRR UI 599, 1930 UB5LHJ SJ 599 and hrd at 1931 UA6ALS. tks fer info.

SP6AZT (IL76h) wkd on June 15th at 1451 9H1BT HV 59, 1624 EA6AU BZ 59, 1625 EA3DXU BB 59, 1639 EA5FDY AY 59, 1641 EA2?? ZB, 1645 EA3BKY AB 59, 1650 EA2AX ZB 59, 1707 EA5YS ZZ 59 and 1709 EA3AQJ BB 59. On June 17th at 1620 EJ0WCY VN 59, 1624 GW8FKB XN 59, 1627 GW6DDB XN 59, 1634 EI5BLB VN 59, 1642 EI3V VN 59, 1646 EI4CL WN 599, 1711 UB5JMZ RE 59, 1713 UY5HF QG 59, 1716 UB5JIZ QF 59, 1719 UB5JIN RE 59, 1730 GI3SXV WO 59, 1735 GI4BPA XO 59, 1809 G3NSM ZL 559 aand 1809 G3IMV ZL 599. On July 2nd he hrd from 1640 until 1700 CT1WW WB63b. tks fer info.

SP6BQA (IK30f) wkd on June 7th at 1501 EA6FB AY 59 and 1508 EA6AU BZ 599. On June 15th at 1405 9H1CD HV 59, 1417 9H1BT HV 59, 1418 9H1FL HV 55, 1420 IT9JLU HX 59, 1424 9H1ES HV 59, 1426 9H1FB HV 59, 1700 EA3AIR BB 59 and 1723 EA2AX ZB 56. On July 15th at 1620 9H5I HV 59, 1622 9H1GK HV 59, 1628 9H1FL HV 59, 1640 IW9ANS GX 59, 1641 IT9JLG GY 59, 1651 IW9AJZ/IH9 GW, 1654 9H1I HV 59 and 1701 9H1ED HV 59. On July 16th at 1718 EA5CM YZ 59. On July 29th at 1934 RA6LRR UI 599, 1935 RB5LGX RK 599, 1938 UB5LHJ SJ 599 and 1943 UA4ALU WI 599. tks fer info.

SP6FUN (IL53c) wkd June 12th at 1248 I8TUS IZ 59. On June 15th at 1358 9H1BT HV 59, 1410 IT9JLU HX 59, 1415 IT9VMT/9 HX, 1421 I8YZO HY 59, 1424 9H1FL HV 59, 1441 IT9Z? GY QRM, 1614 EA5DFY AY 59, 1625 EA3DXU BB 59, 1645 EA4QR YA 59 and 1656 IK8BBG IZ 59. On June 17th at 1710 UB5JIZ QF 59, 1712 UB5GFS RG 59, 1716 UB5JIN RE 59, 1719 UB5JMZ RE 59, 1722 UY5HF QG 59, 1727 GI5SXV WO 59, 1734 GI4TAP XO 59, 1735 GI4LVC WO 59, 1737 EJ0WCY VN 59, 1803 GI6BNI XO 59 and 1805 GI4OPH XO 59. And on July 16th he wkd at 1720 EB5BOD ZY 59. tks fer info.

SP6LZW (JK31c) wkd on June 15th at 1430 EA4QR YA 55, 1432 EA7ABG YA 58, 1433 EB4DF YA 58, 1448 EA1TH YC 59 and 1452 F1MA/p ZD 59. tks fer info.

SP6XA (IL76a) wkd on June 15th at 1412 9H1CD HV 59, 1702 EA5YS ZZ 59 and 1717 EA3AIR BB 59. On June 17th at 1629 UA3YAF TE 599, 1631 EI4CL WN 599, 1645 GW6DDB XN 59, 1656 EI3BNB WN 59 and 1720 UB5JIZ QF 59. On June 19th at 1632 UW6MA TH 599. And on July 29th he wkd at 1920 RA6LRR UI 599. tks fer info.

Please NOTE! Deadline for the summary 1984 ES season report is the 1st October 1984. The DUBUS summary report will be published in issue 4/84.

Bitte beachten! Für den Es Jahresbericht in DUBUS schicken Sie bitte Ihre Infos bis zum 1. Oktober. Der Bericht wird in DUBUS 4/84 erscheinen.

Meteor Shower Information Service May to August

Reprint from BMS Radiant catalogue compiled by Robert A. Mackenzie.

Stream	Date	Maximum	Nr. of Refle.	R.A.	Dec.	Solar-Longit.
Omega Capricornids	Apr.22.-May19.	Apr.30.	4	310	-26	39
Zeta Herculids	May 11.-24	May 18.	3	247	+28	57
Nu Scorpiids	May19.-Jun.20.	May 25	9	261	-37	62
Cassiopeids	May 9.-Jun.20.	May 30.		31	+67	68
Herculids	Jun.8.		var	242	+43	77
Librids	Jun.1.-19	June8.	3	227	-28	78.2
Xi Draconids	Jun.1-13	June9.	2	262	+64	77
OPHIUCHIDS	May19.-Jul.2.	June10.	10	20	-23	78
ARIETIDS	May21.-Aug.1.	June11.	60	39	+24	79
ZETA PERSEIDS	May23.-Jul.5.	June13.	40	63	+27	
Aquilaeids	June2.-30.	June17.	2	297	-07	
LYRIDS	June12.-21.	June17.	8	282	+44	85.5
Pegasids	June16-18	June17.		342	+12	85
Eta Perseids	June14.-25.	June19.		40	+56	87
Beta Cygnids	June17.-25.	June21.	var	290	+27	89
SCORPIO-SAGITTARIIDS	June3.-Jul.15.	June24.	3	282	-25	
54 PERSEIDS	June22.-30.	June26.	30	68	+34	94
BETA TAURIDS	June5.-Jul.17.	June26.	24	84	+24	95
Alpha Draconids	June5.-Jul.19	June26.	4	207	+64	
Corvids	June25.-Jul.3	June26.	13	192	-19	95.6
Sagittariids	June7.-Jul.18.	June30	8	285	-25	83
Epsilon Cepheids	June10.-Jul23.	July1.	var	332	+56	98
ALPHA-BETA PERSEIDS	July1.-3.	July2.		44	+45	99
THETA AURIGIDS	June5.-Jul31.	July3.		93	+31	95
LACERTIDS	July1.-6.	July3.	3	336	+51	100
24 VULPECULIDS	June30.-Jul13.	July4.-7.	var	303	+24	102
CAPRICORNIDS	June4.-Aug.2.	July8.	10	311	-14	105
Kappa Delphinids	July7.-15.	July8.	1.5	314	+05	105
Kappa Aurigids	July3.-17.	July10.	20	94	+28	106
ALPHA CYGNIDS	July-Sept.	July11-13.	5	315	+48	
ALPHA ORIONIDS	July9.-15.	July12	50	87	+12	110
NU GEMINIDS	July9.-18.	July12.	60	98	+21	110
LAMBDA GEMINIDS	July4.-29.	July12.	30	110	+15	110
BETA CANCRIDS	July9.-15.	July12.	20	122	+13	110
Phoenicids	July3.-18.	July14.	5	31	-48	109.6
BETA TRIANGULIDS	July13.17.	July15.	var	28	+35	111
SIGMA CASSIOPEIDS	July12.-Aug21.	July15.	7	2	+56	111
Beta Capricornids	July10.25.	July15.	14	314	-14	111
PI ANDROMEDIDS	July11.-Aug22.	July16-30.	2	6	+35	
GAMMA DRACONIDS	June-Sept.	July17.	4	269	+48	86
ALPHA CAPRICORNIDS	July3.-Aug25.	July17.	6	307	-10	113
Cepheids	July15.-19.	July17.		334	+64	113
Nu Ophiuchids	July13.-Aug4.	July20-26.	4	272	-08	116
Fornacids	July21.-26.	July25.	5	52	-35	121
Gamma Delphinids	July21.-Aug13.	July28.	5	314	+14	125
Alpha Andromedids	July20.-Aug.7.	July29.	7	3	+27	125
PISCIS AUSTRALIDS	July15.-Aug26.	July30.	15	340	-30	127
DELTA AQUARIDS S	July12.-Aug18.	July31.	20	342	-16	125
ALPHA ARIETIDS	July27.-Aug12.			31	+19	139
Nu Andromedids	July28.-Aug10.		6	350	+37	
GAMMA PEGASIDS	Jul12.-Sep.15.	Jul31-Aug10	2	5	+11	
IOTA AQUARIDS S	July2.-Sep.8.	Aug.10	16	343	-03	139
Upsilon Pegasids	Aug.1.-17.	Aug.12.	10	350	+19	138
PERSEIDS	July20.-Aug23.	Aug.12.	80	45	+59	139
DELTA AQUARIDS N	July23.-Sep.5.	Aug.14.	10	346	+04	140
Delta Cepheids	Aug.6-25.		10	334	+58	
Mu Perseids	Aug.10.-Sep22.	Aug.21.	6	61	+50	147
IOTA AQUARIDS N	Aug.11.-Sep10.	Aug.26.	10	350	+03	152

METEORSCATTER NEWS

Supplements/Corrections to the MS-List

SM0HAX	JT51b	Peter Ohlsson; Farkostvagen 6; 18135 Lidingoe;
SM5BEI	JU72c	L. Norberg; Kolarmora PL2679; 74073 Hargshamn;
SM5BEI	IT50j	L. Norberg; Bergasvägen 11; 19146 Sollentuna; 87521796;
IW9AJZ	GY67a	G. La Parola; Via Vello d'Oro 14; 90151 Mondello Palermo;
DD5TD	EI55j	Dietmar Plesse; Am Brunnen 7; 7457 Bisingen; 7476578;
PA2VST	CM24j	Peter Gouweleeuw; Meyersloot 76; 1831 ED Koedyk; 72614781;
LA3UU	FT/FV	Thor Myers; Bergliveien 3; 3000 Drammen;
OK1IDK	GJ	is now OK1FM (old address)
OK1KRQ	GJ	via OK1FM
GW8VHI	YL32f	R. Moolley; 19 Willow Grove; Baglan W-Glam; SA128NY; 639821308
YU1POA	KE	K. Andrejevic; Baba Visnjina 5; 11000 Belgrad
G4MUT	ZL46j	T. Hackwill;59 Rivermead Road;Woodley;Reading RG54DH;734693766
YU3USB	HG38c	Sever Bojan; 62342 Ruse
ON1BWX	BL79f	Helmut Verdegem; Oudburgweg 13; 9830 St-Martens-Latem; (RTTY)
ON5EX	BK09h	John Smet; Acacialaan 27; 9720 De Pinte;
PE1JUP	CL13b	A. van Hengel; Merwedestraat 5; 2991 AE Barendrecht;
F6DRO	AD38h	D. Dehays; 32 Av. Angla; 31500 Toulouse;
F8CH		is not active on MS anymore;
F1JG		and not F1FG (wrong call);
PA0HWM	CK10e	J. Hansen; Hekerdelstraat 4; 6343 Al Klimmen; 44053017;
GW8NBK		is now GW4LXO (old address)
EA4AAW	WZ49g	M. M. Molano; P.O.Box 9; 10002 Caceres; 927222206;
I2FHW	EE17f	Rota Franco; Via Dante 5; 20030 Senago (Mi);
OK1FAV	GK	Jarolav Spacil; Kounice 771; 35731 Horni Slavkov;
OK1JKT	GK	Karel Tvrdy; Bezrucova 4238; 43003 Chomutov;
SM4GVF	HT	Kjell Jarl; P.O.Box 6082; 69200 Kumla; 1978193;
OK2LG		silent key
GW8DUP		not QRV on MS
GW4FJK		not QRV on MS
DD3KF	DK21b	Norbert Graf; Ringstr. 32; 5100 Aachen; 241522374;
F9HS	BD30e	C. Dagonneau; 27 Ch. Madrague; 34170 Castelnau-le-Lez;
Y21PL	GL79j	T. Hartig; Bräuergasse 11; 8010 Dresden;
SM7JUQ	GP37a	H. Jakobsen; Hässleberga 18/23; 24013 Genarp;
PA0NIE	CL12d	K. Nieuwland; Molendijk 31; 3284 Le Zuid-Beyerland; 18661632
DF9RJ	GI13j	Hans Entner; Landshuterstr. 1; 8448 Leiblfing; 9427202;
F1BHL		not active anymore
F1BYM		not active anymore
F1DDA		not active anymore
F3TV		not active anymore
F5SE		not active anymore
F6ANO		not active anymore
F6APU		not active anymore
F6CVN		not active anymore
F6EAS		not active anymore
F8SQ		not active anymore
F8ZW		not active anymore
Y22QG	FM	P. Grosse; Fermersleberweg 34; 3014 Magdeburg;
OK1MBS	HK48a	S. Blazka; Slezska 402; 50901 Nova Paka;

2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m-2m

DD5TD (EI55j) wkd (all in SSB):

DATE	GMT start	stop	CALL	QTH	REPORT tr	re	burst Nr.	pings Nr.	dur. sec	remarks
13.12.83	2100	2200	YU2JL	HD	27		3	mni	2	NC
03.01.84	2200	2241	EA6FB	AY	27	26	17	mni	10	C
04.01.84	0000	0020	SM5MIX	HS				sorry, wrong freq.		

NIL: OH2AUK, OY9JD, GM8YJU (letter arrived one day too late)
HRD Random: 14.12.84 DH1LAC, SM5CNQ, G4BWG, GM4COK, GI4OVS, YU3ZV; 03./04.01 84 GM4CXM, GM8YJU, GJ4ICD, OZ6OL (400), I2FAK, OZ1BVW, IW9AND, IW9AJZ, HG4DCO (?), HG8C.?, G6XDM, SM6AEK (400).
Skeds are welcome, please contact Dietmar Plesse, Am Brunnen 7, D-7457 Bisingen, Tel: 7476 578 during showers only. tks fer info Dietmar.

DF9CY (EL02e) wkd:

12.06.83	0700		SM3IGO	IX	27	26	56		C
26.07.83	1630		YU7KMN	JF	27		8		NC
09.08.83	2000		YU2JL	HD	26	26	42		C
	2200		LA1K	FX	26	26	55	30	C
10.08.83	0500		I4YNO	FE	26		37		NC SSB
12.08.83	0800		DL0IV/I7	JZ	37	27	187	8	C
	1230		SM3JLA	JX	26	26	7		NC
13.08.83	1000		IW5ACZ	FD	37	27	6	20	C SSB
20.08.83	0700		YU7AU	KE	36	26	89	16	NC

NIL: YU1AWW, SM3JLA. tks fer info Christoph.

DF9PY (DK65q) wkd:

31.08.83	2200	2300	YU7AU/5	KA	26	26	14	8	3	C CW
02.09.83	2100	2225	DK3CM/LA	DT	26	26	11	14	2	NC CW
05.10.83	0500	0540	YU7QED	KF	26	26	3	12	5	C CW
10.12.83	2000	2100	YU7MDX	JF	27	26	7	9	1	C CW
11.12.83	1600	1700	YO5BIM	KH	26			5		NC CW
03.01.84	0000	0030	IW5ACZ	FD				2		NC SSB
	1040	1122	I0NLK	GB	27	27	17	14	7	C CW
	1215	1245	YU1ONB	KE	26		1	3		NC CW
	1900	1930	YO5BIM	KH				1		NC CW
	2100	2150	YU1ONB	KE	26	27	7	9	2	C CW
	2200	2230	YU7MCG	KF				2		NC CW
04.01.84	0100	0126	EA6FB	AY	37	26	11	mni	6	C SSB
	0222	0233	YU7MAU	JF	28	27	mni	mni	9	C SSB*
	0500	0540	EA3IH	BB	26	26	6	4	4	C CW
	1100	1140	IT9GSF	GX	26	26	5	10	3	C SSB
	1230	1300	CT4KQ	WA				1		NC CW

*=Random. Hrd Random: HG8CE, YU3ZV, GM8YJY, IV3HWT, GJ4ICD, I0LBK, I4XCC, IW9AJZ, YU3ES. NIL: YO5AXM, YO5BYV, UQ2GLO, OH7PS, LA9FY, EA7AJX, OH7AXB. tks fer info Stefan.

DL6LAU (ex DH1LAC) (FO42f) wkd:

12.09.83	0500	0600	DK6AS/I50	EA	26		3	16	3	NC
17.09.83	0500	0600	DK6AS/I50	EB?	26	27	7	7	3	C
18.09.83	0400	0525	I3LGP	GF	26	28	8	32	4	C
	0600	0800	EA3IH	BB	26	26	4	8	1	NC
09.10.83	0700	0810	FB0P	CG	38	26	11	21	67	NC
13.10.83	0400	0530	I5MZY	FD	26		3	8	1	NC
19.10.83	2230	0030	LA3TQ	JD	26	27	8	11	1	C
21.10.83	2300	0100	YU1ADN	KD	26		3	4		NC
23.10.83	0700	0805	FB0P	CG	26	26	not countable!			C
12.11.83	0330	0450	YU3FM	HG	26	26	14	31	3	C
20.11.83	0100	0150	UA3LBO	QO	26	26	13	8	3	C
	0300	0435	UA3IDQ	QQ	26	26	5	7	3	NC
	2100	2300	UA3IDQ	QQ	26	26	9	14	1	NC
11.12.83	0600	0700	I6WJB	HC	26	37	6	14	3	C
	0200	0300	DK3CGX	II	26	26	7	10	1	NC
	0400	0600	UA3TCF	WQ	26		1		1	NC
12.12.83	0000	0100	HG2SU	JH	26		4	4	3	NC
	0400	0600	UB5JIW	RF	26	27	5	13	2	C?
13.12.83	1500	1620	UK3AAC	SP	26	26	11	16	2	C
	2100	2117	LA1K	FX	27	27	12	30	4	C
	2200	2300	EA3AQJ	BB	26		2		2	NC SSB
14.12.83	1225	1355	YU3TSB	HF	26	26	4	9	2	C
	1400	1500	F9HS	BD	27	27	4	6	1	NC
	1600	1735	IW5AHP	FD	26	26	6	9	2	C
	1900	1922	FB0P	CF	38	38	mni	mni	16	C Rand.

tks fer info Carsten.

DL7YS (GM46b/JO62OL) hrd and wkd:

11.12.83	2000	2120	OH6CH	NV	37	27	14	23		C
	NIL: UA3MEE, UK3A AC.									
12.12.83	0600	0645	F6EYM	ZJ	26	26	12	33	2.5	C CW
	1754	1900	YU7MAU	JF	26	28	8	20		C Rand
	2000	2045	F5DE	AF	hrd					**
	2145		IK4DCO		hrd		4	5	5	SB
	2200	2234	IW2BNA	EF	26		6	27		NC SSB
	2300	2334	I5WHC	FD	26		3	3		NC CW
13.12.83	0000	0040	GI4KSO	WO	26		2	3		NC
	0446	0532	GI4OMK	XO	26	26	2	6		NC SSB
	1614		YU3TSB	HF	hrd				6	Random
	1800	1830	G8TIC	ZM				3		NC SSB
	1834	1910	YU7QED	KF	38	27	11	28		C Rand
	2000	2045	F1FVP	ZF	26	26	14	8	2	C SSB
	2100	2140	DH6CY	MW	38	38	mni	mni	10	C
	2044		GI4OPH	XO	hrd				10	SSBRand
	2224		UA1ASA	PU	hrd					CW Rand
	2244	2259	IW4ARD	GE	27	27	4			NC SSB*
	2300	0000	F6FHP	ZE	27	26	43	23	6	C SSB
	NIL: OY9JD									
14.12.83	0000	0150	RA3DPB	TP	26	27	12	14	3	C
	0200	0257	G3BW	YO	27	26	26	44	6	C
	0310		GM4CXM	XP	hrd				12	Random
	0329		I4XCC	GD	hrd				8	Random
	0331		GI4OPH	XO	hrd				4	Random
	0530	0546	F1FEN	CF	27	27	8	mni	15	C SSB*
	1803		UK3AAC	SP	hrd				5	CW Rand
	1924	1945	OH7PS	OX	27	26	8	5	20	C SSB*
	2000	2115	GI4KSO	WO	26	26	5	9		NC
	2200	2222	I2FAK	EF	26	26	12	9	8	C SSB
	2300	0000	EA1OD	XD	26	26	5		5	NC SSB
15.12.83	0020		SM5CNQ	HS	55 via Tropo, with ant. to 20 deg.					
	0022		SM5CNQ	HS	hrd ant. now to 270 deg.					SSBRand
	0043		RB5IDJ	SH	hrd				12	CW Rand
	0122		YU3ZV	IB	hrd				3	SSBRand
	0142		F1FEN	CF	hrd				4	SSBRand
02.01.84	0500	0615	GW3NYY	XL	26	28	15	27	2	C
03.01.84	0400	0500	YU6AA	JC	26					NC***
	0800	0900	F6DRO	AD	27	26	14	23		C
	1500	1530	YU6AA	JC	26					NC***
	2200	2240	EA3AQJ	BB	26		2	4	1	NC SSB
04.01.84	0030	0100	YU1ADN	KD	38	37				C? CW*
	0245	0300	F1JG	CD	27	27	mni	mni		C SSB*
	0300	0330	IW9AJZ	GY	27	37	mni	mni		C SSB*

NIL in sked: 23.12.83 YO7CJI, 02.01.84 UK6ABI, 03.01.84 UK6ABI.
Hrd Random during Quadrantids: LA7KK, I1NBM, I4YNO, YU1ADN, IW9AJZ, F1FEN, GM8YJU, EA3ADW, GJ4ICD (tried to work him for one hour but no success), F1FHI, GI4OPH, I2FAK, F1JG, LA9BM, OZ9FM, HG8CE, G4IJE. **=Random. ***=Good refl., but no senseful infos incl., HF in key? ***=fault in his memory keyer.
The shower this year was not too good for me; it seems, that the shower was vy directional (did not hear any EA on Random, same time OH7PS was real booming in).Was calling nearly every night during the shower on 3645 KHz, but except lots of UAs and YUs, who did not understand what I was talking about, nobody of the VHF-net was around?? Everybody agrees, that this net on 80m during the night is vy senseful, but nobody is QRV?
tks fer info Peter.

EA3LL (AA25j) wkd:

03.01.84	0000	0030	PA3BIY	CM	26	28	mni			C

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	0030	0100	PA0RDY	CM	28	27	mni			C
	0100	0120	G4IJE	AL	27	26	mni			C
	0125	0200	PA3CAP	??	27	27	mni			C?
	0200	0230	DL3AAL	FM	28	26	mni		2	C
	0300	0345	OK1KKH	HJ	27	27	5	10	3	C
	0400	0430	OE5EFM	HI	26	27	mni		2	C
	0600	0640	OE3CEW	II	26	26	mni			C
	0800	0850	OZ1EKI	EP	26	27	7	15	40!	C
	0900	0940	SP6FUN	IL	27	26	10	22		C
	0950	1000	DJ5MS	GI	27	26	mni		6	C
	1000	1025	Y22ME	HM	28	27	mni		3	C
	1100	1125	PA0OOM	DN	28	26	mni		2	C
	2100	2125	DK6AS	FM	27	27	mni		3	C
	2200	2212	Y23FG	FM	27	27	mni		4	C
	2222	2247	OK1OA	HK	28	28	mni			C
	2300	2335	Y22HA	GO	26	26	7	10	3	C
	2340	2355	YU2EZA	IG	27	26	mni		5	C
04.01.84	0000	0040	LA6HL	CS	26		1	1		NC
	0040	0055	DL9GS	DL	38	27	mni		15	C
	0200	0225	Y21PL	GL	28	26	mni		8	C
	0300	0316	Y22QG	FM	26	28	6	10	4	C
	0400	0412	DL3MBG	GI	27	26	mni		6	C
	0418	0430	OK1FM	GJ	26	26	mni			C? *
	0600	0700	SM6AEK	GQ			2	3		NC
	0700	0800	SM6EOC	GQ	26	26	6	5	15	NC **
	1000	1100	EA1OD	XD	26	26	5	6		NC ***

* QRM QSO in same freq. UB5??
** sent more than 30 min. R26
*** QRT because of very high wind, SRI.
NIL: ON6UG, OK1FM, G4FUF, G4KTP, F6EYM (on same freq. QSO F6DWG-SM4ANQ), DH1LAC, DK1PZ. NOT QRV: EA1ED, EA1OJ, DF6OB, OZ9PW, SM6AFH, SRI. tks fer info.

F6DRO (AD3Bh) wkd:

07.09.83	0700		DF7KF	DK	27		14	3	NC
	0800		DL5MCG	FI	26	26	30	6	C
08.09.83	0800		DL3MBG	GI	27	26			C
09.09.83	0700		DF7KF	DK	27	37	41	11	C
15.09.83	0700		OZ1IUK	GQ	26	27	18	5	C
16.09.83	0700		OZ1CFO	ER	26	26	37	16	3	C
18.09.83	0700		DL8NBI/p	FJ	27	26			C
19.09.83	0700		YU7MAU	JF	26	37			C
02.10.83	0700		OZ1FTU	FP					NIL
10.10.83	0800		IV3HWT	GF					NIL
21.10.83	0830		SK7HW	HQ	26	27			C
04.11.83	0800		CT1WW	WB	26	26	50	28	1	C
24.11.83	0800		I4XCC	GD	26	27	16	3	3	C
14.12.83	0400		LA6HL	CS	26	39	22	16	2	C
	0600		LA9BM	EU						NIL
16.12.83	0800		Y27BL/A	GL	26	26	19	10	2	C
23.12.83	0600		DF3ZY	EK						NIL
03.01.84	0800		DL7YS	GM	26	27				C
10.01.84	0800		SM6EAN	FR	27	26	35	13	1	C
08.03.84	0600		DF3ZY	EK	26	26	37	15	1	C

HRD Random SSB: on 12./14. 0345 LA6CU, 0520 GW3NYY, 0520 PE1FMU, 0535 SM5CNQ and 0639 GM4COK
Sorry not QRV for 11.12.83 DH3MF, 13.12.83 DG4NAE and G6DFT (no 220V). tks fer info.

F9HS (BD30e) wkd:

22.04.83	1100	1300	Y23FG	FM69g	26	26		C
	1315	1515	SM7GEP	HR24e	26	26		C
	1900	2100	OK2KZR	IJ32j	26	26		C
	2100	2300	OZ1FDH	GP22c	26	37		C
	2300	0100	Y22HA	GO71h	26	26		C

01.05.83	1900	2100	Y22QG	FM79h	26	27			NC
05.05.83	1800	2000	Y22QG	FM79h	27	27			C
	2000	2200	SP6FUN	IL53c	26	26			C
07.05.83	0800	1000	G4BAD		26	26			NC QRM
09.05.83	0300	0350	OZ1DOQ	GP34h	26	27			C
10.05.83	0400	0500	OE6WIG	HG29b	27	27			C
11.05.83	0500	0600	GM3WCS	YQ73c	37	26			C
12.05.83	0300	0345	YU3FM	HG73j	26	26			C
14.05.83	0400	0445	DK1KO	FN12g	27	27			C
15.05.83	0400	0515	HB9CE	KG32c	26	27			C
	0600	0700	YU7AU	KE14h	47	26	8	12	21	C
18.05.83	0400	0600	SM4IVE	HT68d	26	26				C
	0600	0700	SM5MIX	HS66g	27	27				C
19.05.83	0530	0630	SP9AI	JJ16g						NIL QRM
	0935	1005	G4IJE	AL12g	27	26				C
20.05.83	0430	0615	OZ1FDJ	GP23h	26	27				C
21.05.83	0400	0500	Y21PL	GL79e	27	26	12	22	1	C
23.05.83	0200	0400	SP9AI	JJ16g	26					NC QRM
24.05.83	0600	0800	GM4CXM	XP09g						NIL
07.06.83	0400	0425	DL8DAT	DL49h	27	27	1	every	10	C
	0600	0645	G8VR	AL42e	27	26	mni		30	C
08.06.83	0600	0640	G4DSC	ZD63e	26	27	10	9	2	C
	0700	0735	OK1FM	GJ28h	37	37	mni			C
	0900	0930	DL6NAA	FK69b	26	27	2		2	NC
	1000	1050	PA0RDY	CM45e	26	26				C
09.06.83	0400	0430	GW3NYY	XL40b	26	27				C
10.06.83	0400	0440	DK2LM	EJ21f	27	37	12	23	7	C
11.06.83	0400	0445	PA0HWM	CK10e	27	27	16	20	1	C
13.06.83	0400	0445	OK1KKH	HJ06c	27	27	11	8	3	C
28.06.83	0200	0300	YU7KMN	JF16e						NIL
	0400	0520	OZ1IUK	GQ73d	27	26	9	22	3	NC
01.07.83	0400	0430	PA0XMA	DM16e						NIL
02.07.83	0400	0440	OZ1IUK	GQ73d	26	26				C
	0600	0730	YU7KMN	JF16e	26	27				C
	0800	0900	OE3CEW	II52f	26	26				C
11.07.83	0500	0530	OZ3ZW	FO18e	27	26				C
12.07.83	0400	0500	DL7YS	GM46b	26	26				C
	0500	0600	SM5CBN	HS56c	26	26				NC
	0600	0800	EI2CA	WM10a						NIL QRM
	0800	0900	GM4CXM	XP09g	37	26				C
13.07.83	0500	0600	LA6QBA	GV41e						NIL
14.07.83	0400	0500	OZ1EYE	FQ41h						NIL
15.07.83	0400	0500	OZ1CFO	ER79j						NIL
16.07.83	0500	0540	DK2PH	EL03e	38	26			9	C
17.07.83	0400	0550	SM5CNQ	HS46c	26	26	12		1	C
17.07.83	0600	0730	SK6HD	GS7Bj	37	27			5	C
18.07.83	0500	0645	G4KTP	ZD11b	27	26				C
24.07.83	2200	2300	GM4COO/A	YS72j	26	26	11	11		C
28.07.83	0500	0530	G8ECI	AN41h	26	27				C SSB
31.07.83	2100	2200	G4ERG	ZN28b	27	26				C
01.08.83	2000	2050	G4DHF	ZM19f	26	26				NC
02.08.83	0400	0430	SM6EDL	GQ25f	26	26				C
	0430	0505	SM6AEK	GQ25b	26	26				C
	0505	0525	SM6AFH	GQ25c	26	27				C
04.08.83	0400	0430	DK0TU	GM37e	37	26				C
	0435	0505	SM7AED	GQ56b	27	37				C Rand
	0830	0910	DF9PY	DK65g	27	27				C
05.08.83	0400	0455	SP6ASD	HL29c	26	27	17	mni	35	C
	0500	0550	G4DHF	ZM19f	27	27	27	mni	2	C
	0600	0645	G3BW	YO33g	26	26	41	mni	12	C
06.08.83	0500	0600	GW4EAI	YL25f	47	26	47	mni	26	C
	0600	0715	DL1MBV	FI79h	26	27			2	C
07.08.83	0300	0340	DF8BL	EN75f	37	27	26	mni	10	C
08.08.83	0400	0500	DH8OAB	EM48c	27	27				C

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	0600	0700	DF1OH	EM57j					
09.08.83	2000	2100	OZ1EYE	FQ41h	27	26	13	mni	1
	2100	2300	YU1BBI	KE71h	26	47	20	mni	1
10.08.83	0000	0100	GW6APZ/p	XM80f	26	26			
	0900	0950	YZ2UL	GN75j	37	27	mni	mni	25
11.08.83	0400	0500	G8TIC	YM69c	26	26			
	0600	0730	SM7GWU	HS75c	26	26			
	1300	1400	GI4TAP	XO21a	26				
	1900	2000	SP9WY	JJ16g	26				
12.08.83	0200	0300	UP2BKH	KP27j	26	27	5	mni	2
	0400	0500	PE1IGM	DN54g	26				
	0700	0730	LA9BM	EU32g					
	0900	1020	SM4GVF	HT76a	36	27	15		5
	1100	1200	GI4OMK	XO31j					
13.08.83	0000	0001	YU3TZT	HG64f	27	27			
	0028	0029	OZ1DPR	EP	27	37			
	0200	0230	DL0IV/I7	JZ01h	37	28			
	0303	0304	G4RNL	YN47d	27	28			
	0800	0900	OE5MKM	HI42g	27	37			
	1005	1105	SM5CHK	HS36j	26	27			
	1500	1530	EA1YV	VC					
14.08.83	0630	0730	SM5CHK	HS36j	26	26			
	0400	0430	G4NFD	XJ					
27.08.83	0200	0400	SM0EJY	IT69g					
	0400	0600	SM5BEI	JU72e	26	26			
28.08.83	0400	0600	SM5BEI	JU72e	26	26			
30.08.83	0400	0600	SM0EJY	IT69g	26	26	7		75
06.09.83	0500	0600	PA3CGR	DM65b	27	26			
21.10.83	0400	0530	OZ1CFD	ER	26				
	0700	0750	SK7HW	HQ05e	26	27	10	10	1
12.12.83	0815	0940	SP6AZT	IL67h	37	37	10	mni	7
	1900	2000	YO2IS	KF17e					
	2000	2040	PA3CNN	CM57	27	26	1	per	30
	2200	2300	GM4OGM	YP	27				
13.12.83	0500	0540	PE1FMU	CM15b	27	37			
	0540	0600	PA0NIE	CL	27	27			
	0600	0645	SP6GZZ	IL54h	27	27			
	0700	0800	DG7FZ	EK75f	27	26			
	0800	0830	PA2VST	CM24j	37	27			7
	0900	0930	DF5DE	EK02h					
	1800	2000	OK1AFN	IK	26	26			
	2000	2100	G4NDG	YK03e	27	26			
	2100	2220	YU2SZZ	IG54f	27	27			
14.12.83	0500	0528	GM4IPK	YP05h	26	27			
	0600	0625	G6DFT	ZL20d	26	26			
	0800	0812	GI4TAP	XO21a	26	26			
	1400	1500	DH1LAC	FO					
	1800	1845	SM6KJX	GR41c	27	27			
	1900	1930	EA7AG	YW18b	26	26			
	2000	2045	SM6CMU	FR50b	26	27			
	2200	2300	YZ4QQ	GM49b	27	27			
	2300	2330	EB7NK	YW28g	26	26			
15.12.83	0500	0600	IV3HWT	GF18c					
	0700	0740	DK1PZ	EL59g	38	27			
22.12.83	1900	1930	DL6NAA	FK69b	38	26			
	2000	2100	YZ7BL	GL79e	26	26			
02.01.84	1110	1200	G4IJJ	AM76e	27	27			
03.01.84	0500	0600	DH8LAC	FO					
	0600	0700	G8XVJ	YN48f	27	26			
	1600	1700	OK3TJI	JI64g	27	38			
	1900	2000	YO7CKQ	LF77A	36				
04.01.84	0500	0530	YU7KN	JF50j					
	0600	0630	EA7BIH	YX12f					
15.03.84	0400	0600	LA6QBA	FT05c	26				

NC QRM	22.03.84	0300	0500	LA6QBA	FT05c					NIL
C		0500	0700	UC2AA	NN18d	26		2		NC
C	24.03.84	0400	0600	OZ9PW	EQ	26	27	6	15	1	C
C SSB		0600	0700	YU3TS	HF83h					NIL
C	25.03.84	0600	0635	OK1MAC	HJ37h	27	27	7	mni	15	C
C SSB	26.03.84	0600	0800	IN3TWX	FG26e	27	26	17	41	1	C
C	27.03.84	0400	0520	LA6QBA	FT05e					NIL
NC QRM	01.04.84	0600	0645	DL3MBG	GI53d	28	26	19	30	1	C
NC QRM	08.04.84	1219	1319	HG4KYB	JH	27		2		NC SSB
C	tks fer info.									
NC										
NIL	GM4CXM (XP09g) wkd:									
C	03.01.83	0900		F6HP	AE	26	27	28	24	13	
NC		1700		DL9MCC	GH	27	38	9	8	12	SSB
C SSB		1900		SM3COL	IW	27	26	12	8	6	SSB
C SSB	04.01.83	0000		IW5AVM	FC	26	26	11	7	4	
C		0400		DL1MF	GH	27	27	15	8	10	
C SSB		0516		YU3ES	GF	27	27	5			Random
C SSB	02.04.83	0000		OK1OA	HK	26	28	13	6	3	
NC QRM	03.04.83	0700		OH1ZAA	KV	26	27	11	19	11	
NIL	04.04.83	0800		DL1MBG	GI	26	26	12	4	1.5	
C	10.04.83	0600		OK1FM	GJ	26	26	9	35		
NIL	17.04.83	0600		OH5LK	NU	26	26	9	2	1	
NIL	21.04.83	0500		I4MKN	GE	26	26	15	10	10	SSB
NC		0800		SM1BSA	JR	26	27	9	1	13	
C	22.04.83	0900		OE3CEW	II	27	26	7	9	3	
C	23.04.83	0000		RQ2GGS	LQ	26	27	4	21	1	
C	05.05.83	0900		UC2AA	NN	26	26	11		6	
NC		1020		UC2AAB	ON	26	26	5	6	2	
C	06.05.83	0000		DK1PZ	EL	26	26	54	13	5	
C Rand.	07.05.83	0800		SP6FUN	IL	26	26	10	9	11	
NIL		1000		F8CS	CH	27	26	7	7	2	
C	22.05.83	0900		OE3XUA	HH	26	26	16	14	2.5	
NC	01.06.83	0600		I1ANP	EE	26	26	6	8	2	
C	04.06.83	0400		OK3KKF	JI	26	27	5	2	2	
C Rand.		0600		LA1K	FX	27	26	21	11	3	
C		0930		F1FEN	CF	27	27	10	13	7	SSB
C SSB	07.07.83	0600		F6HWY	AH	27	26	15	16	2	
C	12.07.83	0600		EA3LL	AB	26	26	8	5	27	
NIL		0800		F9HS	BD	26	37	9	11	5	
NC	16.07.83	0700		PA0OOM/SM1	JQ	27	26	14	17	3	
C	18.07.83	0400		C31XV	AC	27	27	22	28	4	1.C31
C	24.07.83	0800		DK3FW	EM	27	27	10	23	2.5	
C	27.07.83	0700		F6FHP/p	CE	28	37	28	37	3	
C	28.07.83	0010		DL9MCC	GH	37	27	15	2	3	Rand .1
C SSB		0040		OK3TJK	II	27	37	26	11	3	Rand 2
NIL		0400		DK3LL	FO	37	27	18	16	6	
C SSB		0500		F6EYM/EA5	ZY	26	26	24	21	8	
C SSB	10.08.83	0000		YU1POA	KE	26	27	12	29	22	
C		0800		TO6DMD	DD	27	26	mni	mni		
C		1400		SK6HD	GS	27	27	13	10	8	
C		1900		SM3JAW	JX	36	28	18	10	7	
NIL		2300		OE5EFM	HI	27	26	mni	mni		
C	11.08.83	0000		F5DE	AF	26	26	6	3	3	
C		0100		UQ2GCG	LR	27	27	7	8	2	
C		0600		TF3YH	PY	26	27	10	9	23	
C	12.08.83	0600		OH6CY	MW	26	27	14	5	3	
NIL		1000		OH6CH	MX	26	58	10	4	12	
C		1200		OH2AUK/O	KT	37	27	9	2	15	
C		1300		I2FAK	EF	29	27	4	1		SSB
NC		1310		F8OP	CG	29	26	5			Random
NIL		1400		OH7TN/8	OZ	26	26	mni	mni	5	
NIL		1600		UK2RDX	MT	26	26	mni	mni		
NC		1800		OH7UE/7	PW	26	26	6	8	4	

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	2200		YO2IS	KF	26	26	11	7	5	
13.08.83	0200		YU7AU	KE	26	36	9	4	2	
	2100		YU1AWW	KE	26	26	9	8	9	
	2200		YU3TSB	HF	26	26	mni	mni		
14.08.83	0059		YU2RSD	HF	38	38	1			SSBRand
	0059		YU3C	HG	39	39	1			SSBRand
	0400		DG8SAB		26	26	6	0	20	
	2200		EA3ADW	BB	27	27	12	12	1	
05.09.83	0845		F6CRP/p	YG	27	27	13	22	16	
21.10.83	1600		SK7HW	HQ	26	26	mni	mni		

tks fer info Ray.

HB9CRQ (EH61b) wkd (all SSB):

03.01.84	0200	0300	HG8CE	KG	26		2	5	2	NC
	0400	0450	EA6FB	AY	26	26	11	25	2	C
	0600	0630	IT9GSF	GX				3		NC
	0900	1000	DH7PS	OX			2	4	1	NC
	2300	2400	G8ROU	ZN	26		1	6	2	NC
04.01.84	0000	0038	SM7EAN	FR	27	26	12	23	4	C
	0100	0132	GM4OGM	YP	37	37	9	11	5	C
	0300	0323	GI4KSO	WO	27	26	15	14	2	C
	0324	0354	YU7AU	KE	39	26	13	16	10	C
	0400	0416	GI8YDZ	WP	27	37	8	7	3	C
	0800	0836	SP6FUN	IL	26	27	3	4	2	C

NIL: YU6AA, YO6BIM, YO5BYV, UA6YAF, SM3COL and EA7AJX. tks fer info Dan.

HB9QQ (EH) wkd during Lyrids:

22.04.84	0500		UB5EFS		26	26				1950km
	0740		LA8KV		39	37			18	
23.04.84	0600		LA7KK		27	27				

tks fer info Pierre.

I2FAK (EF77q) wkd in SSB:

03.01.84	2100	2200	EA7CPW	YX	26	27	4	3	3	C
	2200	2345	OZ1DSK	EP	26	26	4	11	7	C
	2300	2400	OZ1IUK	GQ	26	26	4	8	5	C
04.01.84	0000	0100	GI4KSO	WO	26	26	7	15	5	C
	0100	0110	G4RNL	YN	26	26	3	2	3	C
	0200	0300	OZ6OL	FP	26	27	5	10	5	C
	0240	0250	SM7KNK	HP	37	37	3	5	5	C Rand
	0500	0600	EA5DFY	AY						NIL
	0600	0700	LZ1AB	LC				3		NC
	1400	1500	UK6ABI	TF						NIL

tks fer info.

IW2BNA (EF36b) wkd in SSB:

12.12.83	0500	0540	EA6FB	AY07j	26	26	4	7	
13.12.83	0300	0356	YZ1PL	GL79j	27	26	4	3	
	0400	0500	GM4COK	YP04b	26	27	8	10	
	0500	0526	YZ2IC	GN20d	26	27	8	3	
	0700	0743	OZ1EKI	EP49h	26	27	10	12	
14.12.83	0500	0537	LA6HL	CS09g	26	26	10	7	
	0600	0700	SP6AZT	IL76h	26	27	10	9	
04.01.84	0000	0026	OZ6OL	FP50e	26	26	7	6	
	0100	0114	SM6KJX	GR41c	27	27	4	3	

HRD Random: GJ4ICD, F1FHI, OZ1EKI. For skeds write to: Walter Rivolta, Via Novella 3, 20037 Paderno Dugnano, Milano Italy, phone: 02 9104712. tks fer info Walter.

All Bands DX Team Palermo IW9AJZ (GY67a) wkd:

04.08.83	2300	0100	YU2CCB	IF	26	26	3	14	C
05.08.83	2300	0000	YO4AUL	OE	26		23	24	NC
	0000	0100	YU7KMN	JF					NC
08.08.83	2300	0000	HG1KBO	IH	26		2	3	NC

11.08.83	0000	0200	UA6YAF	UB						NIL
	0400	0435	PE1FMU	CM						NC
	0435	0500	PA2VBT		38	38	4	12		C Rand
	0700	0800	DG9BAS	EN	26	26	4	8		C
	0800	0900	OK2KZR	IJ	26		1	2		NC
	1000	1100	OK2BGY	IJ	26	38	4	22		C
	1700	1800	YU2CCB	IF						NC
	1800	1900	DF1ZE	EJ	26	26	3	18		C
	2300	0000	SM6AEK	GQ						*
12.08.83	2200	2240	DN6NL	CL	26	38	3	10		C **
13.08.83	0000	0100	SP6FUN	IL						NIL
	0200	0300	SM6EOC	GQ	26	26	1	4		NC
	0400	0500	OZ1DOQ	GP	38	27	3	9	20	C
	0545	0600	DD1BR		27	27	3	18		C Rand
	0600	0700	SM6CMU	FR				2		NC
	0800	0829	DK0TU	GM	27	27	8	10		C
	0700	0933	YU1EU	KE	26		2	3		NC***
	2339	0020	YU7AR		38	38	4	18		C Rand

IW9ANO (GY67a) wkd:

11.08.83	0200	0218	DK1PZ	EL	26	26	9	40	15	C
	0300	0323	PA3AMF	CM	26	26	5	12		C
	0500	0600	PE1EVX	CM	37	37	3	15	18	C
	0600	0641	OE3CEW	II	27	27	5	12		C
	0900	1000	YU2CCB	IF				2		NC
	1100	1200	SM6CMU	FR				3		NC
	1900	1953	DL5BAC/p	EN	26	26	4	15		C
	2000	0000								*
12.08.83	2300	2315	DL3AAL		26	26	5	20		C
13.08.83	0100	0137	SP6GZI	IL	26	26	4	5		C
	0300	0400	YO2IS	KF						NIL
	0500	0520	YU3EW	IG	27	27	5	10		C
	0700	0720	DK0TU	GM	27	27	6	20		C
	1200	1300	SM7AED	GQ	26	26	3	5		C

* not QRV for Amplifier QRT, very sorry for skeds with IW9AJZ in this period: DL5DAW, DL3AAL, DL4YBM, SM6AEK.
** from GY67c in /p.
*** at 0933 electric energy QRT. We had "black out" all day long, with little periods of electric energy to tent, with "ON/OFF" some QSOs. Sorry for PA0OOM, HB9CRQ, YU1EV, GW6APZ/p, YU1PDA, YU7AR, YU1EV, DK3FW, hope QSO next time. Manager's address of the team is : IW9AJZ, G. La Parola, Via Vello d'Oro N.14, I-90151 Mondello Palermo, Italy. tks fer info Guiseppe.

OE1APS (II63q) wkd (all in SSB):

12.12.83	2000	2100	OZ9PW	EQ	26		3	3	1	NC
	2200	2240	SM6EAN	FR	26	26	14	11	2	C
13.12.83	2000	2040	G8TIC	ZM	26	26	8	6	3	C
14.12.83	0500	0600	F6GGF	BI						NIL
	2000	2015	DH7PS	OX	26	28	8	2	5	C
04.01.84	0000	0100	G8VGM/p	ZO	26	26	3	3	2	NC
	0200	0202	G6HKS	AM	26	26	1		4	C

tks fer info Alfred

OK1FM (ex OK1IDK) (GJ20h or GJ36a or GJ68a) wkd:

02.01.83	0200	0350	9H1CD	HV03e	27	27	18	35	C
	0400	0432	G4KLX						NIL
	0600	0650	F1GTR						NIL
03.01.83	1300	1400	UA4CDT						NIL
04.01.83	0000	0012	F6CRP	ZG	27	27	6	2	C
	0041	0101	I0LBK	GB	27	26	4	2	C
	0101	0230	UK6HAR	UE	26				NC
	0300	0358	LA9HW		26				NC
	0400	0458	IW5AVM	FC16E	26	26	3	1	C
	0900	1100	DH7UVB	NY49D	27	26	4	1	C

	1000	1200	UB5LNR	RJ20F	27	27	4	5		C
	1200	1300	UY5OE	BK71E						NIL
	2200	2300	GI4KSO		26					NC
	2300	QRT	UQ2GCB	very high wind - antenna QRT, HI						
05.01.83	1000	1130	SM2BYC							NIL
	1200	1300	EA6JB	BZ45a						NIL
16.01.83	0300	0500	UY5OE	SK71e	26	26	7	3		C
23.01.83	1430	1520	OH1ZAA	KV38h	27	27	12	3		C
05.02.83	0400	0600	SM5CBN		27	27				NC
12.02.83	0400	0600	SM3JGG		26					NC
	2300	0100	UA6LJV							NIL
13.02.83	0000	0200	SM5CBN		26		5	5		NC
06.04.83	0000	0040	DF1CF/IM0	EY03h	27	27	23	11		C
08.04.83	2100	2250	UA3IDQ	QQ64d	26		11	5		NC
10.04.83	0600	0745	GM4CXM	XP09g	26	26	55	51		C
	1800	2000	UA3IDQ		27	26	8	3		C
21.04.83	2200	2300	GM8MBP	YR59j	26		4	14		C
22.04.83	0800	0945	CR1AUW	WA34e	26		3	9		NC
24.04.83	0600	0700	UB5HCU	RJ43e						NIL
28.04.83	0400	0500	OH7PI	NW60d	27	27	16	9		C
01.05.83	0400	0540	UC2AAB	NN18c	27					NC
05.05.83	0200	0400	UK6HAR	UD28e	26		1			NC
09.05.83	0700	0735	F6DRO	AD38h	27	26	36	7		C
	2100	2145	GM3WOJ	XQ15j				1		NC
	UA9GL, UA6BAC, IW5AVM				NIL					
16.05.83	0400	0455	LA1K	FX42c	27	26	50	10		C
19.05.83	0300	0440	OH7TN/4	OV15h	27	26	14	11		C
	0500	0600	SK2KW							NIL
	0600	0700	EA6FB							NIL
	0745	0830	UA6LJV					2		NC
21.05.83	0500	0530	OH3MF	MU23j	27	26	5	8		C
28.05.83	0500	0535	SM3AZV	IX	48	27	19	9	26	C
29.05.83	0500	0550	LA7KK	FU62j	28	27	30	20		C
	1100	1230	SM3JGG	HV62h	26	26	17	8		C
31.05.83	0600	0730	CT4KQ	WA21e						NIL
07.06.83	1200	1255	I2WSG	EF						NIL
	1225	1235	F6FTC							NIL
08.06.83	0200	0400	UA6BAC	SE29e	27	26	7	9		NC
	0400	0600	GM3WOJ		27					NC
	0700	0735	F9HS	BD30e	37	37	35	10		C
	0800	0850	EA6FB		26		3	5		NC
	1100	1200	UK6ABI	TF76e						NIL
09.06.83	0400	0435	GM3WOJ		hrd				6	
12.06.83	0500	0530	GM3ZXE	YQ35g	26	26	20	3		C
	0620	0643	SM0EJY		27	36	20	8		C
13.06.83	2100	2200	SM5CBN	HS56c	27	26	50	10		C
16.06.83	0500	0530	GI6ATZ							NIL
	0600	0700	CT4KQ							NIL
18.06.83	1000	1100	YU1OO	KC10b						NIL
25.06.83	0600	0700	UK6YAG	TE30h						NIL
	0751	0840	EA6FB		26	26	9	11		C
02.07.83	0400	0515	LA8KV	FW27c	37	27	14	10		C
04.07.83	0800	0900	LA6QBA	GV41e	26		1			NC
	2100	2132	F6BZA	AG32b	26	26	4			C
05.07.83	0930	1000	SM5MIX		26	M/S Test 30 min.				NC
10.07.83	0600	0645	F6EYM/EA5	ZY10j	26	26	15	21		C
12.07.83	0200	0325	SK7JD	IR14f	26	26	14	25		C
15.07.83	1200	1330	PA0OOM/SM1	JQ01c	26	26	14	6	17	C
	1400	1430	F6FHP/p		26					NC *
16.07.83	0500	0600	SM3JLA	JX56c						NIL
17.07.83	0400	0550	SM3JLA	JX56c	47	26	10	8	25	C
18.07.83	2200	2330	CT1ADW	VB68f						NIL
19.07.83	0400	0500	LA9MW	HB58f						NIL
	0600	0635	GM4COO	YS72j	27	26	mni	mni	12	C

21.07.83	2145	2310	SK7JD		26	26	5			C Rand
25.07.83	1900	2000	UA6BAC	BE29e						NIL
	2100	2200	LA9MW	HB						NIL
	2300	2400	CT1ADW	VD						NIL
26.07.83	0200	0330	UK6YAG	TE30h	26		1			NC
	0500	0650	LA6HL/TF	TY21h	26		4	2310km		NC
27.07.83	2100	2300	I5OPDQ	EZ66a	27	27	40	10		C
29.07.83	2300	0030	CT1ADW					1		NIL
11.08.83	0600	0700	EB5AZT	ZY10h	26	26	6	14		C
	0700	0740	F6BZA	AG32b	26	26	6	2		C
	0800		UA3OG	UR15f						NC *
	0900	0955	OH7TN/8	PZ11f	26		1			NC
	1000	1030	EA7XY	YX						NIL
	1800		OY5NS	IS	27	hrd	mni	mni		n.QRV**
	2000		UA6ALT			hrd				n.QRV**
	2200		EA7XY			hrd				n.QRV**
12.08.83	0500	0520	IW2BNA							NIL
	0600	0634	EA1TA	VD	27	26	3	1		C
	0910	0935	DL0IV/I7	JZ01h	36	27	6	1		C
	1000	1040	OH7TN/8	OZ						NIL
	1200	1255	SM3KJO	JW02a	26	26	15	11	25	C
	1325	1345	SM0HJZ		26					NCRand
	1600	1635	GB2XN	XN59a	26	26	16	8		C
	1700	1725	I0CUT	GB						NIL
	1719		F1KBF	FB	27	27	1	Rand	20	C SSB
	1900	1935	OH7PS	OX67h						NIL
	2000	2130	UD6DFD							NIL
	2130	2159	OK3AU	KI	26	M/S Test		700km		NC
	2200	2300	TO6DMD	DD14c	26	26	15	10		C
13.08.83	0200	0300	UA9GL	CR02h						NIL QRM
	0600	0645	OH2AUK/0	KT05g	26	36	25	3		C
	0700	0725	IW0AKA	GB13a						NIL
	0900	0935	SM2IUE	IZ38h	27					NC Rand
	1000	1050	OH7UE	PW	47	27	10	3	80	C
	1400	1530	UA3OG							NIL
14.08.83	0600	0800	UA6YBH	UG73a	27	26	6	2		C
27.08.83	0500	0700	UA3RFS	UM08j	26	26	2			NC
29.08.83	0400	0530	EA2ALW	ZC12e	26	26	mni	mni		C
02.09.83	2000	2200	UA3RFS	UM	26	26	3	1		C
	2300	2340	YU7AU/5	KA05h	26	26	18	20		C
09.11.83	2200	2300	UA6BAC	SE29e						NIL
17.11.83	2000	2200	UA3MEE	TR18c	26		1			NC
19.11.83	0400	0500	GM4IPK	YP05h						NIL
09.12.83	2300	0055	SM4ANQ	HU66d	26	27	35	11		C
10.12.83	0500	0700	SM3GHD	GW70e	26	26	11	10		NC
11.12.83	0200	0400	SM3GHD	GW70e						NIL
	0400	0600	SM2IUE	IZ38h						NIL
12.12.83	2130	2230	YO7VS	LE60g						NIL
	2300	2400	OH3TR	LV	26	26	3			C
13.12.83	0000	0100	LZ2OY	MC						NIL
	0300	0305	UB5DAA			HRD				Random
	0400	0505	OH7UE	OW40h	27	26	7	3		C QRM
			OH2AUK			HRD	on QRG			Random
	2000	2200	IBREK	HA	27	26	5			C QRN
	2000	2100	UA3MEE	TR18c	26		1			NC
	2200	2310	GI4KSO	WO	26	26	14	6		C
	2310	2400	UB5JNI	SF15a	17		18	10		NC Rand
	0000	0045	UB5JNI	SF15a	37	37	20	10		C Sked
14.12.83	0050	0105	UA6YAF, UB5EFS			HRD				Random
	0200	0300	OY5NS	WW						NIL
	0336	0349	GI4OPH	XO	27	26	6	10		C Rand
	0352	0410	GM4COK	YP	27	27	6			C Rand
	0400	0420	OH7PS	OX67h						NIL
	1800	1900	YU2JL	HD						NIL

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	2000	2100	SM1IUE	IZ3Bh						NIL
	2200	2300	EA1OD	XD	26	26	2	5		NC
15.12.83	0000	0100	UA6BAC	SE29e						NIL
	0115	0155	UK3AAC	SP19e	28		mni	mni		NC
	0200	0300	UA6YAF	TE30h	26		1			NC
02.01.84	2200	2230	YU2JL	HD30a						NIL
03.01.84	0000	0100	OY9JD	WV						NIL
	0200	0300	LA4QI	EV						NIL
	0500	0555	F1GTR	ZG65g	27		1			NC
	0730	0000	EA3LL	AA25j	SRI, not QRV					
	1900	2100	SM3GHD	GW70e	26	28	12	6	8	C
	2100	2200	UA4CDT	YL01h	QRB 2430km					NIL
	2200	2355	YU2JL	HD30a	26	27	mni but vy short			NC
04.01.84	0000	0140	OY9JD	WV						NIL
	0200	0400	UA4CDT	YL	QRM, DJ/OH on QRG					NIL
	0418	0434	EA3LL	AA25j	27	26	6	14		C Rand
18.03.84	0400	0550	SM2JDN	IY24f	26		3	1	6	NC
24.03.84	0500	0600	SM3BZS	HY						NIL
25.03.84	0400	0550	SM2JDN	IY24f	26		21	8		NC
01.04.84	0500	0655	SM2IUE	IZ3Bh	26	26	3	5		NC

* Sorry, mains QRT

** Sorry, pre-amplifier is QRT, H.V. anode capacitor, Z.-diode.

Lot of QSO's being NIL have been arranged by letter and haven't been confirmed.

I am very interested in each MS-QSO in CW (max. 2500 LPM) or also SSB in big shower. CW skeds all the time out of TV program. Equipment: BF981 at antenna 2xGW4CQT, TX 350W Output. Also arrange skeds for OK1SM, OK1KRQ (GJ), OK1JKT, OK1FAV (GK). OK1FM, Milan Gütter, Jablonskeho 42, 301 - 45 PLZEN, Czechoslovakia, phone 0042 19-45975. tks fer info Milan.

OK1MBS (HK48a) wkd:

12.08.83	2350		G4NFD	XJ05h	27	39	Random
13.08.83	0930		F6FHP	AE21j	27	39	Random

PA3BIY (CM) wkd:

31.08.83	0000	0032	YU7AU/5	KA05	26	27	22	31	2.5	C CW
17.09.83	0400	0505	LA1B	DU	26	26	21	45		C CW
13.12.83	0000		UB5DAA	LI22g		27				NC CW*
	0200	0400	YO5TP	LG18j		37	1		24	NC CW
	1925	2015	YU7PXO		37	28	mni		3	CW Rand
	2100	2200	OK7PS	OX		26	2	7		NC SSB
	2200	2400	UA3IDQ	QQ	26	26	9	22		NC CW**
14.12.83	0600	0608	SM3GHB	HW	37	27	4	2	10	C SSB
	0700	0800	EA3IH	BB	37	27	mni		12	CW Rand
17.12.83	0400	0600	SM2LTA	JY		26	8	6	4	NC CW
18.12.83	0400	0600	SM2LTA	JY	26	27	3			NC CW**
03.01.84	0000	0040	EA3LL	AA	26	28	26	45		C CW**
04.01.84	0000	0130	SM2LTA	JY	26	27	67	76	2x13	C CW
07.01.84	0500	0700	OH6CH	NV	26	26	5	12		NC CW
14.01.84	0500	0700	EA2LU	ZC	26	27	52	151	4	C CW
04.02.84	0500	0700	YU7AU	KE	26	27	16	15	2	NC CW

* NIL, after one period QRT?

** very short reflection

HRD during Quadrantids (Jan. 4th) in CW: UB5BAE, YU7AU, LZ1AB, OK1DA, OH5IY, OH9AMI, G3BW, YU7PXO, YU1DRM, OK1SM, YU2RSD, OK1VBN, UQ2GLO; in SSB: IK4DCA, YU4BMN, YU3ES. NIL: EA3IH, UA3RFS, OH7UV/8, SM2IZV, SM2GGF.
tks fer info.

PA3CPL (CL02a) wkd:

28.05.83	I1ANP	27		12	8	1	NC
30.05.83	OH5LK	26	26	3	4	1	NC
04.06.83	OH3MF	38	27	6	10	35	NC
05.06.83	I6WJB	27	26	10	10	2	C
	OH3MF	27	26	16	13	2	C

06.06.83	IW2BNA							NIL
07.06.83	EA1TA	26	27	4	6	2		C SSB
08.06.83	YU2JL	26		2	4	1		NC
09.06.83	I1ANP	26		2	2			NC
	SM3AZV	26	26	9	18	1		C
29.06.83	LA1K	27	27	9	19			C
30.06.83	YU7KMN	37	37	12	12	10		C
	HG5OV/7	26		2	2			NC SSB
02.07.83	CW1AUW							NIL
12.08.83	IW2BZY	37	47	2	1	10		C SSB
13.08.83	OH5LW							NIL
	UQ2GCG	27	27	random				C
04.09.83	YU7AU/5	26		4	2	1		NC
22.10.83	YU1AWW	26		2	4	0,5		NC
12.12.83	YU1AWW	26	27	17	20			C
13.12.83	OH2AUK							NIL
	IW4ASX							NIL
	YU7QED							NIL
	OH7PS	26		1	2			NC SSB
	YU2SZZ							NIL
14.12.83	YU2JL	27	37	12	3	2		C
15.12.83	YO7VS							NIL
03.01.84	SM2JDN							NIL QRM
	IW4ARD	26	26	6	10	1		C SSB
	OH7AXB							NIL
	YO7VS							NIL
04.01.84	EA3DXU	38	58?	4	8	8		NC SSB
	OH3AWH	27	26	mni		8		C

PE1HWO (CL03e) wkd:

22.06.83	2100	2300	OK2PEW	IJ	26	26			C
08.08.83	0400	0530	YU3FM	HG	26	27			C
10.08.83	2000	2100	HG1YV	IH			4		NC
	2230	2400	YU7AU	KE	26		1		NC
11.08.83	0900	1000	I2FAK	EF	26	27			C SSB
	2000	2050	HG8CE	KG	27	26			C
22.12.83	2000	2200	YO2IS	KF	26	26			C
03.01.84	2200	2300	EA3BBU	AB	26		3	1	NC

NIL: OK1KKH, YU3TSB, YU1AWW, IW4ARD, OE3PUW, SP6ASD, I4GOC, YU3ZW.

I'm very interested in MS (SSB or CW) max. speed 1500 LPM. Equipment: RX BF981, TX 4 CX 350A, antenna 16ele F9FT. Also DRV on 432 and 1296 MHz. Please write to Andre Mense, Socratesstr. 339, 3076 BX Rotterdam, tel. 010-325886.
tks fer info Andre.

PE1JUP (CL13b) wkd:

08.08.83	2200	YU2JL	HD	26	26	6	mni	3	C SSB
13.12.83	2200	I0LBK	GB	27	26	16	mni	3	C SSB
03.01.84	1700	OE6NVG	HG						NIL
	1800	SP6AZT	IL	26	26	6	17	3	C CW
	2300	OY9JD	WV						NIL
04.01.84	0000	IW4ARD	GE	26	26	mni	mni	4	C SSB*
	0100	YU3TTL	HG	26	27	7	mni	8	C CW**
	0400	OH3MF	MU						NIL
07.01.84	0700	YO2IS	KF						NIL***

* ufb, ** fb, *** new sked?

Hrd Random: HG8CE, YU3ES, YU2JL. Any proposal for sked is welcome (SSB + CW up to 1000LPM), any OH7. PE1JUP, Alex van Hengel jr, Merwedestraat 5, 2991AE Barendrecht. tks fer info Alex.

SM7GWU (HS75c) wkd:

10.08.83	0900	1000	I1KTC/4	EE	26	26	4	21	4	C
11.08.83	0600	0730	F9HS	BD	26	26	9	11	1	C
	0900	0946	G4NFD	XJ	27	47	14	22	5	C
	2100	2200	F8CS	CH	27	26	11	12	7	C

DUBUS 2/84

METEOR SCATTER NEWS

12.08.83	1000	1020	GM6APZ/p	XM	26	26	6	4	8	C SSB
	2000	2030	YU3ZW	IG	37	48	6	5	13	C
	2100	2140	TO6DMD	DD	26	26	10	6	1	C
13.08.83	0000	0030	F6DKQ	DH	26	26	11	12	42	C
	1130	1220	G3WOH	YN	29	27	9	9	10	C
13.12.83	2300	2340	I2FAK	EF	26	26	7		3	C SSB
04.01.84	0200	0250	IK4DCO	GE	26	27	15	15	2	C

tks fer info Stefan.

Y21PL (GL79j) wkd:

12.12.83	2230	2400	GM3ZXE	YQ35g	26	26	5	10	2	C
13.12.83	0000	0200	UA3RFS	UM08j			1			NC
	0300	0356	IW2BNA	EF36b	26	27	6	9	2	C SSB
	0400	0500	EA1OD	XD32d						NIL
	2200	2345	YU7MAU	JF50j	26	27	9	14	5	C
14.12.83	0000	0200	YO7VS	LE60g	26	27	5	21	1	C
	0300	0351	EA6FB	AY07j	26	26	7	4	2	C SSB
	0400	0600	UA3IDQ	QQ64d	26	27	4	2	2	C
	0600	0635	F6EYM	ZJ75a	27	26	16	25	10	C
	0700	0900	UA3DHC	TQ71c	26	26	1	1	1	NC QRN
04.01.84	0000	0200	UA3RFS	UM08j						NIL
	0200	0230	EA3LL/p	AA25j	26	28	9	14	3	C
	0245	0259	IW9AJZ	GY	27	27	6	Rand.		C SSB
	0300	0400	EA7CPW	YX12f	26	26	2	3	1	NC QRM
	1000	1035	IW0BFZ	GB14f	26	26	11	24	2	C
02.04.84	0700	0730	F6DRO	AD38h	27	26	9	30	1	C

tks fer info Thomas.

YO7CKQ/8 (NH13a) wkd during Perseids (first MS operation in NH square):

14.08.83	0000	0030	PA2VST		26	26			68	C SSB
	0040	0058	DK6AS		26	26			10	C Rand

YO7CKQ (LF77a) wkd during Geminides (first MS operation in LF square):

12.12.83	0100	0240	PA0RDY		26	26	15	24	2	C CW
	0240	0310	PA2VST		27	26	5	8		C CW
	0500	0630	SM6EOC		27	26	10	15	2	C CW
	2200	2400	OH7PI		27		4	7		NC CW
13.12.83	0600	0800	Y22ME		27		mni			NC CW

NIL de OZ9PW, UA6BAC, UA3DHC. Sorry not QRV for SM6AEK, Y22HA, G3WZT, UA3LBO during Ursidis (bad luck):

22.12.83	0500	0700	PA2VST		27		1		3	NC CW
	2000	2200	Y22HA		26		7	8	2	NC CW

NIL de F6DKQ. During Quadrantides: pre-amp BF 981 QRT. Sorry not QRV for OH7PI, SM0HAX, DL8NBN, OZ1DSK.

YU1POA (KE24j) wkd:

11.12.83	2000	2030	G4IJE	AL	27	26	6	12	4	C
	2200	2300	F6GGF	BI						NIL
	2300	2400	G3WZT	ZK	27		1		2	NC
12.12.83	2000	2200	GI4OPH	XO	26			4		NC
13.12.83	200	2035	G6DFT	ZL	27	26	5	8	3	C SSB
	2100	2148	OZ1HWS	GQ	26	26	6	10	2	C SSB
	2200	2230	UQ2GCG	LR	27	27	12	mni	7	C
14.12.83	0000		UK3AAC	SP	37	26	mni			NC*
	2000	2018	SM6KJX	GR	27	27	4	4	3	C SSB
	2200		SP6GZZ	IL	37	27	1	2	4	NC
02.01.84	2335	0105	SM5CNQ	HS	27	28	6	16	4	C *

*=Random. Hrd Random: ON6UG, DF7DJU, PA0FAS, DF7DJ, RB5IOJ, UB5LNR, F1FHI, UB5JIN, UB5EFS, PA3PBY, PA3BDY, SM5EVN, UA6LGH, UA6LJV, DF6FL, UB5BAE, PA0RLS, F6DKQ, SM0EJM, DK0TU, UQ2GLO, PA3COB, GJ4ICD, G4DCV, F1FHI, PA3AQM. tks fer info Kokan.

YU2EZA (IG54f) wkd:

28.07.83	1800	2000	GM4COO	YS	26	26	3	4	5	NC CW
31.07.83	0600	0800	OH5IY/4	NV	26	27	26	5	0,5	NC
03.08.83	0500	0555	GM3WCS	YQ	27	26	23	23	26	C
04.08.83	0400	0600	LA5IH	CU	36	26	4	11	22	NC
16.09.83	0500	0600	DK6AS/IS0	EA	27	27	12	10	2	C
22.10.83	0700	0830	SK7HW	HQ	26	26	17	11	1	C
12.11.83	0500	0700	PA3AQN	CM	37	27	43	25	10	C CW
16.11.83	0600	0700	GI4OPH	XO	27		8	6	6	NC SSB
20.11.83	0500	0700	DH1LAC	FO	26		12	3	1	NC
06.12.83	0500	0610	OZ1IUK	GQ	27	26	13	12	5	C
10.12.83	2300	0000	EA2LU	ZC	27	26	30	8	2	C
11.12.83	2000	2030	UA3IDQ	QQ	26		2	2	1	NC
	2200	2310	OH6CH	NV	28	27	20	12	2	C
12.12.83	0200	0300	G8VGM/A	YN	36		8	2	5	NC SSB
	0500	0600	PE1DAB	CN	26		20	8	1	NC SSB
	0700	0745	F6EYM	ZJ	26	27	10	23	9	C CW
	2000	2030	OH6NU	MW	26			1	1	NC
13.12.83	0000	0200	UQ2GLO	KQ	28	26	14	23	5	C
	0200	0400	GI4KSO	WO	26	26	12	8	1	NC
	2100	2145	F8OP	CF	27	27	20	10	2	C
15.12.83	0000	0200	Y22IC	GN	26	26	10	8	2	NC
32.12.83	0000	0200	G4NQC	ZL	27	26	75	44	4	C
	0200	0250	F8CS	CH	27	26	12	14	5	C
03.01.84	1900	2000	SM6KJX	GR	27		7	3	1	NC SSB
	2330	2400	EA3LL	AA	28	27	9	17	6	C CW
04.01.84	0000	0200	Y21TC	GN	26	37	16	8	2	C
	0300	0400	GI8YDZ	WP	27		2	1	1	NC SSB
	0400	0425	PE1DAB	CN	26	27	4	20	5	C SSB
08.01.84	0800	0920	G4DHF	ZM	28	26	18	19	2	C CW

NIL: LA5IH, UA6BAC, RB5LGX, EA6FB, DH1LAC, SM2CKR, RB5JAX, UA3DHC, SM3BIU, UP2BKH, UA6YBH, UC2AAB, SM2SKR, LA9FY, OH7UE (YU2EZA QRT SRI). tks fer info Nev.

YU2JL (HD30a) wkd:

16.08.83	2200	2400	SM0HAX	JT	27	27	5	9	0,5	NC
21.10.83	0530	0705	SK7HW	HQ	37	27	15	20	9	C
11.12.83	2000	2200	OZ1IUK	GQ	26	27	6	10	6	C
12.12.83	0000	0100	UP2BKH	KP	37	27	2	3	5	NC
	0100	0200	UQ2GLO	KQ	27	27	7	8	1	C
	0400	0600	OH3MF	MU	26		1	0	1	NC
	0600	0730	Y21TC	GN	27	27	17	36	1	C
	2200	2400	RB5LGX	RK	26		2	6	1	NC
13.12.83	2000	2100	OH2AUK	LT	27	26	5	2	1	NC
	2100	2200	DD5TD	EI	27	26	4	1	3	NC SSB
14.12.83	0200	0325	LA6HL	CS	27	27	7	99	6	C
	0353	0410	F6EZV	BI	27	27	12		3	C SSB*
	0500	0535	PA3CPL	CL	37	27	8	10	10	C**
	2000	2040	DL3AAL	FM	37	37	34	40	14	C
03.01.84	1500	1605	F6EYM	ZJ	37	26	12	9	5	C
	2000	2200	PE1FMU	CM	27	27	6	30	1	C
	2200	2400	OK1FM	GJ	27		3	3	1	NC
04.01.84	0233	0239	PA3NLS		37	37	4	0	8	C SSB*
	0243	0249	PA3COB	DM	26	26	5	0	3	C SSB*
	0329	0340	PA3AQN	CM	27	37	6	3	2	C SSB*
	0349	0400	F6FLV	BI	27	27	5	2	2	C SSB*
	0400	0455	G4OIG	ZM	27	27	14	12	12	C
	2000	2130	UY5OE	SK	26	26	4	7	1	C
	2200	2400	RB5LGX	RK	27		1	1	1	NC

* Random. ** Tropo 559. tks fer info Boban.

70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70cm-70

DF9CY (EL02e) wkd:

10.08.83	1600		OH0NU	MW	26		4		2	NC

NIL: YU1EV. Used 21ele and 1.2KW Output. tks fer info Christoph.

NEWS + SKEDS + COMMENTS + SUPPLEMENTS

Contest Informations

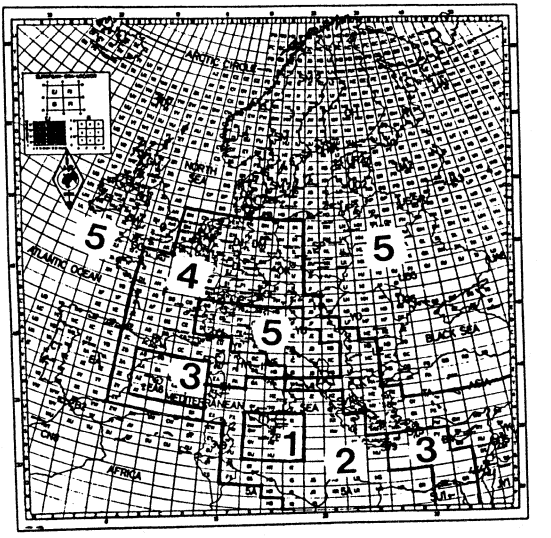
VHF/UHF/MICROWAVE CONTEST's 1984

27.05.84 DL-10GHz Sommer BBT 10GHz
02.06.84 F-VHF Contest 14-24z
02.06.84 G-1296MHz Trophy Contest
02.06.84 EA-VHF/UHF Contest
03.06.84 G-432MHz Trophy Contest
03.06.84 F-UHF/SHF Contest 04-14z
05.06.84 Scandin. VHF Contest 18-22z
10.06.84 G-70MHz Contest
07.06.84 Scandin. UHF Contest 18-22z
10.06.84 SP-VHF/UHF/SHF Cont. 08-10z
16.06.84 DL-SHF Contest 14-14z
17.06.84 G-10 GHz Contest 09-19z
16.06.84 HG-VHF Contest 18-24z 06-12
23.06.84 AGCW VHF CW Contest 19-23z
7/8.7.84 IARU VHF/UHF/SHF Contest 14-14z
08.07.84 G-VHF National Field Day
15.07.84 G-10 GHz Contest 09-19z
04.08.84 G 432 MHz Low Power Contest
05.08.84 G-144 MHz Low Power Contest
12.08.84 G-10 GHz Contest 09-19z
19.08.84 G-1296/2320 MHz Contest
1/2.9.84 IARU VHF Contest 14-14z
16.09.84 G-10 GHz Contest 09-19z
6/7.10.84 IARU UHF/SHF Contest 14-14z
28.10.84 G-70 MHz Fixed Contest
03.11.84 Marconi Memorial Contest
02.12.84 G-144 MHz Fixed Contest
16.12.84 G-70 MHz CW Contest

The 9H Falcon Contest

E. From June 1st 0001 GMT to June 15th 2400 GMT a contest, organised by the 9H VHF-UHF-SHF Group, on the 2m band (144-146 MHz) is taking place. Participation is open to all Radio Amateurs. All modes and all types of propagation may be used. Contacts via satellites and repeaters are not valid. Participating stations located in:

Zone 1 must wrk a min. of 10 9H stn
Zone 2 " " " " " 7 9H "
Zone 3 " " " " " 5 9H "
Zone 4 " " " " " 2 9H "
Zone 5 " " " " " 1 9H "



N.B. Please refer overleaf for Zone boundaries. The same 9H station may be logged more than once provided the contacts are established on different dates.

Points are calculated at 1 point per kilometre. Bonus: for every 9H station worked beyond the minimum requirement the points earned for the particular contact are doubled. Logs must show date, time (GMT), callsign, both reports (RS/RST), QTH Locator (E or WW) and points claimed. No serial numbers are to be given. Logs are to reach not later than the July 15th to: The Contest Manager, P.O.Box 144, Valletta, Malta. Awards: 1st - Trophy, Diploma and <u>One Week's Free Stay in Malta For Two Persons.</u> 2nd - Diploma. 3rd - Diploma. The decision of the Awards Manager is final. Explanatory Note: It is possible for a station in Zone 5 to establish the required 9H contact as late as the 14th or 15th June. No problem. This contact will automatically render valid his activity during the entire contest period the same applies for other zones and their requirement.

D. Der 9H FALCON Kontest, ist organisiert von der 9H VHF-UHF-SHF Gruppe. Alle Radio Amateure können teilnehmen. Band: 2m (144-146 MHz). Datum 1. Juni 0001 bis 15. Juni 2400. Sämtliche Betriebsarten und Ausbreitungsarten sind zugelassen außer Verbindungen über Satelliten und Relais. Die teilnehmenden Stationen müssen entsprechend ihrem Standort (siehe Zoneneinteilung) aus Zone 1 mind. 10 9H, Zone 2 mind. 7 9H, Zone 3 mind. 5 9H, Zone 4 mind. 2 9H und Zone 5 mind. 1 9H Station arbeiten. Gleiche Stationen können mehrmals an verschiedenen Tagen gearbeitet werden. Entfernungsmässig zählt ein km = 1 Punkt. Das Log muß enthalten: Datum, Zeit (GMT), Rufzeichen, beide Rapporte, QTH Kenner (E. oder WW) und die Punktanzahl aus der Entfernung. Es wird keine laufende QSO Nummer ausgetauscht. Logs werden eingesandt an: The Contest Manager, P.O. Box 144, Valletta, Malta bis spätestens 15. Juli 1984. Preise: 1. Platz: 1 Woche kostenloser Aufenthalt auf Malta für 2 Personen plus ein Diplom und Trophy. 2. und 3. Platz je 1 Diplom.

36. POLNI DEN 1984 / FIELD DAY

The Central Radio Club of Czechoslovakia has the honour to invite radio amateurs to participate in the 36. Polni Den / Field Day / VHF, UHF SHF Contest / which will take place during the 3rd Subregional Contest. Contest period: 24 hours from 1400 UTC July 7th 1984 to 1400 UTC July 8th 1984. Classifications: portable QTH only:
1. 145 MHz, max. output 5W, fully transistorized equipment fed from the chemical or solar sources (battery, storage battery).
2. 145 MHz, output according to the licensing rules.
3. 433 MHz, max. output 5W, fully transistorized equipment fed from the chemical or solar sources (battery, storage battery).
4. 433 MHz, output according to the licensing rules.
5. 1296 MHz, output according to the licensing rules.
6. 2304 MHz, output according to the licensing rules.
Exchange: RS or RST report plus a progressive QSO number starting with 001 and QTH locator. Points: each 1 kilometre of the QSO distance counts 1 point.
Logs: use a separate log for each band. Log must contain all necessary data; please keep all times in UTC; plus total score and the declaration that the rules and regulations of the contest have been observed. Logs must be sent not later than July 23rd 1984. Mailing address: The Central Radio Club, Vlnita 33, 147 00 Praha 4, CSSR. The decision of the Contest Commitee is final. Jan Franc OK1VAM (Award Manager)

On July 7th 1984 from 1000 UTC to 1300 UTC radio amateurs who are younger than 18 years are invited to a Young Operator's Field Day by The Central Radio Club of Czechoslovakia. Classifications: portable QTH only:
1. 145 MHz, max. output 25W, any feeding.
2. 433 MHz, max. output 5W, fully transistorized equipment fed from the chemical or solar sources (battery, storage battery). For exchange, points, logs and mailing address s.a.

AGCW-DL VHF Happy New Year Contest 1984

Call	QTHL	QSOs	Squ.	WAE	Pnts.	Call	QTHL	QSOs	Squ.	WAE	Pnts.
Klasse A:											
1.DJ2IB	EI13j	43	13	2	1830	4.DF6LN	FO51j	31	12	5	1156
2.DL1NBY	FK69b	28	17	5	1716	5.DK9OY	FM41c	29	14	2	1152
3.DF3TT/p	EI38d	40	12	3	1215						
Klasse B:											
1.DK9TV/p	DH20c	57	20	5	4500	4.DL9YBJ	EL03e	48	21	4	2925
2.DF1BN	DL64j	60	19	5	3168	5.DL4FAF/p	EJ14h	41	20	5	2925
3.DL3KAG/p	DK04e	62	18	3	2982						
Klasse C:											
1.DL5GBG/p	EI12f	67	18	5	4738	4.DJ1KN	EN75g	38	16	3	1938
2.PA0NIE	CL12d	56	19	7	3796	5.OZ1DOQ	GP34h	31	15	4	1748
3.DF5LS	FO66j	53	17	5	3146						

Comments News Skeds

CT1WW (WB63b) writes:...I am QRV also on 1296 MHz, 2320 MHz and 10 GHz. For 1296 MHz I have a Microwave Modules transverter, amplifier with 2 x BFQ68 and a linear with 2 x 3CX100 (2C39) from EME (Germany). For 2320 MHz I have a transverter from SSB-Electronics and a linear with 1 tube 2C39. tks fer info Tiago.

DF9PY (DK65g)schreibt:...Die Rubriken Tropo und Es finde ich in der vorliegenden Zeilenform sehr unübersichtlich. Ich bitte daher um Rückkehr zur alten Spaltenform. Zu erwägen ist vielleicht auch eine Aufschlüsselung der Berichte nach Kalendertagen, bei ausgeprägten Bandöffnungen eventuell mit einer Wetterkarte/Temperaturprofil wie teilweise schon geschehen. Die Mindestentfernung von 700km für 2m, bzw. 500km für 70cm finde ich in Ordnung. Ein dickes Lob jedoch für den Technik-Teil mit genauen und sauberen Skizzen, Schaltbildern und Layouts. Platzeinsparung für weitere Informationen könnte durch Fortfall der deutschen Übersetzung erreicht werden.
Den Gebrauch des weltweiten QTH-Kennersystems im innereuropäischen Verkehr lehne ich ab; eine zusätzliche Angabe bei guten Übertragungsbedingungen ist jedoch praktikabel. tks fer comment.
A.d.R. Das Abdrucken der Berichte in Tabellenform benötigt ca.40-60% mehr Platz. Da die Seitenzahl von DUBUS durch das Porto-Versandgewicht (100g) nicht beliebig vergrößert werden kann, könnte nur über den Faktor des Verkleinerns oder Streichung von Berichtsteilen zur Tabellenform zurückgefunden werden. (Es und Tropo).
DF9PY (DK65g) writes: The columns Tropo and Es are in this arrangement now too difficult to survey. Please, return to previous column organisation. Maybe a devision of the reports into calendar days at good condx would be good, perhaps with weather cards / temperatureprofile as done already. The minimum distances of 700 km for 2m, 500 km for 70cm are alright. Much commendations to the technical part with exact drawings, lay-outs and circuit diagrams. More room for further info could be achieved by omitting the German translations. tks fer comment
I refuse the WW-Locator for European DX-traffic, but at good condx it might be useful as additional statement.
N.o.e. For continue printing the Tropo and Es columns as before it needs abt. 40-60% more space. But we are limited by mailing weight of 100 grammes. The only way to return is to reduce the scale by 1:2 or to shorten the reports.

DJ8WS, OM Josef Regner schreibt:...Als langjähriger Bezieher dieser Zeitschrift möchte ich meine Meinung äußern. Es befremdet mich immer mehr, daß das Niveau der Hefte nach einer Seite neigt die für mich und viele meiner Freunde erschreckend ist. Um bei Heft 4/83 zu bleiben, DL7QY scheint es nicht mehr nötig zu haben in einer deutschen Zeitschrift noch deutsche Sprache zu verwenden. Man kann ruhig den Titel der Hefte ändern, es würde nicht auffallen. Abgesehen davon daß 10 Seiten Technik, davon 7 in englisch ohne den leisesten Versuch einer übersetzung, im Verhältnis zu 70 Seiten Selbstbeweihräucherung stehen. Vor Jahren habe ich diese DX Berichte ohne Zweifel geglaubt bis ich einen Bericht einer I4 Station las, der DL1KF und DK5RV auf 70cm als Partner angab. Diese Stationen in meiner unmittelbaren Nachbarschaft sind bis heute noch nicht auf 70cm qrv.
A.d.R. Lieber OM Regner, mehr als die Hälfte der DUBUS Auflage wird im Ausland gelesen, deshalb ist der englische Sprachgebrauch unerläßlich. Wir werden uns bemühen zukünftig alle technischen Berichte zweisprachig zu veröffentlichen. Zu dem zweiten Punkt der Berichterstattungskritik kann der eingesandte Bericht der I4 Station ein 2m Bericht gewesen sein, welcher fälschlicher Weise in die 70cm Rubrik von unserer Redaktion eingeordnet wurde. Mir ist bekannt, daß bedauerlicher Weise ähnliches des öfteren passiert ist, auch umgekehrt 70cm in 2m. Meistens sind derartige Mißverständnisse auf mangelhafte Kennzeichnung von den Berichten der OM's zurückzuführen.

DK1KR (FN) schreibt: Mir persönlich gefällt die neue Organisationsform sehr gut. Die straffere Gestaltung dieses neuen Heftes spricht wesentlich mehr an. Die Gliederung ist sehr gut, nicht nur eine Ansammlung von Berichten, was

nicht die reale Pioniertat aller Mitstreiter der ersten Stunden schmälert, denn sie erst machten dieses Heft möglich. Aber in einer derart kostenträchtigen Zeit ist zentrale Leitung eines solchen "Unternehmens" fast Zwang. Die Ansicht des OHØNC möchte ich voll stützen. Solange Dubus in DL erstellt wird, sollte sie zweisprachig bleiben. Welcher Brite würde seine Hefte in Deutsch allein herausgeben, auch wenn dieses die Weltsprache wäre? Man fände ihn nicht. Zudem sind die Übersetzungen zwar wörtlich, entsprechen gerade deswegen jedoch nicht dem, was in der Ursprungssprache zu sagen war. Zum Inhalt möchte ich einen ganz besonderen Glückwunsch aussprechen. Nicht zuletzt die Herausgabe der Programme für den WW-Locator, werden ihn ganz besonders in DL/Y2 schnell einführen. tks fer comment Walter.
I personally like the new organisation very much. The arrangement is good, not only a collection of reports, which does not belittle the work of the contributors of the first hours. But in such expensive times a central "management" is almost a must. I agree to OHØNC's opinion. As long as DUBUS is made in DL, it should be bilingual. Which Briton would publish his magazine in German only, even when it would be universal language. You wouldn't find him. Besides, the translations are often literal but because of this they often don't correspond to the origin text. Congratulations to contents, especially to the programs for WW-Locator (we will enter it fast in DL/Y2.). tks fer comment Walter.

DK3UZ schreibt: Aus Protest gegen den Beschluß des Amateurrats, bei der diesjährigen IARU Region 1 Konferenz die Einführung eines neuen QTH-Kenner-Systems zu befürworten, wünsche ich hiermit eine Streichung meines Rufzeichens aus der DUBUS 144 MHz Topliste.
DK3UZ writes: Protesting against the decision of the DARC council to vote for the entering of a new QTH-Locator-System at IARU Region 1 conference this year, I ask to delete my call of the DUBUS 144 MHz Toplist.

DL7YS Peter writes: The Club station of the Amateurradio Club Berlin-Spandau in the DARC, DLØSP is looking for Tropo skeds during the Contests of July/ September and (may be) October. QTH is GM36d (JO62OM). Location is abt. 100m a.s.l. Equipment on 144 MHz is 600W rf, 4x10ele, preamp BF981. On 432 MHz abt. 150W rf and 8x19ele. For Tropo skeds (no MS) contact Peter John, DL7YS, Karlsbergerallee 32-34. 1000 Berlin 22.
Always when we have some Tropo to the West (G, PA, ON a.s.o.) everybody is asking us in DL7 or Y2, what is abt. SP stations. So I checked my QSL-collection, to give you some info abt. good equipped stations in SP, which are qrv now: SP1AAY, Jerzy Haberko, Box 106, Koszalin, PL. IO62g, running 120W rf preamp AF239 and a 9 ele yagi. SP3JBI, Zenon Musielak, ul. Piwonicka 42, 62-800 Kalisz, JL21a, running 20W rf into a 9 ele yagi. SP6CPF, Franciszek Dul, Henrykow 155, 59-800 Luban SL, HL67e, running 50W rf into a 9 ele lyagi. SP7FSF, no address, JL28a, 100Wrf RX= 40841, ant: OK1DE. SP5KVW, no address, KN78e, 80Wrf into a 9 ele lyagi. From my log another list of active SP's on 144 MHz: SP1FPG (HN), SP2LU (JN), SP2JPG (JN), SP2DXL (JO), SP3MFI (JL), SP3BLR (HM), SP3MIS (IM), SP3JBI (JL), SP3FWM (IM), SP3GAD (IM), SP3CAI (HM), SP2FAV (JO), SP4DCS (KN), SP45AD (KM), SP5KVW (KN), SP6HEI (IL), SP6CIZ (IL), SP6FUN (IL), SP6CPF (HL), SP6ASD (HL), SP7DSA (JL), SP6BQA (IK) and SP9EWO (JK). This is only to give the VHF-friends in Western Europe an idea, which squares are "on the air" in SP. Of course there may be also activity from other squares (JJ,JM,KJ,IN,KK), but this is an extract of my own log from 1st. Nov. 1983 to 1st. May 1984. So be patient and keep looking eastwards with your antennas, the SP's are waiting for your CQ SP! tks fer info Peter (AdR MS Ber. in 3/84).

EA4AAW (WZ49g) wird Juni, Juli und August auf 144.300 +-15 MHz zwischen 1500 und 1900 GMT QRV (SSB, MS) sein. EA4AAW (WZ49g) will be QRV (SSB, MS) on 144.300 +-15 MHz in June, July and August between 1500 and 1900 GMT. Seine Station/his station: VHF FT-902, FTV 901R, 2x4CX250B, 4x16ele, 0.6dB; UHF 100W, 4x21ele, 0.7dB; SHF UTV 1200BH, 4x23ele, 20W, 0.9dB. Marcos Marino Molano, P.O.Box 9, 10002 Caceres, tel: 927222206.

F1EIT schreibt:...Ich stimme OHØNC's Meinung über die Zweisprachigkeit von

DUBUS voll zu. Bestimmt ist der deutsche Teil auch für Leser außerhalb Deutschlands von Nutzen (speziell in Mittel- oder Nordeuropa). Außerdem wird DUBUS in Deutschland hergestellt und muß seine Identität wahren.
F1EIT writes:...I fully agree to OHØNC's opinion beyond the two languages in DUBUS. The German part is also useful for readers outside Germany (especially in Middle or Northern Europe). And anyway, DUBUS is created in Germany and must keep its identity. tks fer comment Jose.

F1FHI writes concerning the 70cm band:...We can only work between the splatters of "Syledis" system; for example: 432.195 to .205 QRM, .205 to .215 free, .215 to .225 QRM, .225 to .235 free, etc.. Syledis uses 2.5 MHz and this is not easy for working via the moon, but at Feb. activity week end I have worked W6ABN in the splatters, Hi! But when the conditions will be good I believe it will be possible for a lot of Europeans to receive Syledis: excellent beacon and for frequency no problem: every 19 KHz you have the pulses! Perhaps in Cefalu at the IARU Region 1 Conference it will be possible to arrange a QSY on an other frequency but this is very difficult. On 13cm not again QRV but we work on the receiver with friends from Paris. tks fer info Jean-Pierre
F1FHI schreibt:...auf 70cm können wir hier an der Atlantikküste nur noch zwischen dem Gesplatter von "Syledis" (Syledis = Fluß + Küstenvermessungsverfahren) arbeiten. Zum Beispiel von 432.195 bis 432.205 nur QRM, von .203 bis .219 frei, von .215 bis .225 QRM, .225 bis .235 frei, usw. Syledis arbeitet breitbandig 2.5 MHz, was natürlich auch EME QSO's nicht gerade erleichtert, trotzdem konnte im Februar-EME-Aktivitätswochenende mit W6ABN im QRM gearbeitet werden. Bei Tropo-überreichweiten werden mitteleuropäische Stationen eine im Abstand von 19 KHz gepulste Bake empfangen! Vielleicht kann in Cefalu bei der IARU Region 1 Konferenz eine Verschiebung des Frequenzbereiches erreicht werden. Auf 13cm noch nicht wieder QRV, arbeiten aber mit Freunden am Empfänger.

F6DRO (AD38h) writes:...I agree with LA8AK about difficulties being different to work squares on VHF/UHF; for example AD: if you draw a 2000 km circle around this square, more than 70 per cent of the surface is inactive! (sea or regions with no amateurs); we have the same difficulties to be competitive in contests.
F6DRO (AD38h) schreibt:...Ich stimme mit LA8AK über die verschiedenen Schwierigkeiten Felder auf VHF/UHF zu arbeiten überein. Zum Beispiel: Zöge man einen Kreis mit 2000 km Durchmesser um AD-Square, wären 70 Prozent seiner Fläche nicht aktiviert! (Meer oder Regionen in denen es keine Funkamateure gibt); wir haben die gleichen Schwierigkeiten wettbewerbsfähig zu sein. tks fer comment.

GJ8SBT (YJ) writes:...I am QRV on 1296 MHz, 150 Watts to 90 element array. So if any DL stations want a sked on 1296 MHz please phone in big tropos 0534 42258, A. Renouf, Boscobel Farm, St. Peter, Jersey, Channel Islands. tks fer info.

GW8VHI writes: I think Dubus info has just the right amount of info , skeds and technical reports. The only complaint I have is that I have written to many OM's for MS skeds whose calls apeared in Dubus MS List, but very few replied. Maybe the most of them should be taken of the list.
GW8VHI schreibt: Ich glaube, Dubus ist die richtige Mischung aus Information, Skedberichten und technischen Berichten. Die einzige Beschwerde, die ich habe, ist, ich habe vielen OM's wegen MS Skeds geschrieben, deren Rufzeichen in der MS-Liste aufgeführt waren, aber nur sehr wenige antworteten mir. Vielleicht sollten die meisten von ihnen aus der Liste genommen werden. tks fer comment.

HB9CRQ (EH61b) writes:...I enjoy very much 144 MHz and 432 MHz DX, especially MS working and I'm willing to keep any skeds should anyone like to work EH. Because of QRL I can't be QRV during July, August and September but earlier or later I'm QRV for skeds via EME, MS and Tropo. My equipment for 144 MHz: RTX Transverter and IC 720 A, 1 KW CW PEP, GAAS FET NF 0.2dB, 8x9 el Tonna. For 432 MHz: RTX Transverter and IC 720 A, 1 KW CW PEP, GAAS FET NF 0.3dB, 8x9 ele

Tonna. For the moment I'm MS-SSB QRV only, but I hope to get the needed equipment in October. Please write to me or listen for me on VHF-Net. My address: Dan Gautschi, HB9CRQ, P.O.box 12, CH5737 Menziken, Switzerland. tks fer info Dan

HB9MIO/p ist jetzt auch auf 5760 MHz in DH80e (1300m a.s.l.) QRV. Station: ZF 432 MHz, TX 200mW, RX 2.6 dB, Ant. 70cm Parabol.
Außerdem ist er von seinem Portabel-Standort bei jedem Contest und guten Condx. QRV auf 2m (25W/10ele), 70cm (25W/2x9ele), 23cm (10W/26ele loop) und 3cm FM (10mW/70cm Parabol.).
HB9MIO/p is now QRV on 5760 MHZ in DH80e (1300m a.s.l.), also. Station: IF 432 MHz, TX 200mW, RX 2,6dB, antenna 70cm parabol. At contests and good conds. he also is QRV from DH80e on 2m (25W/10ele), 70cm (25W/2x9ele), 23cm (10W/26ele loop) and 3cm FM (10mW/70cm parab.) tks fer info Ferdinand.

I2FHW writes:...I am QRV on 70cm from EE17f, 800m a.s.l., in a good QTH for F,DL, OE, OK, etc. Northern stations. My rig on 432 MHz is 4 x 21 ele long Yagi, at large spacing (3m HxE); very low loss cable, celflex type CUY 1/2 inc.; RX with low noise, 3SK97 GaAs Fet; Pa with 4CX250R abt. 300W output. I thought to make the QSOs with you like in MS-procedure, i.e. first minute I call you, second minute you call me etc., CW mode at QRS or SSB. I think, in this mode it is easy to make a QSO in order to avoid each confusion, and the report will be RST. I am QRV only at weekend or in August (for hollidays) and I think 2000 GMT Saturday evening and before 0900 GMT Sunday morning is a good time at frequency 432,370 MHz (not below 432,220). Please write me (day, GMT, frequency and procedure) or if you want to test before on 144 MHz. I am also QRV on 1296 MHz with 20W output, GaAs Fet in RX and 4 x 23 ele Yagi.
I2FHW berichtet, daß er auf 70cm in EE17f (800m a.s.l.) QRV ist. Seine Station: 4 x 21 ele Long Yagi (3m HxE), verlustarmes Kabel Celflex CUY 1/2 inc., rauscharmer RX, 3SK97 GaAs Fet, Pa 4CX250R ca. 300W Output. Er möchte die QSO's wie bei MS machen, die erste Minute ruft er, die zweite Minute wird er gerufen, CW auf QRS oder SSB, der Rapport soll RST sein; er denkt, so Verwirrungen vorbeugen zu können. Er ist nur am Wochenende, 2000 GMT Samstags und Sonntags vor 0900 GMT, oder im August QRV, auf 432.370 MHz (nicht unter 432.220 MHz). Interesierte sollen ihm unter Angabe von Datum, Zeit, Frequenz und Modus schreiben, auf Wunsch zuvor auch Test auf 144 MHz. Er ist auch auf 1296 MHz QRV, 20W Output, GaAs Fet im RX, 4 x 23 ele Yagi.
Address/Adresse: I2FHW, Rota Franco, Via Dante 5, 20030 Senago (Mi), Italy.

Es in January?!
(see also page 157!)
I4XCC (GD03d) wkd on Jan. 14th 1984 at 1127 UA3QHS TL27b 559 559 and hrd UA3QER. He writes:...at first I thought it was "super tropo" condx but the QRB is >2000km and I was QRV until 1230 and had not hrd other UA or UB5. tks fer info Claudio.

70cm Propagation Warning Net: 433.775 MHz
Since no formal decision can be made, we will now start a net frequency on 70cm for VHF/UHF information. The following amateurs have received 70cm FM RX to participate: LA4WN, LA6VBA, LA9DL, SM6HYG and LA8AK. We hope, this frequency will be cleared away from citizen band (technical license) operators.
Warnnetzfrequenz 433.775 MHz bei überreichweiten
In Norwegen beginnen wir auf 70cm mit einer VHF/UHF Informationsfrequenz in FM. Folgende Amateure sind empfangsbereit: LA4WN, LA6VBA, LA9DL, SM6HYG und LA8AK. Wir hoffen, daß diese Frequenz für diesen Zweck störungsfrei genutzt werden kann.tks fer info Jan.

ON6UG (BL79g/JO11UB) will be QRV on 2320 MHz this summer. For MS / Tropo skeds he is QRV on OSCAR 10 on Saturday at abt. 2000 GMT on 145.940 MHz. Freddy De Guchteneire, ON6UG, Olmstraat 18, B-9910 Mariakerke.

PE1HQO is now PA3DIJ. He writes:...I am active on 70cm, 23cm and 13cm. For 70cm I get a home brew station with 100 W Output and 1 x 21ele F9FT; for 23cm,

also home brew, 100 W Output and a 2m dish with a L.P.D.; and for 13cm, also home brew, mgF 1200, pre-stage CFY 13, 50 W Output and a 2m dish. I have worked a lot of DX on 70cm and 13cm in the last year and hope to let hear from me very soon again. I am busy with a EME station for 70cm with 8 x 21ele in the garden and 700 W Output. It will be operational in 1985, I hope.
PE1HQO ist jetzt PA3DIJ. Er schreibt:...ich bin aktiv auf 70cm, 23cm und 13cm (Stationen alle selbstgebaut). Für 70cm 100 W und 1 x 21ele F9FT; 23cm 100 W und ein 2m Spiegel mit L.P.D.; 13cm mgF 1200, Vorstufe CFY13, 50 W und ein 2m Spiegel. Im letzten Jahr habe ich viel auf 70cm und 13cm gearbeitet und hoffe bald wieder etwas von mir hören zu lassen. Zur Zeit baue ich eine EME Station für 70cm mit 8 x 21ele im Garten und 700 W. Ich hoffe, daß sie 1985 fertig sein wird. tks fer info Frank.

PE1JSE (CL34f) writes:...I'm member of DUBUS for a few months now and I enjoy it very much, particular to read what other OM's have worked during Tropo, Es, Aurora, MS, EME and so on.
I am Radio Amateur for one and a quarter year now. I am QRV on SSB on 2m and 70cm for about 8 months, and on 23cm for 3 months. tks fer info Jac.

SM4IVE schreibt:...Ich glaube es wäre besser DUBUS nur in Englisch zu drucken, da es mehr Leser gibt, die Englisch und nicht Deutsch gelernt haben. SM4IVE writes:...I think it would be better to print DUBUS in English only, because most of the readers have learned English but not German. tks fer comment Lars.

Wes, ex-SP1DX, möchte allen Bekannten mitteilen, daß er nach Aufhebung des Kriegsrechtes in Polen seine Afu-Lizenz nicht zurück erhalten hat. Außerdem wünscht er aus der Topliste gestrichen zu werden, da er keinen Sinn darin sieht , die Topliste in den kommenden Jahren hinab zu rutschen. Mit besten 73 an alle VHF-Amateure von Wes.
Wes, ex-SP1DX, would like to inform all friends that after the war status in Poland is ended he did not obtain back his licence so he is not a licenced ham anymore. Besides, he wishes his call to be withdrawn from the Toplist, as he sees no sense in sliding down the Toplist for the comming years. Wes sends his best 73 to all VHF-amateurs.

Toshiba UHF Linear RF Power Modul S-AU4 (s. DUBUS 4/83 p.272)

Dieses Modul ist in Holland über den Nationalen Amateur Verein VERON zu erhalten. Preis in Holland 125 holländische Gulden. PA0MS hat einen kleinen Vorrat von diesen Modulen erworben und kann diese in Deutschland versenden. (PA0MS ist heute auch noch in DL wohnhaft als DJ0MX)
Für DM 110.- bekommen Sie per Einschreiben ein S-AU4 Modul. Schicken Sie einen Euroscheck an P.F. Maartense, DJ0MX, Im Gärtchen 9, 5107 Simmerath, oder überweisen Sie diesen Betrag auf das Bankkonto 8008583, Commerzbank Aachen, Blz 39040013.

World Wide QTH Locator
DB5LM writes:...for verifying the example in the published program in DUBUS 1/84 p.13 must be changed a few lines to: 30 B=ASC(A$(1))-65:C=ASC(A$(2))-65, 80 IFE=0THENE=10, 120U=40+C-D/8-H/24+.97916667, 130 V=2*B+E/5+G/15-.16666667. The Loc. results are the same as in the old version, but now it's possible to calculate the exact coordinates from the QTH-Loc.
Um das in DUBUS 1/84 S.13 gebrachte Beispiel im QTH Kenner Programm verifizieren zu können, bedarf es o.a. Änderungen. Jetzt können durch umrechnen des Kenners die Koordinaten kontrolliert werden. Tks fer info Peter.
DK3UZ sent a WW QTH Loc. calculation program written in HISOFT PASCAL 4D1.6a.
DK1KR translated the in DUBUS published WW Loc. program in BASIC for using the pocket computer PC1401 (Sharp).
PA0BLD sent a WW QTH Loc. program for 16k ZX81 use.
Listings of all mentioned programmes are available at DL7QY. Please incl. a free stamped evl. or 1 IRC. Listings von o.a. Programmen sind erhältlich bei DL7QY. Bei Interesse bitte Freiumschlag beifügen.

Cefalu IARU 1984 Conference

A view of Commitee B VHF/UHF/SHF at the Commitee D (Drink!). Second plan: DK2NH, DK2ZF, OZ7IS. First plan: G3WSN, F6CJG, G4KGC, YU1AW, EA3LL, DL7YC, HA5CJ. Now the World Wide QTH Loc. is introduced officially from 1.1.1985 in IARU Reg. 1. "With our best regards to all DUBUS readers, 73 de F6CJG.

Reprint from 'The 2m News Sheet' Issue 9-3/84 and 10-4/84 published by SM6EOC, Olle Wibber.
F6DQX a.o. will be QRV from BE during July Contest on 144, 432 and 1296 MHz.+++There will be activity from ZA47d in EA-contest every first weekend May-Nov. on 144, 432 and 1296 MHz. EA3ECY/2 cs 144 MHz and EA3LL/2 cs 432 and 1296 MHz. No MS during the contest but perhaps in summer they will stay some more days to work MS.+++ SM0FSK/3 and co will be QRV from GY30b during Perseids (CW MS, etc.).+++YT GM8YMK (YT67e) is qrv with FT-480 and 8 el yagi. No MS.+++AY EA6FB (AY07j) is qrv CW MS every morning 04-06z. Skeds on the VHF net or direct to EA6FB, P.O.Box 8, San Jose, Ibiza, Spain.+++FS SM6AFH and SM6EOC will be QRV CW MS for around the clock operation from FS June 11-17. Skeds on the VHF net.+++HZ I8PMH, I8UPK, IK8BIO are qrv from HZ square. No MS.+++JL SM2LTA (JY02g) is now qrv on both CW and SSB MS, as well as tropo and Aurora and Es. Skeds for MS (only Sat. and Sundays) by phone 0950-32037 or by letter to SM2LTA, Assar Westmann, Box 383, S-92030 Blavikssjön. He is not qrv on VHF net.+++JL SM3MFI is qrv on Tropo and Aurora.+++Iceland LA6HL will be qrv again this summer from Iceland on 2m MS as well as OSCAR 10. More info later.

Expeditions 1984

DK2UO, Hajo, will spend his summerholidays in OZ. From May 17th until June 30th he is QRV in EQ02c-square. His equipment: for 80m, 40m, 20m and 2m he has 300W and 16el Yagi; for 70cm 200W and 2x23el Yagi; 23cm 200W / 13cm 30W and a 2m parabolic reflector; for 6cm and 3cm 2W and a 60cm parabolic reflector.
DK2UO ,Hajo, wird vom 17. Mai bis 30. Juni in OZ im Square EQ02c QRV sein. Auf 80m, 40m, 20m und 2m mit 300W und 16el Yagi; 70cm: 200W und 2x23el Yagi; 23cm 200W / 13cm 30W und 2m Parabolspiegel; 6cm und 3cm 2W und einem 60cm Parabolspiegel.

Expedition to YG-Square in August
A group of Swiss amateurs from Neuchatel will be active from YG square from Aug. 3rd to Aug. 16th. The call will be F0GAL. They will be QRV on: 144 MHz: 2x11 el, 500W, 144.270 SSB; 432 MHz: 8x21 el, 500W, 432.270 SSB; 1296 MHz: 4m dish, 200W, 1296.270 MHz SSB and on 14.345 MHz VHF net. Skeds can be arranged with Andre Breguet, Gare 49, CH 2017 Boudry.
Einige Amateure aus HB werden vom 3. Aug. bis 16. Aug. in YG QRV sein. Das Rufzeichen wird F0GAL sein. Sie werden QRV sein auf 144 MHz: 2x11 el, 500W, 144.270 SSB; 432 MHz 8x21 el, 500W, 432.270 SSB; 1296 MHz: 4m Spiegel, 200W, 1296.270 SSB; und auf 14.345 MHz VHF Net. (Skedadresse s.o.)

F6CTW, F1EDJ and F1COW will be QRV in ZJ-square from July 3rd until July 15th. For 2m 1kW, 70cm 400W, 23cm 100W, 13cm (2320 MHz) 50W and 1,1m parabolic dish, 3cm (FM) SSB 100mW (maybe 10W) and 1,1m parabolic dish. For IARU contest on July 7th-8th they will use the call F1KBF.

Expedition to XQ-Square (Perseids 1984)
From Aug. 7th to Aug. 15th GW3NYY, Walt, GW8TVX, Richard, GW4LXO, Jon, G8TFI, Chris and GW6EWA,Peter, will be QRV in XQ-square. The call will be GB2XQ (special prefix for exped. stn, country is GM). They will be QRV on 144 MHz and 432 MHz with 400W and on 1296 MHz with 100W (SSB and CW). Modes of operations: 144 MHz: MS (CW or SSB) on Aug. 11th - 14th; Tropo,Aurora, Es on other days. 432/1296 MHz: Tropo Aug. 7th to 15th. Skeds via GW3NYY, Walt Davidson, P.O.Box 21, Swansea, SA1 1ED, tel. 0792 201111, or on 20m VHF net via GW3NYY; GB2XQ will be QRV on 20m VHF net during expedition. QSL's via bureau or via GW3NYY (Pse IRC for direct QSL).

MS-Expedition to EY80e (JP44) in August 1984
LA1K will be QRV from Linesoya/EY80e during Perseids 84. Operation times: Aug. 7th from 1800 UTC until Aug. 9th 2400 - 2 hours CW skeds and Aug. 9th from 0000 UTC until Aug. 14th 1200 - 1 hour CW/SSB. Frequencies: CW: 144.117 and 144.147 (5 min per), SSB: 144.157 and 144.357 (1 min per). Equipment: 1. FT480r + 4CX250B + MGF1400 + 16el F9FT, 2. FT726 + 4CX250B + 3SK97 + 16el F9FT, 3. FT221 + 2 x 4CX250B + MGF1200 + 16el F9FT. Max. speed on all stations: 1000 lpm. Info: We will be QRV on VHF-net during expedition (20 and 80 mtr). Call on all stations will be LA1K. Reply on sked proposals after mid-may. 2 stations will operate on sked freq., the third on random freq. Ops: LA1BEA, -1JU, -3XAA, -6IDA, -8KV, -9MW, -9UX and LB2IC. Sked proposals to: Akademisk radioklubb, St.p. 250, N-7034 Trondheim-NTH.

Eine UKW-DX-Gruppe von OM's aus LZ plant eine MS-Expedition nach NC, OC, NB und OB im Juni (Arietiden) und August (Perseiden) und, ebenfalls eine MS-Expedition, nach SV (Mount Athos), LA und MA im September oder Oktober.
Weitere Pläne sind: Gründung des SSHC (Sky Stones Hunters Club) mit der Aufgabe MS-Aktivität und Vervollkommnung dieser Funkart zu unterstützen; Stiftung des Diploms "SSH-Award" als representative Auszeichnung für hohe Leistungen auf dem Gebiet der MS-Kommunikation; Betrieb und Experimente auf dem Gebiet der modernen Funkverfahren - Satellit, Moon Bounce, TE Probleme, Packet-radio Systeme usw.
A VHF-DX-group of OM's in LZ plans a MS-expedition to NC, OC, NB and OB in June (Arietids) and August (Perseids) and also a Ms-expedition to SV (Mount Athos), LA and MA in September or October.
Other plans are: Foundation of SSHC (Sky Stones Hunters Club) to support MS-activity; Foundation of the diploma "SSH-Award" for great achievement in MS-activity; Work and experiment in satellites-communication, Moon bounce-communication, TE-problems etc... tks fer info.

Y24PL/p wird vom 31. Juli bis zum 14. Aug. in G080a, Trassenheide (Usedom), auf 10 GHz und vielleicht auch auf 24 GHz mit 15mW, 50cm Parabolspiegel und 30 MHz ZF QRV sein. Werner ist sehr an Skeds interessiert. Werner Thote, Wilhelm-Piek-Str. 150, 8142 Radeberg, DDR. Y24PL/p will be QRV from July 7th until Aug. 14th in G080a on 10 GHz and maybe also on 24 GHz with 15mW, 50cm parabolic dish and 30 MHz IF. He is very interested in skeds (address s.a.).

EIRE 1984 EXPEDITION 3-14 August

Latest Information: Callsign: EI2VPX/p will be used for MS. Other callsigns not yet known. QTH Loc.: WL03h (IO61FX). Equip_ment: 70 MHz: 100 solid state linear 5 ele yagi. 144 MHz: 2x4CX250B-400W PEP 2x19ele cushcraft. 432 MHz: 2x4CX250R 400W PEP 4x21 ele Tonna MGF1202 preamp. 1296 MHz: 2x2C39 100W PEP 4x23ele Tonna GaAs FET preamp. 2320 MHz: 2C39 15W PEP 1.2m dish GaAs FET preamp. For MS skeds contact: C.N. Wilson G4VVZ, 9 Greythorn Drive, West Brigdefort, Wottingham, NG2 7GG, England. Phone 0602/231900. Changed dates of operation: qrv 144 MHz from 3-14 Aug., other bands from 4-14. 73 de G8ROU. tks fer info David.

Es in January ?! (see p.154)
DH2NAF (FI17g) hrd on 14th Jan. 1984 at 1120 gmt UA6LJV in TH with 59+ for 3 minutes duration! tks fer info Jochen.

Summer DX-pedition IW4AJS/IP9

From June 17th to 24th, IW4AJS/IP9 is qrv on 144 MHz (10W), 432 MHz (20W) and 1296 MHz (2W). Frequencies on 2m: 144.220, 144.290, 144.330, 144.375 MHz. On Aug. 8th to 15th he will be qrv under FØGAL from YG square on 144 MHz 800W+2x11ele, on 432 MHz 300W+8x21ele and 1296 MHz 10W+39ele. He writes...for Aug. 11th to 24th other DX-peditions planed but it depends on permission. Now to all Southern DL stations: Be active on 144.420, 144.290 MHz on June 2/3+ Sept. 10/11/12th, look to FE square. IW4AJS needs additional prefixes and German squares. tks fer info.

Corse Expedition 1984 2nd to 17th Aug.

During the Perseids meteor-shower, the Rainbow DX Activity Group will be qrv from ED square in TK (New prefix for Corse). It is supposed to be activ on 144 MHz only, also via tropo, as well as on the VHF-net. Operating frequencies during the shower will be 144.433 MHz for SSB and 144.060 MHz for CW. MS-skeds can be arranged via DL8NBN on the VHF-net or by letter. Written inquiries for CW-tests can not be accepted, SSB proposals only. Operators are: DL8NBN, DG5MCL and DH2NAF, but our callsings in TK are unknown until now. So we hope for best reflections and many complete QSO's. For further informations, requests and QSL please (enclose 1 IRC) write to: DG5MCL, P.O. Box 242, D-8070 Ingolstadt 2, W-Germany - reply 100% ok. tks fer info Jochen.

The radioclub of Örebro invites all intrested to visit the VHF-UHF-SHF meeting in Ånnaboda. Date will be 8-9-10 of June 1984.

Ånnaboda is a sport and recreation area located about 25 km north-west of Örebro-City (QTH:HT55b, 250 m asl)

Some of the activities on this years meeting: Antenna-gain measurements on 432 MHz. Lecture about antenna theory. Discussions. Instrument calibration in a special calibration bus. Receiver noisefactor and dynamic tests. Fleamarket. Fox hunting on 10 GHz! Saturday evening festivities etc.

Accomodation possibilities: You may live in a new built conference hotel in 4 bed or 2 bed rooms. Or you can camp on a nearby camping site. In the meeting area there is a small restaurant and possibilities for bath, sauna, fishing and forrest wandering

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For more information and for room booking, please write or phone to: Gun Grännsjö, SM4LMU
Lundagårdsvägen 9
S-702 29 ÖREBRO

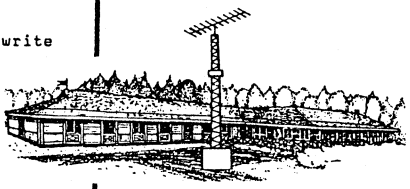
phone: 019-246280

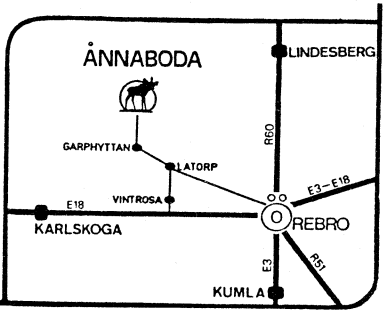
N.B. Please tell us if you will bring any 432 MHz antenna to be measured - thanks!

VERY WELCOME!!

ÖSA-VHF-GROUP

Å-84 ÅNNABODA





EUROPEAN VHF UHF SHF BEACON LIST 16.05.1984

CALL	QRG (MHZ)	WW-QTH	E-QTH	POWER (W)	ANTENNA	QTF	ASL(M)	MODE
GB3SIX	50.020	IO73TJ	XN49F	100 ERP	3EL. YAGI	W	58	F1A
ZB2VHF	50.035	IM76HE	XW64G	20	5EL. YAGI	WNW	117	F1A
5B4CY	50.500	KM64HT	QU14G	35	5EL. YAGI	WNW	2000	A1A
GB3CTC	70.030	IO70NJ	XK46D	40 ERP	2EL. YAGI	NE	320	F1A
GB3WHA	70.040	JO01BA	AL71D	16 ERP	2EL. YAGI	NW	168	F1A
GB3BUX	70.050	IO93BF	ZN61A	20 ERP	2*TURNSTILE	OMNI	460	A1A/F1A
GB3ANG	70.060	IO86LN	YQ35C	100 ERP	4EL. YAGI	SSE	370	A1A
5B4CY	70.112	KM64LU	QU15B	10	4EL. YAGI	WNW	117	F1A
ZB2VHF	70.120	IM76HE	XW64G	10	4EL. QUAD	N	117	F1A
EI4RF	70.130	IO63SN	WN38C	25 ERP	2*5EL. YAGI	NE/SE	120	A1A
UB5SAY	144.007	KN29EA	MJ72D	5	V-DIPOLE	OMNI	300	A1A
UK5EAS	144.050	KN78NH	RI56J	0.2	GROUNDPLANE	OMNI	??	A1A
UK0FAI	144.090	KP16NK	LA46J	5	V-DIPOLE	OMNI	??	A1A
OE3XXA	144.126	JN88BA	II71D	0.5	HALO	OMNI	840	A1A
UP2WN	144.136	KO25DB	MP72J	3	????	??	??	A1A
5B4CY	144.139	KM64HT	QU14G	40	6+6EL. YAGI	NW	2000	A1A
ZB2VHF	144.145	IM76HE	XW64G	15/35	8EL. YAGI	NE	117	F1A
OZ3VHF	144.149	JO55FI	FP53H	.1	HALO	OMNI	35	A1A
EA3XS	144.152	JN11DP	BB22E	20/250	16EL. YAGI	NE	??	??
UK3MBQ	144.156	KO87SV	SR08E	3	2*DIPOLE	OMNI	130	A1A
UK5UDX	144.177	KO50CG	PK52F	5	DIPOLE	N/S	169	A1A
UK4NAU	144.185	LO48WH	YS60G	3	DIPOLE	NNE/WSW	120	F1A
UK4NBY	144.199	LO49JJ	YT45F	5	9EL. YAGI	NNW	??	A1A
UK5JAA	144.250	KN74FU	RE13A	1	TURNSTILE	OMNI	1000	A1A
UK3TAA	144.250	LO16WH	VQ60G	0.5	V-DIPLOE	OMNI	??	A1A
UK3UMK	144.315	LO06LX	UQ05B	1	HELIX	OMNI	??	??
UK5GAA	144.371	KN66LV	QG05D	5	DIPOLE	N/S	??	A1A
SP8VHA	144.430	KO116G	LL53D	1	DIPOLE	OMNI	??	A1A
UK5YAB	144.500	KN28WG	MI60E	5	DIPOLE	??	??	A1A
YU3VHF	144.506	JN76NC	HG76A	2	CROSSDIPOLE	OMNI	1219	A1A
UB5BBJ	144.725	KN29VA	MJ79D	5	DIPOLE	N/S	??	A1A
OH8VHF	144.800	KP25TC	MZ79H	40	16EL.COLLINEAR	N/S	240	A1A
IS0A	144.810	JN40SX	EA0BA	25 ERP	TURNSTILE	OMNI	450	A1A
I7A	144.820	JN71UR	HB29A	2 ERP	BIG WHEEL	OMNI	1012	A1A
I0A	144.825	JN61ES	GB12D	28 ERP	2*BIG WHEEL	OMNI	30	A1A
9H1VHF	144.830	JM75FV	HV03F	1.5	TURNSTILE	OMNI	??	A1A
I1G	144.830	JN35SH	DF58C	20 ERP	BIG WHEEL	OMNI	625	A1A
IT9G	144.840	JM68QE	GY67C	35 ERP	5EL. YAGI	N	150	A1A
IX1A	144.845	JN35LU	DF15B	12 ERP	6EL. YAGI	NW	3350	A1A
I5A	144.850	JN53FR	FD23H	4 ERP	BIG WHEEL	OMNI	918	A1A
DL0UB	144.850	JO62QL	GM47B	5	4*DIPOLE	OMNI	80	F1A
LA5VHF	144.855	JP99KP	JD25E	50	4*10EL. YAGI	SSW	60	A1A
I2B	144.860	JN45ST	EF18J	30 ERP	HB9CV	SE	1330	A1A
LA1VHF	144.860	JO49FS	ET13E	25	TURNSTILE	OMNI	1882	A1A
IS0G	144.863	JM49NF	EZ66A	0.5	CROSS DIPOLE	OMNI	90	A1A
HB9HB	144.865	JN37NE	DH66C	10	10EL. YAGI	NNW	1300	F1A
LA6VHF	144.865	KP59??	PD???	25	9EL. YAGI	??	??	A1A
EA1VHF	144.867	IN53UG	VD59E	25	5EL. YAGI	N/E	??	A1A
LA2VHF	144.870	JP53EG	FX52D	50	10EL. YAGI	NNE	710	A1A
HB9W	144.875	JN47GJ	EH43D	0.036 ERP	HALO	OMNI	490	A1A
SK2VHF	144.875	JP94TF	JY69H	30	2*CLOVER LEAF	OMNI	300	A1A
LA3VHF	144.880	JO38PB	DS77J	10	8EL. YAGI	S/E	100	A1A
OY6VHF	144.885	IP62NA	WW76D	60 ERP	4EL. YAGI	SE	350	A1A
I8A	144.890	JM78WD	HY70F	28 ERP	2*TURNSTILE	OMNI	1958	A1A
LA4VHF	144.890	JP20QQ	CU27G	50	4*8EL. YAGI	NE	48	A1A
SK2VHG	144.890	KP07MV	KB06F	60	16EL. YAGI	S	495	A1A
EA3VHF	144.892	JN11MR	BB26H	1	HALO	OMNI	155	A1A
FX0THF	144.895	JN08ML	AI46H	30	2*TURNSTILE	OMNI	246	F1A
3A2B	144.900	JN33RR	DD28H	5	GROUNDPLANE	OMNI	60	F1A/F2A
DB0OP	144.900	JN59WI	FJ60H	4	BIG WHEEL	OMNI	522	A1A
OH6VHF	144.900	KP02TG	KW59F	50/100	2*6EL. YAGI	N/SW	220	A1A
FX3THF	144.905	IN88GS	YI13D	30	2*9EL. YAGI	E	80	F1A
DL0PR	144.910	JO44JH	EO54C	150	6EL. YAGI	N/S	100	A1A
GB3CTC	144.915	IO70NJ	XK46D	40 ERP	3EL. YAGI	NE	320	A1A
DK0OE	144.915	JO30DU	DK12A	1	10EL. YAGI	NNE	165	F1A
EA6VHF	144.918	JM08PW	AY07J	25	5EL. YAGI	NE	150	A1A
SK7VHF	144.920	JO65SN	GP38C	30	2*CLOVER LEAF	OMNI	190	A1A
GB3VHF	144.925	JO01DH	AL52J	50 ERP	2*3EL. YAGI	WNW/NNW	275	F1A/F1B
DB0JT	144.927	JN67JT	GH14C	30 ERP	2*4+4 DIPOLE	NW	785	F1A/F1B
YU2V	144.930	JN83HG	ID54F	1	CROSSDIPOLE	OMNI	780	A1A
OZ7IGY	144.930	JO55VO	FP39B	50 ERP	BIG WHEEL	OMNI	96	A1A
Y41M	144.932	JO61FH	GL53G	0.2 ERP	2*DIPOLE	OMNI	232	A1A
SP9VHI	144.935	JO90XB	JK80C	0.05	CROSSDIPOLE	OMNI	200	A1A
DL0UH	144.940	JO41RD	EL68F	1 ERP	V-DIPOLE	OMNI	385	A1A
UK2CAU	144.942	KO34KI	NO55A	0.2	DIPOLE	N/S	??	A1A
SP3VHG	144.945	JO71SW	HL08J	6	2*DIPOLE	OMNI	240	A1A
SK1VHF	144.950	JO97BG	JR51D	10	2*CLOVER LEAF	OMNI	60	A1A
OK0EA	144.952	JO70SS	HK18D	12	2*DIPOLE	N/S	1450	F1A
FX4VHF	144.955	JN05VE	AF69C	20	BIG WHEEL	OMNI	600	A1A
YO2KHP	144.957	KN05DS	KF17F	2.5	TURNSTILE	OMNI	80	A1A
SK4MPI	144.960	JP70NJ	HU46D	100	4*6EL. YAGI	N	510	A1A
OK0EB	144.963	JN78DU	HI12A	1	BIG WHEEL	OMNI	1083	F1A
GB3LER	144.965	IP90JD	ZU65F	50 ERP	4EL. YAGI	NNE	107	F1A
DF0ANN	144.966	JN59PJ	FJ47E	0.02	DIPOLE	OMNI	630	F1A
SP6VHF	144.966	JO70VP	HK29D	0.15	2EL. YAGI	NE	1602	A1A

PAGE - 1 - DUBUS EUROPEAN VHF UHF SHF BEACON LIST: SUPPLEMENTS SEND TO: CLAUS NEIE / D-7101 RUDOLFSBERG 24 --- PRINTED BY DL 7 QY

EUROPEAN VHF UHF SHF BEACON LIST 16.05.1984

CALL	QRG (MHZ)	WW-QTH	E-QTH	POWER (W)	ANTENNA	QTF	ASL(M)	MODE
OH2NUA	144.970	KP20DH	MU52J	0.5	TURNSTILE	OMNI	40	A1A
GB3ANG	144.975	IO86LN	YQ35C	20 ERP	3EL. YAGI	SSE	370	F1A
DL0SG	144.975	JN68EQ	GI22C	15	4*4EL. YAGI	OMNI	500	A1A
SP2VHC	144.980	JO94BI	JO51B	28	CLOVER LEAF	OMNI	??	A1A
ON4VHF	144.985	JO20FP	CK23E	2.5	BIG WHEEL	OMNI	??	F1A
Y41B	144.985	JO53RP	FN28F	10	2*BIG WHEEL	OMNI	??	F1A
OK0ET	144.992	KN08SU	KI18A	1	3EL. YAGI	W	981	F1A
UK5UBZ	145.002	KO50EH	PK52C	2.5	V-DIPOLE	OMNI	187	A1A
YO3KAA	145.900	KN34BK	NE41J	0.2	DIPOLE	OMNI	80	A1A
LZ2F	145.980	KN33WM	ND40F	25 ERP	????	OMNI	295	??
DL0RW/A	431.996	JN69ES	GJ12D	1	2*DIPOLE QUAD	NW/SW	825	A1A
SP6VHF	431.998	JO70VR	HK29B	0.06	2EL. YAGI	NE	1602	A1A
Y41N	432.030	JO60JW	GK05G	0.1	DOUBLE QUAD	NW/SE	360	A1A
DL0BQ	432.050	JN49GP	EJ23D	0.2	DISCONE	OMNI	??	A1A
DK0OE	432.087	JO30DU	DK12A	1.5	19EL. YAGI	NNE	165	F1A
SP9VHB	432.093	JN99TS	JJ19F	5	DIPOLE	N	944	A1A
DK1WY	432.095	JO42MG	EM56F	0.05	BIG WHEEL	OMNI	90	A1A
SP8VHA	432.290	KO11GG	LL53D	1	????	OMNI	??	A1A
OH2NRA	432.300	KP20JE	MU65G	5	TURNSTILE	OMNI	20	A1A
OE3XXA	432.378	JN88BA	II71D	1 ERP	4EL. YAGI	NNE	840	A1A
OE3XMB	432.400	JN77SX	HH08B	.01	9EL. YAGI	NW	1246	A1A
DJ4WG	432.455	JN59AQ	FJ21G	0.005	11EL. YAGI	NE	265	A1A
YU3UHF	432.507	JN76NC	HG76A	??	LOG.PERIODIC	??	1219	A1A
DB0QO	432.540	JO42BA	EM71E	2	SLOTRADIAT	OMNI	??	A1A
IT9B	432.805	JM67LX	GX05B	12 ERP	2*MINI WHEEL	OMNI	825	A1A
DB0JZ	432.805	JO31SN	DL38J	1 ERP	????	OMNI	125	F1A
GB3WHA	432.810	JO01BA	AL71D	25 ERP	2*8+8EL. YAGI	NW/E	165	F1A
DB0OP	432.825	JN59WI	FJ60H	2	BIG WHEEL	OMNI	522	A1A
I0B	432.825	JN61ES	GB12D	40 ERP	4*MINI WHEEL	OMNI	30	A1A
FX1UHF	432.830	JN18BR	BI21B	10	4*BIG WHEEL	OMNI	160	F1A
I1H	432.830	JN35SN	DF38C	12 ERP	3EL. YAGI	S	650	A1A
LA7UHF	432.830	JP20QJ	CU47D	25	??EL. YAGI	S	558	A1A
DB0KI	432.841	JO50SF	FK68B	2	4*4EL. YAGI	OMNI	690	F1A
I5B	432.850	JN53JR	FD25H	20 ERP	4*MINI WHEEL	OMNI	56	A1A
DL0UB	432.850	JO62QL	GM47B	5	4*DOUBLE QUAD	OMNI	80	F1A
SK3UHF	432.855	JP82XO	IW40B	10	4*DOUBLE QUAD	OMNI	180	A1A
LA5UHF	432.855	JP99KP	JD25E	15	??EL. YAGI	SW	60	A1A
I2B	432.860	JN45NT	EF16J	35 ERP	2*10EL. YAGI	SE/SW	490	A1A
DB0TW	432.860	JO42FA	EM73E	0.02	????	OMNI	433	F1A
LA1UHF	432.860	JO59JW	FT05G	12	BIG WHEEL	OMNI	364	A1A
I2N	432.865	JN45JU	EF14B	50 ERP	10EL. YAGI	SE	1050	A1A
OZ2UHF	432.865	JO46JD	EQ64D	10 ERP	BIG WHEEL	OMNI	85	F1A
FX4UHF	432.870	IN93EH	ZD52C	10	2*6EL. YAGI	NNE	900	F1A
I2H	432.870	JN55DN	FF32J	2 ERP	TURNSTILE	OMNI	990	A1A
LA2UHF	432.870	JP53EG	FX52D	40	21EL. YAGI	NNE	710	A1A
IV3B	432.880	JN65WR	GF30H	4 ERP	TURNSTILE	OMNI	418	A1A
LA3UHF	432.880	JO48BC	ES71A	50 ERP	15EL. YAGI	S/SE	8	A1A
OY6UHF	432.885	IP62NA	WW76D	30 ERP	5EL. YAGI	SE	350	A1A
I6B	432.885	JN72AN	HC31G	12 ERP	2*TURNSTILE	OMNI	444	A1A
OK0EP	432.885	JO80OC	IK77H	6	2*5 EL. YAGI	NW/SE	1500	F1A
GB3SUT	432.890	IO92BO	ZM31B	60 ERP	2*8+8EL. YAGI	N/SE	270	F1A
I8B	432.890	JM78WD	HY70F	12 ERP	2*MINI WHEEL	OMNI	1958	A1A
LA4UHF	432.890	JO29PJ	CT47E	5	DIPOLE	OMNI	75	A1A/F1A
DB0AE	432.890	JO43GN	EN33C	??	????	??	??	F1A
PA0DSW	432.895	JO22JM	CM35F	0.5	MALT. CROSS	OMNI	10	A1A
OZ4UHF	432.895	JO75JE	HP64C	20 ERP	BIG WHEEL	OMNI	154	A1A
I0H	432.900	JN61IS	GB14E	4 ERP	2*MINI WHEEL	OMNI	373	A1A
DB0YI	432.900	JO42XC	EM80B	1	BIG WHEEL	OMNI	480	A1A
PA0QHN	432.903	JO22FH	CM53J	1	GAIN 3DB	OMNI	20	F1A
GB3MLY	432.910	IO93EO	ZN32B	50 ERP	8+8EL. YAGI	SE	600	F1A
DB0AD	432.913	JO30XS	DK20D	1	11EL. YAGI	W	290	F1A
SK7UHF	432.920	JO77BQ	HR21J	7	BIG WHEEL	OMNI	350	A1A
DB0JG	432.925	JO31BT	DL13C	??	????	??	??	A1A
SK6UHF	432.925	JO67BF	GR61A	10 ERP	BIG WHEEL	OMNI	75	A1A
OZ7IGY	432.930	JO55VO	FP39B	50 ERP	BIG WHEEL	OMNI	96	A1A
OK0EA	432.935	JO70BS	HK18D	12	2*DIPOLE	NW/SW	1450	F1A
DL0UH	432.940	JO41RD	EL68F	0.3 ERP	V-DIPOLE	OMNI	385	A1A
SK7UHH	432.940	JO86FQ	IQ23J	30 ERP	2*CLOVER LEAF	OMNI	60	A1A
DB0LB	432.945	JN48NV	EI06D	0.2	CORNERDIPOLE	N/S	367	F1A
DB0AA	432.950	JO31NK	DL46C	1 ERP	????	N	??	F1A
DB0AH	432.950	JO53JD	FN65F	3.5	DIPOLE	OMNI	118	A1A
OZ1UHF	432.955	JO47WB	ER80J	30 ERP	2*MALTESER	OMNI	85	A1A
SK4UHF	432.960	JO79KH	HT55J	60	4*10EL.LOG.PER.	N/SW/SE	285	A1A
DF0ANN	432.966	JN59PJ	FJ47E	1	CLOVER LEAF	OMNI	630	F1A
GB3CTC	432.970	IO70NJ	XK46D	5 ERP	4EL. YAGI	NE	320	F1A
DL0SG	432.974	JN68EQ	GI22C	7	4*11EL. YAGI	OMNI	500	A1A
SK5UHF	432.975	JP80TB	IU79G	25 ERP	BIB WHEEL	OMNI	90	A1A
OZ2ALS	432.983	JO45VB	EP79C	10	BIG WHEEL	OMNI	32	A1A
HB9F	432.984	JN36XN	DG40C	15 ERP	CORNERREFLECTOR	N/S	3573	F1A
GB3ANG	432.990	IO86LN	YQ35C	100 ERP	9EL. YAGI	SSE	370	F1A
DF0AAD	432.990	JO54IF	FO64A	10 ERP	BIG WHEEL	OMNI	250	F1A
DL1XV	433.143	JN67LQ	GH25C	40	SLOT	NW	1618	A1A
OK0EA	1295.975	JO70SS	HK18D	1	2*10EL. YAGI	NW/SW	1450	F1A
LA2UHG	1295.985	JP53FK	FX43G	0.2	????	OMNI	??	A1A
LA1UHG	1295.990	JO59FE	FT63G	3	BIG WHEEL	OMNI	75	A1A

PAGE - 2 - DUBUS EUROPEAN VHF UHF SHF BEACON LIST: SUPPLEMENTS SEND TO: CLAUS NEIE / D-7181 RUDOLFSBERG 24 --- PRINTED BY DL 7 QY

EUROPEAN VHF UHF SHF BEACON LIST 16.05.1984

CALL	QRG (MHZ)	WW-QTH	E-QTH	POWER (W)	ANTENNA	QTF	ASL(M)	MODE
LA8UHG	1295.995	JO59JW	FT05G	2	MINI WHEEL	OMNI	364	A1A
DB0FB	1296.000	JN47AU	EH11H	4	DIPOLE	N/S	1200	F1A
DF5EO/A	1296.025	JO31DV	DL02E	0.8	DBL.HELICAL	OMNI	170	F1A
HB9BBD	1296.050	JN47FA	EH73E	.5	CORNER	N/NE	1661	F1A
DB0AJ	1296.180	JN57VX	FH09B	10	6EL. GROUP	N/W	720	A1A
SP9VHB	1296.280	JN99TS	JJ19F	5	6EL.REFLECTOR	N	944	A1A
DK1WY	1296.285	JO42MG	EM56F	0.025	BIG WHEEL	OMNI	90	A1A
OE1XCS	1296.340	JN88DD	II62E	.2	????	N	??	??
DB0JS	1296.800	JN59GB	FJ73C	5 ERP	SLOT	OMNI	700	A1A
SK6UHI	1296.800	JO66LJ	GQ45D	10 ERP	CLOVER LEAF	OMNI	220	A1A
DB0GP	1296.805	JN48WQ	EI30G	4 ERP	4*5EL. YAGI	OMNI	760	F1A
GB3NWK	1296.810	JO01BH	AL51J	100	2*8EL. YAGI	NNW	180	F1A
I1I	1296.830	JN35SH	DF58C	0.4 ERP	SQUARECORNER	S	625	A1A
GB3BPO	1296.830	JO02PB	AM77J	700 ERP	2*32ELSLOT.WAVEG	W/E	85	F1A
SK0UHG	1296.835	JO89WI	IT60H	15 ERP	2*HELICAL	OMNI	30	F1A
GB3FRS	1296.850	IO91PH	ZL57J	3	DISC	OMNI	120	F1A
I5C	1296.850	JN53DV	FD02E	0.2 ERP	MINI WHEEL	OMNI	30	A1A
DL0UB	1296.850	JO62QL	GM47B	3	DBL HELICAL	OMNI	80	F1A
DB0JO	1296.854	JO31SL	DL48A	350 ERP	4*15+15EL. YAGI	W	312	F1A
I5I	1296.855	JN53LL	FD45B	10 ERP	4*MINI WHEEL	OMNI	550	A1A
OZ2UHF	1296.865	JO46JD	EQ64D	3	BIG WHEEL	OMNI	85	F1A
GB3AND	1296.870	IO91GF	ZL63B	50 ERP	STACK. SLOTS	OMNI	85	F1A
PA0EHG/A	1296.875	JO21SK	CL48J	4	GAIN 6DB	OMNI	61	F1A
ON5UHF	1296.880	JO10UN	BK39J	10 ERP	????	OMNI	180	F1A
GB3DUN	1296.890	IO91SV	ZL08E	2 ERP	HB9CV	N	263	F1A
IC8C	1296.890	JN70CT	HA12G	6 ERP	MINI WHEEL	OMNI	589	A1A
DB0JC	1296.895	JO40RV	EK08F	1.5	4EL.SLOT WAVEG	OMNI	620	F1A
GB3IOW	1296.900	IO90IO	ZK34A	100 ERP	ALFORD SLOT	OMNI	250	F1A
DB0JR	1296.900	JN67CR	GH22H	0.2	CORNERREFLECTOR	NNW	1560	F2A
DB0AN	1296.900	JO31SX	DL08B	1	BIG WHEEL	OMNI	100	F2A
DB0AD	1296.905	JO30XS	DK20D	1	DIPOLE	W/E	290	F1A
GB3CLE	1296.910	IO82RL	YM48H	10 ERP	2*15+15EL. YAGI	N/SE	573	F1A
DB0JB	1296.910	JN48FX	EI03A	1 ERP	BIG WHEEL	OMNI	275	F1A
PA0QHN	1296.917	JO22FH	CM53J	4	GAIN 6DB	OMNI	20	F1A
DB0VC	1296.920	JO54IF	FO64A	10	2*BIG WHEEL	OMNI	250	F1A
SK7UHG	1296.920	JO77BQ	HR21J	2 ERP	BIG WHEEL	OMNI	350	A1A
SK6UHG	1296.925	JO57TQ	FR29G	10	4*BIG WHEEL	OMNI	35	A1A
GB3MLE	1296.930	IO93EO	ZN32B	50 ERP	CORNERREFLECTOR	SSE	600	F1A
OZ7IBY	1296.930	JO55VO	FP39B	5 ERP	BIG WHEEL	OMNI	96	A1A
DB0YI	1296.935	JO42XC	EM80B	3	BIG WHEEL	OMNI	480	A1A
HB9F	1296.945	JN36SW	DG08C	15 ERP	2*CORN.REFLECTOR	NE/SW	937	F1A
OZ1UHF	1296.955	JO47WB	ER80J	10 ERP	BIG WHEEL	OMNI	85	F1A
DF0ANN	1296.956	JN59PJ	FJ47E	2	4*DOUBLE QUAD	OMNI	630	F1A
SK4UHG	1296.960	JP60VA	GU79D	4	2*15EL. YAGI	S	450	??
DB0JU	1296.975	JO31BU	DL11B	??	HELICAL	OMNI	295	A1A
OZ3ALS	1296.985	JO45VB	EP79C	10 ERP	BIG WHEEL	OMNI	33	A1A
GB3EDN	1296.990	IO85HW	YP04G	25 ERP	2*CORNER REFLCT.	NW/SE	117	F1A
DB0JQ	1296.995	JN68TU	GI19H	6 ERP	4*QUAD	OMNI	1150	F2A
DB0LB	1297.040	JN48NV	EI06D	0.2	DIPOLE	OMNI	367	F1A
OE3XPA	1297.153	JN78SB	HI78C	0.1	11EL. YAGI	NW	725	A1A
GB3AND	2304.010	IO91GF	ZL63B	5 ERP	????	E	85	F1A
GB3LDN	2304.050	JO01BL	AL41A	25 ERP	????	NW/NE	??	F1A
SK6UHJ	2320.800	JO58RG	FS58F	1	2*??EL. YAGI	S/SW	80	A1A
LA1UHH	2320.860	JO59FE	FT63G	2ERP	6DB GAIN	??	??	A1A
DB0JO	2320.899	JO31SL	DL48A	0.1	DIPOLE	N	312	F1A
DB0JB	2320.900	JN48FX	EI03A	1 ERP	BIG WHEEL	OMNI	275	F1A
PA0TGA	2320.900	JO21WU	CL20A	1	10 DB GAIN	NW/W	??	??
DB0VC	2320.920	JO54IF	FO64A	5	BIG WHEEL	OMNI	230	F1A
PA0QHN	2320.925	JO22FH	CM53J	2	GAIN 6DB	OMNI	20	F1A
GB3LES	2320.955	IO92IQ	ZM24J	5 ERP	ALFORDSLOT	OMNI	220	F1A
DF0ANN	2320.965	JN59PJ	FJ47E	0.5	DOUBLE QUAD	OMNI	630	F1A
DB0AS	2320.967	JN67CR	GH22H	0.5	28EL. YAGI	NW	1560	A1A
DC8EC/A	2321.050	JN58TB	FI79G	4	6EL. GROUP	NW	580	F2A
GB3UOS	3456.000	IO93EK	ZN42C	4 ERP	SLOT WAVEGUIDE	N/S	400	F2A
DL7QY/A	3456.000	JN49XC	EJ80B	0.05	HORN	E	450	A1A
DL0WY	3456.115	JN67CR	GH22H	0.08	12EL. GROUP	NW	1560	A1A
DB0JO	3456.155	JO31SL	DL48A	??	????	??	312	F1A
DC0DA	3456.360	JO31SM	DL38E	120 ERP	0.7M DISH	N	220	F1A
DL7QY/A	5760.000	JN49XC	EJ80B	0.01	HORN	E	450	A1A
DL0WY	5760.192	JN67CR	GH22H	0.05	6 DB HORN	NW	1560	A1A
DC0DA	5760.600	JO31SM	DL38E	8.5 ERP	0.7M DISH	N	220	F1A
LA1SHF	5760.860	JO59FE	FT63G	1 ERP	6DB GAIN	??	??	A1A
GB3IOW	10100.000	IO90IO	ZK34A	0.15 ERP	SLOT WAVEGUIDE	OMNI	250	F2A
GB3LBH	10100.000	JO01BN	AL31C	1.5 ERP	WAVEGUIDE	OMNI	45	F2A/F3E
GB3ALD	10120.000	IN89WR	YJ30H	1 ERP	SECT. HORN	NNE	90	F2A
DB0JX	10350.000	JO31FF	DL63A	0.01	10 DB GAIN	OMNI	115	F2A
DL7QY/A	10368.000	JN49XC	EJ80B	0.01	HORN	E	450	A1A
LA1SHG	10368.000	JO59FE	FT63G	0.16	22DB GAIN	??	??	A1A
PA0MS/A	10368.045	JO21SL	CL48A	0.05	GAIN 21DBI	NW	56	F1A
PA0DBQ	10368.100	JO22DB	CM72J	0.04	GAIN 20DB	W	75	F1A
PE1BLE	10368.200	JO22KH	CM55J	0.01	GAIN 14DB	SSW	35	F1A
DL0WY	10368.345	JN67CR	GH22H	0.02	10 DB HORN	NW	1560	A1A
SK6SHG	10368.800	JO58RG	FS58F	10 ERP	20 DB HORN	S	80	A1A
GB3MHX	10368.830	JO02PB	AM77J	1 ERP	1.2M DISH	E	60	F1A
GB3XGH	10400.000	IO83QF	YN67B	1 ERP	SLOT	OMNI	100	F2A

PAGE - 3 - DUBUS EUROPEAN VHF UHF SHF BEACON LIST: SUPPLEMENTS SEND TO: CLAUS NEIE / D-7181 RUDOLFSBERG 24 --- PRINTED BY DL 7 QY

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NR	CALL	WW-QTH	E-QTH	WKD	TROPO	AURO	MS	ES
1	Y22ME	JO72	HM	515	1577	1579	2293	2197
2	SM7AED	JO66	GQ	459	1522	1763	2274	2326
3	SM4IVE	JO79	HT	451	1815	1945	2021	2284
4	SM7FJE	JO66	GQ	450	1642	1600	2241	1761
5	DK6AS	JO52	FM	438	1460	1885	2510	2260
6	SM4GVF	JO79	HT	430	1796	1796	2099	2310
7	F6CJG/P	JN15	BF	424	1748	1892	2510	2836
8	PA0RDY	JO22	CM	412	1578	1959	2262	2295
9	G3POI	JO01	AL	411	1965	1935	1935	2208
10	OZ1OF	JO46	EQ	389	1765	1770	2134	2294
11	DK5AI	JO51	FL	369	1565	1510	2275	2282
12	SM6EOC	JO66	GQ	367	1730	1800	2000	2230
13	PA2VST	JO22	CM	365	2371	1827	2572	3208
14	SM6AEK	JO66	GQ	360	1730	1800	1900	2330
15	OK1KKH	JN79	HJ	353	1500	1489	2379	2146
16	OZ1EYX	JO66	GQ	350	1577	1602	1893	2382
17	SM5CHK	JO78	HS	350	1262	1753	1991	2060
18	DL1MF	JN67	GH	348	1530	1512	2085	3255
19	SM5BEI	JP90	JU	348	1525	1777	2702	2455
20	UA3LBO	KO64	QO	347	1807	1939	2273	2467
21	SM6AFH	JO66	GQ	341	1730	1554	1900	2330
22	OZ1EKI	JO45	EP	339	1450	1777	2088	2273
23	OZ1FDH	JO65	GP	337	1581	1762	2271	2287
24	ON5QW	JO11	BL	335	1510	1927	2080	3285
25	DF3XU	JO53	FN	332	1643	1808	2106	2222
26	PA0OOM	JO33	DN	328	1405	1986	2310	2215
27	SM0FFS	JO99	JT	327	1820	1580	2030	2190
28	DJ5MS	JN68	GI	323	1260	1509	2102	1930
29	F6DWG	JN19	BJ	320	1756	1880	2143	2448
30	OH7PI	KP32	NW	316	1902	1715	2151	2272
31	I6WJB	JN72	HC	315	2224	1500	2214	2374
32	DK1KO	JO53	FN	315	1625	1745	2124	2194
33	OK1FM	JN69	GJ	314	1843	1438	2200	2031
34	HB1YA	JN87	IH	314	1612	1534	2183	2885
35	OZ1DOQ	JO65	GP	312	1411	1590	1879	2260
36	OK2KZR/P	JN89	IJ	311	1518	1610	2793	3598
37	Y23FG	JO52	FM	308	1595	1375	2010	2232
38	SM0HAX	JO99	JT	306	1700	1640	1830	2240
39	OZ9FW	JO65	GP	305	1328	1618	1954	1963
40	OK3AU	KN08	KI	304	1608	1637	2065	2236
41	UB5JIN	KN74	RE	303	1709	1497	2500	2826
42	SM7GWU	JO78	HS	303	1585	1770	2099	2007
43	OE3XUA	JN77	HH	302	1610	1975	2150	2340
44	PA3BIY	JO22	CM	302	1480	1850	2000	2296
45	UR2RQT	KO28	MS	302	1210	1840	2172	1900
46	DK4TG	JO31	DL	301	1410	1730	2440	2000
47	DL4EA	JO31	DL	300	1468	1723	2078	2247
48	I3TJQ	JN65	GF	300	1000	1250	2010	3120
49	EA3LL	JN01	AB	298	1995	----	2300	3215
50	Y21PL	JO61	GL	297	1760	1360	2110	2059
51	I3LGP	JN65	GF	297	1000	1387	2020	3150
52	G3NSM	IO91	ZL	295	1489	2003	1872	2481
53	OK1OA	JO70	HK	295	1256	1509	2050	2054
54	DL7QY	JO62	GM	293	1402	1751	2353	1845
55	PA0KDV	JO33	DN	291	1475	1610	2051	2352
56	SM4AXY	JO79	HT	289	1714	1760	1880	2143
57	OE3LFA	JN88	II	289	1615	1795	1720	3550
58	SM0DJW	JO88	IS	289	1340	1810	1840	2573
59	UR2EQ	KO39	NT	288	1541	1840	2240	2245
60	DK2PR	JO43	EN	285	1460	1515	1940	2425
61	ON4UB	JO11	BL	283	1089	1013	2640	3296
62	PA0FTF	JO20	CK	281	1500	1800	----	2900
63	I4BXN	JN54	FE	279	1600	1520	1916	2670
64	F6BSJ	JN26	CG	277	1510	1220	2105	2705
65	DF6NA	JN49	EJ	276	1156	1120	2080	1709
66	F8OP	JN26	CG	274	1228	1196	2028	2720
67	LA2PT	JO59	FT	272	1438	1660	2020	2427
68	SM5CUI	JO89	IT	271	1590	1600	2190	----
69	DF1OH	JO42	EM	271	1564	1671	2242	2379
70	F1FHI	IN97	ZH	269	1739	1292	2125	2467
71	YO2IS	KN05	KF	269	1380	1775	2040	2360
72	Y23ZI	JO51	FL	268	1785	1280	1925	2075
73	SM3BIU	JP73	HX	268	1460	1890	2260	2250
74	YU2IQ	JN74	HE	268	1210	----	1955	3462
75	OZ1ASL	JO54	FO	266	1763	1675	2061	2323
76	SP5JC	KO02	KM	266	1740	1740	1980	1861
77	OH3TH +	KP11	LV	265	1355	1669	2217	2069
78	UQ2GFZ	KO37	NR	265	1154	1855	1884	2159
79	SM7JUQ	JO65	GP	261	1579	1646	1921	2027
80	SM4COK	JO79	HT	261	1440	1570	2080	1940
81	SM7WT	JO65	GP	260	1590	1680	1930	2180
82	I4EAT	JN54	FE	260	1550	1420	2240	2500
83	PA0XMA	JO32	DM	260	1394	1368	2300	2164
84	PA0WWM	JO22	CM	260	1303	1839	1997	2212
85	G4DSC	IO94	ZO	259	1485	1485	1942	2285
86	DK1PZ	JO51	FL	257	1567	1364	1867	1866
87	OH2BBF	KO19	LT	257	1388	2000	2125	2144
88	OZ1FTU	JO55	FP	257	1282	1558	1903	2315
89	DJ9CZ	JO31	DL	256	1650	1862	1925	2015
90	SM2CKR	KP03	KX	256	1630	1660	2310	1810
91	SM3AKW	JP92	JW	256	1598	2078	2142	2504
92	UR2GZ	KO28	MS	253	1577	1794	2141	2174
93	PA0HWM	JO20	CK	252	1363	1508	1845	3103
94	YU3ES	JN65	GF	251	1167	1004	2074	2483
95	YU1EU	KN04	KE	250	1680	----	2200	2380
96	YU2EZA	JN86	IG	250	1416	1413	2084	2377
97	OZ3ZW	JO54	FO	249	1763	1863	1415	2100
98	DF1JC	JO31	DL	249	1270	1830	2348	2007
99	LX1GR	JN39	DJ	249	868	1104	2206	1409
100	SM5DRV	JO77	HR	248	1330	1410	1810	----
101	ON4YZ	JO20	CK	247	1530	1510	----	2360
102	YU7EW	KN05	KF	246	1868	1172	1930	2425
103	OZ1EYE	JO56	FQ	246	1379	1271	2329	2600
104	HB9ET	KN06	KG	245	1445	1845	2000	2279
105	LA9BM	JP40	EU	244	1612	1670	1892	2165
106	OK1KHI/P	JO70	HK	242	1803	1180	----	2040
107	F6CTW	JN18	BI	241	1676	1713	2207	2416
108	PA3AOU	JO32	DM	241	1392	1673	1763	2193
109	OE6WIB	JN76	HG	241	1214	1728	1890	2269
110	OZ6OL	JO55	FP	239	1800	1700	----	1800
111	OZ8SL	JO65	GP	238	1476	1305	----	2188
112	SM7GEP	JO77	HR	238	1467	1768	1695	2043
113	OH0JN	JP90	JU	238	1451	1856	2108	2198
114	PA0RLS	JO22	CM	238	1350	1890	1890	2204
115	YU7BCX	KN05	KF	237	1868	1172	1956	2425
116	SM3DCX	JP81	IV	237	1300	1850	1990	----
117	RQ2GAG	KO26	MQ	236	1432	1714	----	1973
118	PA3BBA	JO22	CM	236	1300	1436	1907	2311
119	UA3TCF	LO26	WQ	236	1131	1974	2498	2332
120	UA3MBJ	KO88	SS	235	1560	2006	2573	2390
121	DF6OB	JO52	FM	234	1421	1349	1877	2013
122	DL7ZL	JO62	GM	234	1401	1254	3200	3800
123	SM5BSZ	JO99	JT	233	1830	1720	1890	2080
124	PA3BRS	JO22	CM	233	1494	1738	1613	2112
125	Y24QO	JO62	GM	232	1250	960	1846	1840
126	SP9AI	JN99	JJ	231	1870	1300	1810	2400
127	SM5FRH	JO79	HT	231	1580	1690	1650	----
128	SM4GGC	JO69	GT	231	1286	1815	1856	1670
129	OZ1CLL	JO65	GP	230	1369	1969	1448	2208
130	G3LTF	JO01	AL	229	1824	1846	2021	2174
131	SM5CNQ	JO78	HS	228	1698	1751	1909	1843
132	SM3COL	JP82	IW	226	1784	1693	2122	2367
133	SM6CKU	JO67	GR	225	1530	1560	1470	1790
134	YU3CAB	JN76	HG	225	1463	1530	2165	3356
135	SM3UL	JP81	IV	225	1275	1521	2110	2363
136	I4XCC	JN63	GD	225	1070	1782	2275	2270
137	G8FUF	JO01	AL	224	1810	1410	2466	1800
138	OK1MBS	JO70	HK	224	1506	1599	1506	2133
139	GJ4ICD	IN89	VJ	223	1620	1100	2050	2090
140	UQ2BLO	KO06	KQ	223	1447	1802	1992	1576
141	DK8VS	JN39	DJ	223	1350	1080	2240	3230
142	G3CHN	IO80	YK	222	2656	2138	----	2358
143	DF2ZC	JO30	DK	221	1090	1686	2004	2009
144	SM0IOT	JO99	JT	218	1300	1700	1820	2100
145	UC2AAB	KO33	NN	217	1350	1850	1980	2280
146	DF9CY	JO41	EL	215	1382	1603	1841	2350
147	DK2LM	JN49	EJ	215	1014	1098	1956	2444
148	DL7YW	JO62	GM	213	1299	1106	1895	2170
149	Y22HA	JO64	GO	213	1250	1071	2058	2041
150	SM5EJN	JO89	IT	212	1770	1630	2240	1920
151	SM5AQJ	JO99	JT	212	1380	1580	1930	----
152	GM4CXM	IO75	XP	211	1428	1583	1709	2023
153	PA2CHR	JO21	CL	211	1370	1108	1695	2300
154	DK3XT	JO53	FN	211	1350	1430	1800	1990
155	YU2JL	JN73	HD	211	1156	----	2108	2019
156	YU2KDE	JN95	JF	209	1731	1097	2074	2196
157	SM5CNF	JO78	HS	208	1660	1730	1850	----
158	DF5DL	JO41	EL	208	1389	1596	2003	2020
159	I1DMP	JN35	DF	208	1001	930	1864	2718
160	SM0BYC	JO89	IT	207	1380	1710	1890	2390
161	OZ3GW	JO56	FQ	207	1340	1580	----	2338
162	YU1EV	KN04	KE	206	1650	----	2165	2200
163	F6CER	JN18	BI	206	1500	1350	1700	2300
164	PA3BSK	JO31	DL	206	1387	1698	1290	2148
165	Y59UN	JO60	GK	204	1790	1220	1920	1630
166	OE5XDL	JN78	HI	204	1400	1515	1976	1958
167	LA8AK	JO38	DS	204	1325	1722	1797	2303
168	SM4ARQ	JO79	HT	202	1750	1590	1950	1930

THE LIST IS PUBLISHED CONTINUOUSLY. DATA COMPILED ABOVE BASED ON UNCONFIRMED CLAIMS BY OPERATORS. PRINTED BY DL 7 QY

WORLD WIDE VHF TOP LIST 144 MHZ 16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO	AURO	MS	ES
169	UQ2GCG	KO17	LR	202	1676	1769	1990	1769
170	Y23PA	JO64	GO	202	1168	1150	1710	----
171	PA3GER	JO21	CL	201	1327	1249	2100	2118
172	SM3FGL	JP81	IV	200	1563	1680	1955	----
173	DL2OM	JO30	DK	200	1270	1712	2104	2488
174	OZ9PW	JO46	EQ	200	1200	1200	1500	2160
175	EA3ADW	JN11	BB	198	2311	----	1932	2245
176	G3FPK	IO91	ZL	197	1828	1488	----	2069
177	G3LQR	JO02	AM	196	1776	2150	2150	2150
178	Y24TN	JO60	GK	195	1790	1310	1920	1630
179	EA3AIR	JN11	BB	194	1241	----	1850	2580
180	OE5JFL	JN68	GI	193	1503	1155	1964	1823
181	IW5AVM	JN52	FC	192	1466	----	2016	2891
182	HG5KDQ	JN97	JH	192	1307	----	1849	2195
183	SM5AGM	JO99	JT	191	1930	1740	----	2000
184	PA0BAT	JO31	DL	191	1078	1377	2498	2042
185	G8KBQ	IO81	YL	190	1501	1775	1865	2235
186	DL7YS	JO62	GM	190	1180	1067	1677	1891
187	PE1BNK	JO22	CM	189	1328	1341	----	2257
188	UR2RDR	KO28	MS	189	1200	1750	1600	2100
189	OE3CEW	JN88	II	188	1464	1344	1842	2000
190	DL7AN	JO62	GM	188	1310	1140	1936	1845
191	OE5EFM	JN78	HI	188	1291	1548	1807	1936
192	PA3AHD	JO22	CM	188	1279	1586	1940	1879
193	UQ2NX	KO27	MR	187	1712	1745	1707	1870
194	DK3LL	JO54	FO	187	1525	1187	1875	1812
195	SP5AD	KO02	KM	185	1767	1697	----	1973
196	DL1JF	JO54	FO	185	1325	1775	----	2062
197	SP1JX	JO84	IO	184	1617	1622	----	2090
198	SM4FXR	JO79	HT	184	1280	1430	1760	----
199	ON1IM	JO11	BL	183	1380	1015	1310	2120
200	LA8AE	JO59	FT	182	2041	1573	----	1932
201	UQ2OW	KO26	MQ	182	1092	1514	1845	1963
202	SM5FND	JO79	HT	181	1445	1601	1616	2060
203	OE5OLL	JN68	GI	181	1430	1500	----	2000
204	EA1TH	IN82	YC	181	1366	----	1674	2292
205	DG1BP	JO33	DN	181	1201	1609	1475	2005
206	PA3CPL	JO21	CL	180	1306	1080	1566	1961
207	G3SEK	IO91	ZL	179	1560	1681	1872	2154
208	SP6ARE	JO81	IL	179	1205	1222	1756	2442
209	SM0DFP	JO89	IT	178	1830	1590	2030	----
210	SM5LE	JO99	JT	178	1440	1470	2190	----
211	UB5WN	KO50	PK	178	1376	1270	2410	1457
212	OH0NC	JP90	JU	177	1525	1308	1670	2493
213	DF9PY	JO30	DK	177	1203	1009	1770	2088
214	F1EAN	JN06	AG	176	1650	----	----	2400
215	PA0CSL	JO22	CM	176	1528	1610	1750	1960
216	RR2TEJ	KO39	NT	176	1422	1760	----	2070
217	OH2BWL	KP20	MU	176	1056	1586	1901	2221
218	G3COJ	IO91	ZL	175	1630	1650	----	1852
219	UR2RGM	KO29	MT	175	1131	1768	1429	2157
220	G4MCU	JO01	AL	174	1567	1630	1627	2000
221	PA3CAP	JO22	CM	174	1305	1230	1687	2008
222	I2FAK	JN45	EF	173	1500	970	1775	3000
223	DC7OH	JO62	GM	173	1349	1289	1680	2260
224	F6FHP	JN04	AE	172	1752	----	2243	2105
225	I2FHW	JN44	EE	172	1500	950	1500	2900
226	DB6BX	JO32	DM	172	1398	1094	----	2059
227	G3PBV	IO80	YK	171	1540	1466	1563	2315
228	DL7WC	JO62	GM	171	1360	1240	1550	1800
229	PA0SBL	JO22	CM	171	1258	1513	1848	1772
230	UA1MC	KP50	PU	170	1500	1540	2145	----
231	F9FT	JN29	CJ	170	1440	1440	2017	----
232	OE3OKS	JN87	IH	170	1354	946	1663	2322
233	OZ1CFO	JO47	ER	170	1262	865	1939	2105
234	SM5CPD	JO89	IT	169	1820	1210	1370	1960
235	UR2AO	KO29	MT	169	1162	1176	1792	2136
236	PA0JOZ	JO22	CM	169	1159	1420	1666	1980
237	F5DE	JN05	AF	168	1850	900	1800	2300
238	F1FEN/P	JN25	CF	167	1506	974	1750	2895
239	PE1AAP	JO22	CM	167	1326	1086	----	2052
240	DL5LH	JO54	FO	167	1313	1614	----	2080
241	F6FLV	JN18	BI	166	1400	----	1350	2054
242	UR2NW	KO19	LT	166	1380	1570	1797	----
243	DF5DE	JO40	EK	166	1186	1670	1845	1752
244	IW0AKA	JN61	GB	166	1119	----	1575	2380
245	SP8AOV	KO11	LL	165	1224	1723	1821	1851
246	DL7ACG	JO62	GM	164	1592	850	1997	----
247	I0AKP	JN61	GB	164	1440	----	1790	2341
248	UA3LAW	KO54	PO	164	1372	1675	2208	----
249	DG7FZ	JO40	EK	164	1123	1190	993	2085
250	SM0CPA	JO89	IT	163	1856	----	----	----
251	UQ2AO	KO26	MQ	163	1647	1679	1472	----
252	PA0LSC	JO22	CM	163	1528	1590	1750	1960
253	OZ1DPR	JO45	EP	163	1373	1215	1327	2015
254	HB9QQ	JN47	EH	163	1330	1250	1685	1520
255	UP2BBC	KO15	LP	163	1260	1904	1989	----
256	UR2HD	KO18	LS	163	1050	1918	----	----
257	SM0AGP	JO89	IT	162	1820	1710	1560	----
258	G3WSN	JO01	AL	162	1522	1821	2076	2077
259	DD3KF	JO30	DK	162	1491	1150	1576	2165
260	EA1TA	IN53	VD	160	1820	----	1739	2334
261	OE5XPL	JN78	HI	159	1434	836	1929	1680
262	Y25QL	JO61	GL	158	1825	950	----	----
263	SP1FPG	JO73	HN	158	1440	1000	1605	2134
264	DK2RY	JN59	FJ	158	1300	1400	1800	----
265	EA5HM	IM99	ZZ	157	1750	----	1800	2100
266	Y24BO	JO62	GM	157	1380	1440	----	1854
267	OK1AGE/P	JO70	HK	156	1481	1136	----	----
268	OE1XRA	JN88	II	156	1468	1630	1895	2233
269	DL5BBL	JO42	EM	156	1290	1286	----	1991
270	OE1RKU	JN88	II	155	1497	1493	1658	2369
271	PE1BZD	JO22	CM	155	1359	1547	1889	1990
272	DF5JJ	JO31	DL	155	1272	1256	1620	2074
273	G8MFJ	IO91	ZL	155	1209	1210	1329	2168
274	YO6AFP	KN26	MG	154	1380	1175	2220	2138
275	PA0VV	JO22	CM	154	1372	1635	1845	1952
276	SP6AZT	JO81	IL	154	1263	1120	1710	1710
277	SP2LU	JO93	JN	153	1200	1452	1611	1430
278	EA6FB	JM08	AY	152	1964	----	1800	1960
279	OE3PUW	JN88	II	152	1456	1019	1858	2289
280	PE1GBT	XXXX	DN	152	1368	962	----	2015
281	9H1CD	JM75	HV	151	1960	----	----	2400
282	DK2NH	JO53	FN	151	1607	1432	----	1996
283	SM4DHN	JP60	GU	151	1390	1300	1770	----
284	EA1ED	IN53	VD	148	1818	----	1533	2119
285	PE1BHB	JO21	CL	148	1204	1007	----	1850
286	OK1KIR/P	JO60	GK	148	1172	1062	----	1551
287	OK1CA/P	JO70	HK	147	1481	1065	950	----
288	PE1JSE	JO21	CL	147	1338	1015	----	----
289	9H1BT	JM75	HV	144	1950	----	2031	2506
290	SM0DRV	JO89	IT	144	1820	1400	1530	2070
291	EA7PZ	IM77	XX	143	1820	----	----	2406
292	OK1KRQ	JN69	GJ	143	1403	1374	1894	----
293	F1BBI	JN18	BI	142	1543	----	----	2115
294	SM5CJF	JO89	IT	142	1440	1280	----	----
295	OE6LDB	JN76	HG	142	1307	1048	----	2318
296	SM7FMD	JO77	HR	142	1276	1031	----	1780
297	DF5BL	JO32	DM	142	1091	1659	----	2364
298	PA0JMV	JO21	CL	141	1220	1590	1790	----
299	EA1BLA	IN53	VD	140	1826	----	1842	2308
300	HB9CRQ	JN47	EH	140	1250	----	1635	2200
301	I1JTQ	JN35	DF	140	1001	----	1720	2027
302	I8TUS	JM89	IZ	139	1448	----	1862	2458
303	F6DRO	JN03	AD	139	1000	----	1950	2200
304	I2AV	JN45	EF	138	1860	----	2480	1730
305	I2KSX/2	JM78	HY	138	1830	----	2183	2320
306	OE1APS	JN88	II	138	1343	1765	1847	2005
307	G3KEQ	IO91	ZL	138	1335	1275	----	1800
308	UR2DZ	KO29	MT	138	1300	1810	1855	----
309	SP9AFI	JN99	JJ	136	1540	980	----	----
310	OE5UAL	JN68	GI	136	1357	1518	1056	3329
311	SM6BFQ	JO68	GS	136	1200	1830	----	----
312	EA4QR	IN80	YA	134	2092	----	1466	2584
313	SP9FG	JN99	JJ	134	1647	1283	----	1630
314	PA3CMC	JO21	CL	134	1492	1100	----	1857
315	OE5UKL/5	JN68	GI	134	1357	832	1646	3329
316	SM0FOB	JO99	JT	133	1830	1490	1390	1860
317	OH0AA	JP90	JU	133	1526	1461	----	----
318	F6EAS	IN98	ZI	133	1380	----	2230	2020
319	SM6CYZ/7	JO66	GQ	132	1120	1200	----	1590
320	PE1HWO	JO21	CL	132	1070	1250	1430	1800
321	SM6PF	JO68	GS	131	1470	1200	----	----
322	DF3BL	JO32	DM	131	1091	1350	----	2051
323	IC8EGJ	JN70	HA	130	1300	----	----	2780
324	IW2BNA	JN45	EF	130	1213	880	1719	2991
325	F1AUQ	JN27	CH	129	1600	----	2025	1604
326	EA1QJ	LN13	VD	128	1820	----	2101	2099
327	I4GBZ	JN54	FE	128	1035	----	----	2160
328	DJ6XV	JO31	DL	127	1010	995	----	2125
329	I0EIO	JN61	GB	126	1257	----	----	2000
330	DG1NZ	JN59	FJ	126	1180	1230	----	2122
331	I6ZAU	JN63	GD	124	1171	----	1930	2170
332	OK3CPY	JN98	JI	121	1166	1830	1711	2226
333	EA3XU	JN11	BB	120	2200	----	----	2060
334	F6HEO	JN16	BG	120	1277	----	----	2380
335	HB9MIO/P	JN37	DH	119	1316	975	----	2183
336	LA9FY	JP40	EU	119	778	1242	1128	----

DEADLINE IN 1984 (1)15.2. (2)15.5. (3)15.8. (4)15.11. WKD=NUMBER OF SQUARES WORKED +=OP. HAS DIED PRINTED BY DL 7 QY

WORLD WIDE VHF TOP LIST 144 MHZ

16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO	AURO	MS	ES
337	OE1WEB	JN88	II	118	900	----	----	2350
338	OE3EFS	JN78	HI	117	1412	1360	----	3500
339	OE3HJW/3	JN77	HH	116	1643	----	----	----
340	G6HKT	IO81	YL	116	1450	700	----	2200
341	HB9AOF	JN36	DG	113	1181	----	----	1981
342	EB4DF	IN80	YA	112	1940	----	1670	2240
343	OE3JHC	JN78	HI	111	1307	----	----	1975
344	OE3RLC	JN77	HH	110	1431	----	----	2016
345	EA3IH	JN11	BB	110	1297	----	1857	2565
346	F1BRV	JN16	BG	109	1107	----	----	1999
347	EA5DFY	JM08	AY	108	1369	----	1620	2654
348	OE6IWG	JN77	HH	108	1221	1110	1481	1920
349	OE3IWG	JN77	HH	108	1221	1110	1481	1920
350	IS0PDQ	JM49	EZ	108	978	----	2200	2294
351	G6JNS	IO82	YM	107	1309	----	----	1808
352	OE1AFW	JN88	II	105	1470	1410	----	2179
353	DL7QY	JN59	FJ	105	1368	1628	1345	1689
354	OK1KTL/P	JO60	GK	105	907	----	----	----
355	SP6LB	JO70	HK	104	1331	820	----	----
356	OZ7IS	JO65	GP	104	1020	1090	1294	1842
357	I8REK	JN70	HA	102	1613	----	1473	1872
358	EA1QF	IN82	YC	100	1099	----	1951	2293
359	EA4AAW	IM69	WZ	99	1884	----	1640	2390
360	EB5AZT	IM98	ZY	99	1391	----	1516	2487
361	EA7AJX	IM87	YX	98	1720	----	1750	2456
362	OE3RRA	JN88	II	98	942	979	----	2304
363	DL0UL/P	JN48	EI	97	1010	----	----	2019
364	OE3PQU	JN78	HI	94	1556	944	----	1930
365	I4PAI	JN64	GE	93	1150	----	1432	2275
366	OE8JDK/8	JN66	GG	92	940	----	----	----
367	I4JED	JN54	FE	91	850	----	----	2450
368	EA7AG	IM86	YW	89	1626	----	1677	2127
369	EA3DXU	JN11	BB	87	1533	----	1280	2559
370	OE5XVL	JN67	GH	87	1009	----	----	1605
371	I4PPH	JN64	GE	87	775	----	----	1995
372	EA2AX	IN91	ZB	86	1438	----	----	2177
373	G8ROU	IO93	ZN	86	1250	700	1470	----
374	IW5AFB	JN52	FC	85	1452	----	1103	1539
375	LA8AK	JO48	ES	85	900	1255	----	----
376	EA1RCA/P	IN63	WD	84	1860	----	----	1781
377	IW0AWH	JN61	GB	84	1277	----	----	1837
378	EA3FD	JN12	BC	83	1220	----	----	1512
379	IS0DKU	JM49	EZ	82	2373	----	----	2095
380	EA8XS	KO84	SO	80	3031	----	----	3150
381	OE1PBC	JN88	II	80	1753	839	----	2179
382	I2AY	JN45	EF	80	980	----	----	1560
383	YO5NU	KN17	LH	79	1250	----	1060	----
384	EA1YV	LN12	VC	76	1691	----	----	1913
385	HB9AJF	JN47	EH	76	1013	----	----	1621
386	EA3CCK	JN11	BB	75	1410	----	----	2074
387	EA1ACD	LN13	VD	74	1820	----	----	1939
388	EA7BVD	IM77	XX	73	1580	----	----	2282
389	OE1FQS	JN88	II	73	1490	----	1211	2017
390	EA7CR	IM67	WX	73	1370	----	----	2150
391	I3ZVN	JN55	FF	73	1114	----	----	----
392	EA3MM	JN11	BB	72	1197	----	----	1812
393	EB5YE	IM99	ZZ	70	1378	----	----	1978
394	EB5BAX	IM99	ZZ	69	1378	----	----	1978
395	I0AWZ	JN61	GB	64	1128	----	----	1926
396	EB4BK	IN80	YA	63	584	----	----	1880
397	EA3CSX	JN11	BB	62	1829	----	----	2064
398	I0YLI	JN61	GB	62	1221	----	----	1868
399	IW1AHH	JN35	DF	62	1085	----	----	1250
400	I7WAF	JN80	IA	62	808	----	----	2172
401	OE1KTC	JN88	II	60	1004	----	----	2240
402	OE1AFA	JN88	II	59	1825	----	----	1410
403	OE3AFA +	JN88	II	59	1825	----	----	1410
404	EA2LP	IN93	ZD	59	1618	----	----	1441
405	EB5BOD	IM98	ZY	59	1460	----	----	2137
406	EA1CDH	IN71	XB	58	1860	----	----	2312
407	EA3DLV	JN11	BB	58	1352	----	----	2157
408	EA1KV	LN12	VC	57	1706	----	1824	2001
409	EB7NK	IM86	YW	57	1620	----	1065	2150
410	EA3CCK/6	JM19	BZ	57	1126	----	----	1824
411	I3NOO	JN55	FF	57	951	----	----	1808
412	EA7BIH	IM87	YX	56	2285	----	----	2353
413	ED1RCF	IN63	WD	56	1862	----	----	----
414	IW0BCU	JN61	GB	56	1349	----	----	1396
415	EA3BTZ	JN11	BB	56	1238	----	1178	1695
416	EA5EZ	IM99	ZZ	55	1500	----	----	1812
417	IW2AEN	JN45	EF	55	1478	----	----	1600
418	I7YYU	JN80	IA	54	1850	----	----	2081
419	I2FXI	JN45	EF	53	1612	----	----	----
420	IW4AJS/P	JN35	DF	52	958	----	----	1210
421	OE3GRA/6	JN77	HH	52	844	----	----	1050
422	I5XEI	JN53	FD	51	1463	----	----	1993
423	EB4REM	IN80	YA	48	1600	----	----	2250
424	EB4AEM	IN80	YA	48	1600	----	----	2250
425	IW3EYG	JN55	FF	48	876	----	----	1101
426	EA7APD	IM67	WX	46	1835	----	----	1581
427	I1SCL	JN33	DD	45	1000	----	----	1250
428	I7TBF	JN80	IA	45	796	----	----	2282
429	IW1ALW	JN35	DF	44	960	----	----	2100
430	OE9MDI	JN47	EH	43	1046	647	----	1692
431	IW2BY	JN45	EF	43	1000	----	----	----
432	SM5OJR/5	JO79	HT	42	1286	2405	----	----
433	I2OIM	JN45	EF	42	870	----	----	1864
434	EB4KI	IN80	YA	41	585	----	----	----
435	IW9ACT	JM68	GY	40	1446	----	----	1979
436	I3EJ	JN55	FF	40	965	----	----	1273
437	EA5BAX	IM99	ZZ	36	1378	----	----	----
438	I0UCM	JN61	GB	36	1224	----	----	1887
439	EA2ARD	IN93	ZD	36	1144	----	----	1200
440	SM2OJR	JP94	JY	35	----	1454	----	----
441	I0ZUF	JN63	GD	35	952	----	----	1550
442	EA3AYK	JN11	BB	34	1220	----	----	----
443	EA7ZM	IM76	XW	33	1682	----	----	2006
444	I3VAD	JN65	GF	33	707	----	----	----
445	I2LVN	JN45	EF	32	1023	----	----	2023
446	IC8ZUQ	JN70	HA	27	1300	----	----	1900
447	IT9XIX	JM77	HX	25	1881	----	----	----
448	EA7EBN	IM76	XW	25	1443	----	----	----
449	IW0BAY	JN61	GB	25	680	----	----	----
450	EA1TF	LN13	VD	24	1832	----	----	1885
451	EB4DF/7	IM88	YY	23	1480	----	----	----
452	EB7DF/7	IM88	YY	23	1480	----	----	----
453	EA1ZK	LN13	VD	23	1000	----	----	----
454	EB8EH	KO84	SO	20	480	----	----	1875
455	EA5EBO	IM99	ZZ	19	1320	----	----	1890
456	I2VIU	JN46	EG	12	150	----	----	----
457	EB5CWM	IM97	ZX	11	380	----	----	2060
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THE LIST IS PUBLISHED CONTINUOUSLY. DATA COMPILED ABOVE BASED ON UNCONFIRMED CLAIMS BY OPERATORS.

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WORLD WIDE UHF TOP LIST 432 MHZ 16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO	AURO	MS	ES
1	DL7QY	JN59	FJ	184	1368	1618	----	----
2	DL7YC	JO62	GM	179	1225	----	----	----
3	SM0DJW	JO88	IS	177	1910	910	----	----
4	DL7ZL	JO62	GM	176	1305	1249	----	----
5	DK5AI	JO51	FL	166	1506	798	----	----
6	DF3XU	JO53	FN	165	1607	1057	----	----
7	OZ7IS	JO65	GP	160	1499	1048	1294	----
8	F1FHI	IN97	ZH	158	1892	----	----	----
9	SM3AKW	JP92	JW	151	1190	919	----	----
10	SM6CKU	JO67	BR	150	1293	660	----	----
11	PA0EZ	JO22	CM	149	1787	1028	----	----
12	OE3LFA	JN88	II	149	1620	----	----	----
13	PA0RDY	JO22	CM	146	1799	822	----	----
14	G3LQR	JO02	AM	144	2031	873	----	----
15	G3LTF	JO01	AL	142	1520	890	----	----
16	UA3LBO	KO64	QO	140	1426	1612	----	----
17	SM6HYG	JO58	FS	138	1685	720	----	----
18	PA3DIJ	JO33	DN	135	1695	825	----	----
19	PA0FRE	JO21	CL	134	1840	850	----	----
20	DJ9DL	JO31	DL	131	1274	615	----	----
21	PA0WWM	JO22	CM	129	1342	726	----	----
22	Y22ME	JO72	HM	128	1364	874	----	----
23	G3SEK	IO91	ZL	128	1269	170	----	----
24	Y23FG	JO52	FM	127	1560	885	----	----
25	DK6AS	JO52	FM	127	1360	620	----	----
26	DB6BX	JO32	DM	126	1398	----	----	----
27	OZ9FW	JO65	GP	125	1348	1026	----	----
28	OK1CA/P	JO70	HK	124	1267	----	----	----
29	PE1CQQ	JO32	DM	123	1684	490	----	----
30	DJ9BV	JO43	EN	123	1436	887	----	----
31	OZ2OE	JO45	EP	122	1429	1020	----	----
32	F6GNR	IN97	ZH	120	1894	----	----	----
33	F1FEN/P	JN25	CF	120	1540	----	----	----
34	OK1KHI/P	JO70	HK	120	1525	----	----	----
35	OH0NC	KP00	KU	118	1544	864	----	----
36	PE1ALA	JO22	CM	118	1336	788	----	----
37	DB6NT	JO50	FK	117	1505	----	----	----
38	DJ6MB	JO30	DK	117	1253	921	----	----
39	SM0FZH	JO99	JT	116	1900	957	----	----
40	F6APE	IN97	ZH	116	1706	----	----	----
41	PE0AGO	JO32	DM	116	1382	----	----	----
42	SM5BEI	JP90	JU	115	1325	1016	----	----
43	DL7APV	JO62	GM	115	1308	850	----	----
44	DF3EE	JO31	DL	115	1267	1019	----	----
45	DL3UZ	JO53	FN	114	1270	----	----	----
46	OZ1EKI	JO45	EP	113	1325	700	----	----
47	SM7BAE	JO65	GP	113	1220	850	----	----
48	OH3TH +	KP11	LV	113	1199	943	----	----
49	SM6FYU	JO66	GQ	112	1441	706	----	----
50	PA3AOH	JO31	DL	112	1116	530	----	----
51	DF7VX	JO41	EL	112	1105	658	----	----
52	DK0NA	JO50	FK	112	1096	----	----	----
53	OE3XUA	JN77	HH	111	1408	----	----	----
54	SM5CPD	JO89	IT	110	1230	640	----	----
55	ON5FF	JO11	BL	110	1170	736	----	----
56	SM5DWC	JO89	IT	109	1400	810	----	----
57	SM0FFS	JO99	JT	109	1380	740	----	----
58	PA0JOZ	JO22	CM	107	1156	----	----	----
59	SM4AXY	JO79	HT	105	1714	1100	----	----
60	DC2XK	JO43	EN	105	1440	----	----	----
61	DL4EA	JO31	DL	105	1265	1009	----	----
62	SM0CPA	JO89	IT	104	1856	797	----	----
63	F6DWG	JN19	BJ	103	1350	----	----	----
64	OK1KIR/P	JO60	BK	103	1331	----	----	----
65	OZ3IW	JO54	FO	103	1298	613	----	----
66	F1EAN	JN06	AG	102	1500	----	----	----
67	GJ4ICD	IN89	YJ	102	1340	803	----	----
68	DK2NH	JO53	FN	101	1607	805	----	----
69	G3PBV	IO80	YK	101	1572	----	----	----
70	G3COJ	IO91	ZL	101	1465	812	----	----
71	SM0DFP	JO89	IT	101	1410	830	----	----
72	DB2VY	JN39	DJ	101	1335	----	----	----
73	DC7QH	JO62	GM	100	1231	509	----	----
74	PE1IST	JO22	CM	99	1285	----	----	----
75	DL7AN	JO62	GM	99	1240	----	----	----
76	G8KBQ	IO81	YL	97	1327	----	----	----
77	DC9XO	JO42	EM	96	1600	----	----	----
78	DG4GAN	JN48	EI	96	1504	----	----	----
79	G4FRE	JO01	AL	96	1225	560	----	----
80	DC9CSA +	JO62	GM	96	1171	----	----	----
81	OK1AIY/P	JO70	HK	95	1410	----	----	----
82	DL7ACG	JO62	GM	95	1279	----	----	----
83	OZ7LX	JO55	FP	93	1315	720	----	----
84	PA3BSK	JO31	DL	93	1129	----	----	----
85	DK1PZ	JO51	FL	93	1018	----	----	----
86	PA2DOL	JO21	CL	92	1088	----	----	----
87	SM0DYE	JO99	JT	91	1205	845	----	----
88	DF9CY	JO41	EL	91	1067	430	----	----
89	PA0CRA	JO22	CM	90	1412	----	----	----
90	PA0JUS	JO22	CM	90	1340	----	----	----
91	F9FT	JN29	CJ	90	960	----	----	----
92	PE1GHG	JO21	CL	89	1323	----	----	----
93	DF1OH	JO42	EM	89	1261	1038	----	----
94	DJ6XV	JO31	DL	89	968	508	----	----
95	LA8AE	JO59	FT	88	1585	843	----	----
96	ON5QW	JO11	BL	88	1395	----	----	----
97	DD2EK	JO31	DL	88	1284	----	----	----
98	Y22HA	JO64	GO	87	1414	----	----	----
99	DF5JJ	JO31	DL	87	908	----	----	----
100	ON4YZ	JO20	CK	86	1460	----	----	----
101	PE1JSE	JO21	CL	86	1111	----	----	----
102	G3UBX	IO82	YM	86	1101	----	----	----
103	Y23PA	JO64	GO	85	1102	----	----	----
104	OZ3GW	JO56	FQ	85	1090	620	----	----
105	F1BUU	IN94	ZE	84	1250	----	----	----
106	PE1GVK	JO21	CL	84	1197	----	----	----
107	F6CER	JN18	BI	83	1350	500	----	----
108	DF3CK	JN57	FH	83	1283	867	----	----
109	DL6NAQ	JO40	EK	83	1253	----	----	----
110	G6HKT	IO81	YL	83	1190	----	----	----
111	ON5GF	JO20	CK	83	1115	----	----	----
112	OZ1CFO	JO47	ER	82	1330	----	----	----
113	LA8AK	JO38	DS	82	1188	776	----	----
114	Y24QO	JO62	GM	82	1100	----	----	----
115	G4LRT	IO92	ZM	81	1394	----	----	----
116	PE1HWO	JO21	CL	80	1050	----	----	----
117	OZ1HDA	JO47	ER	79	1370	----	----	----
118	PA3BGL	JO23	CN	79	1250	----	----	----
119	DG1BP	JO33	DN	79	1165	----	----	----
120	DF1JC	JO31	DL	78	1270	----	----	----
121	DK2ZF	JO53	FN	78	1223	----	----	----
122	DG1NZ	JN59	FJ	78	1146	----	----	----
123	HB9MIN/P	JN37	DH	78	1100	----	----	----
124	DB5AQ	JO51	FL	78	1050	----	----	----
125	PA0VV	JO22	CM	77	1180	----	----	----
126	DJ7YP	JO42	EM	77	971	----	----	----
127	PA2CHR	JO21	CL	76	1265	----	----	----
128	DL5FAU	JO40	EK	76	1120	----	----	----
129	ON6UG	JO11	BL	76	970	420	----	----
130	Y22EN	JO60	GK	75	1395	----	----	----
131	PA2DRV	JO21	CL	75	1147	----	----	----
132	DL6WU	JN49	EJ	74	1305	740	----	----
133	DL7HR	JN58	FI	74	1256	980	----	----
134	DC9BU/A	JO40	EK	74	1253	----	----	----
135	G4MCU	JO01	AL	74	1192	----	----	----
136	OH2BBF	KO19	LT	74	1164	773	----	----
137	SP1JX	JO84	IO	73	1120	----	----	----
138	SM4IAZ	JO79	HT	73	1055	1134	----	----
139	SM7GEP	JO77	HR	72	1428	533	----	----
140	Y23BD	JO62	GM	72	1150	----	----	----
141	DF2VQ	JO31	DL	72	1077	475	----	----
142	PA0XMA	JO32	DM	72	980	485	----	----
143	G8HVY	IO80	YK	71	1500	----	----	----
144	G4BEL	JO02	AM	71	1175	----	----	----
145	UR2EQ	KO39	NT	71	1160	907	----	----
146	SM5CUI	JO89	IT	71	1150	1260	----	----
147	Y24BO	JO62	GM	71	1066	838	----	----
148	SM7CFE	JO76	HQ	70	1420	----	----	----
149	OZ1HDB	JO47	ER	70	1418	----	----	----
150	PA3BRS	JO22	CM	69	1292	----	----	----
151	SM7GWU	JO78	HS	69	1192	692	----	----
152	DF1EQ	JO31	DL	69	811	----	----	----
153	DK0IK/P	JO43	EN	68	1436	----	----	----
154	DF6NA	JN49	EJ	68	1201	650	----	----
155	SM5CUL	JO89	IT	68	1150	1260	----	----
156	PE1AAP	JO22	CM	67	1132	----	----	----
157	OK2ZRZ/P	JN89	IJ	65	1333	----	----	----
158	OZ2LD	JO54	FO	65	1186	----	----	----
159	OZ9SW	JO46	EQ	65	1050	----	----	----
160	SM7FMD	JO77	HR	64	1594	----	----	----
161	DG4BB	JO43	EN	64	1194	----	----	----
162	OZ1ASL	JO54	FO	64	1187	----	----	----
163	G3WSN	JO01	AL	63	1385	----	----	----
164	SP9FG	JN99	JJ	63	1327	----	----	----
165	DL0SP/P	JO62	GM	63	1150	----	----	----
166	RQ2GAG	KO26	MQ	62	1317	709	----	----
167	OE5EFM	JN78	HI	62	1214	----	----	----
168	UP2BBC	KO15	LP	62	1125	807	----	----

DEADLINE IN 1984 (1)15.2. (2)15.5. (3)15.8. (4)15.11. WKD=NUMBER OF SQUARES WORKED +=OP. HAS DIED PRINTED BY DL 7 QY

WORLD WIDE UHF TOP LIST 432 MHZ

16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO	AURO	MS	ES
169	DH4NAG	JO50	FK	62	1096	----	----	----
170	F6CJG/P	JN15	BF	61	1170	----	----	----
171	DK3OL	JO31	DL	61	909	----	----	----
172	Y21PL	JO61	GL	61	864	----	----	----
173	HB9AOF	JN36	DG	61	820	----	----	----
174	SM5DSN	JO89	IT	60	1470	670	----	----
175	OK1KTL/P	JO60	GK	60	993	----	----	----
176	SM4IVE	JO79	HT	60	938	710	----	----
177	DK8VS	JN39	DJ	60	920	----	----	----
178	SM5LE	JO99	JT	59	1560	710	----	----
179	G8SFM	IO81	YL	59	1255	----	----	----
180	DL7RU	JO62	GM	59	1231	----	----	----
181	OE5UKL/5	JN68	GI	59	1221	----	----	----
182	DC4XH	JO43	EN	59	1037	----	----	----
183	F6HLD/P	JN26	CG	58	1545	----	----	----
184	F6BSJ	JN26	CG	58	1525	----	----	----
185	PE0DOL	JO21	CL	58	1033	----	----	----
186	DG7FZ	JO40	EK	57	1147	----	----	----
187	DL4OL	JO52	FM	57	1018	----	----	----
188	SP6AZT	JO81	IL	56	1538	----	----	----
189	I6GQA	JN63	GD	56	813	----	----	----
190	DK3UC	JO53	FN	55	1380	600	----	----
191	OE1RKU	JN88	II	55	1354	----	----	----
192	G4MUT	IO91	ZL	54	1197	----	----	----
193	PA0JME	JO21	CL	54	1046	----	----	----
194	PA2HJS	JO20	CK	54	832	----	----	----
195	DL5LH	JO54	FO	53	1256	630	----	----
196	IW5AFB	JN52	FC	53	945	----	----	----
197	PA0KDV	JO33	DN	53	920	----	----	----
198	DK1KO	JO53	FN	53	920	----	----	----
199	PA0JTA	JO21	CL	52	920	----	----	----
200	I2FHW	JN44	EE	52	910	----	----	----
201	DL0SO/A	JO31	DL	52	888	----	----	----
202	DL2OM	JO30	DK	52	780	639	----	----
203	OE1APS	JN88	II	51	1341	----	----	----
204	OE3EFS	JN78	HI	50	1303	----	----	----
205	OE3PQU	JN78	HI	50	1220	----	----	----
206	DF7YU	JO41	EL	50	1147	----	----	----
207	SM6FHZ	JO66	GQ	50	1010	800	----	----
208	DL0UL/P	JN48	EI	50	759	----	----	----
209	HB9QQ	JN47	EH	49	1080	----	----	----
210	PA3BBA	JO22	CM	49	1028	----	----	----
211	YU3CAB	JN76	HG	49	684	----	----	----
212	DL0UP/P	JN48	EI	49	676	----	----	----
213	SP1DSU	JO73	HN	48	1340	730	----	----
214	UR2NW	KO19	LT	48	1060	675	----	----
215	EA3XU	JN11	BB	47	1230	----	----	----
216	SP1FPG	JO73	HN	47	968	----	----	----
217	DD3KF	JO30	DK	47	862	----	----	----
218	OE9XXI/9	JN47	EH	47	844	----	----	----
219	SP6BTI	JO81	IL	47	806	----	----	----
220	EA3BBU	JN11	BB	46	1225	----	----	----
221	SP5JC	KO02	KM	46	1120	866	----	----
222	UR2RQT	KO28	MS	46	853	853	----	----
223	SP9MM	JO90	JK	45	1547	----	----	----
224	UQ2NX	KO27	MR	45	1355	----	----	----
225	SP6LB	JO70	HK	45	1301	----	----	----
226	OH2BWL	KP20	MU	45	1223	1005	----	----
227	HB9MIO/P	JN37	DH	45	1010	----	----	----
228	SM3COL	JP82	IW	45	621	455	----	----
229	IW5AVM	JN52	FC	44	1458	----	----	----
230	OZ1FDH	JO65	GP	44	1033	822	----	----
231	OE5XVL	JN67	GH	44	890	----	----	----
232	F6ECI	JN18	BI	44	880	----	----	----
233	I2FUM/2	JN44	EE	44	875	----	----	----
234	DL2HAD	JO43	EN	44	798	----	----	----
235	SM2CKR	KP03	KX	43	1215	820	----	----
236	OE3RLC	JN77	HH	43	1131	----	----	----
237	DF3XZ	JO53	FN	43	956	----	----	----
238	DC8LG	JN57	FH	43	934	----	----	----
239	DC9VA	JN39	DJ	43	920	----	----	----
240	OE6LOG	JN76	HG	43	470	----	----	----
241	G8ROU	IO93	ZN	42	1255	----	----	----
242	DC7OH	JO62	GM	42	1079	----	----	----
243	SM0AGP	JO89	IT	42	740	410	----	----
244	OE5UAL	JN68	GI	41	1287	----	----	----
245	SM4DHN	JP60	GU	41	1240	1030	----	----
246	UQ2OW	KO26	MQ	40	934	833	----	----
247	DL7WC	JO62	GM	40	795	----	----	----
248	DL9HN	JO53	FN	39	1093	----	----	----
249	GM3ZSS	IO87	YR	38	1400	----	----	----
250	UQ2GFZ	KO37	NR	38	1328	590	----	----
251	OE3JHC	JN78	HI	38	1017	----	----	----
252	DK0IK/P	JO34	DO	38	800	----	----	----
253	HG1YA	JN87	IH	38	631	----	----	----
254	OE5XPL	JN78	HI	37	1176	----	----	----
255	DL8DAU	JO31	DL	37	737	----	----	----
256	UA3MBJ	KO88	SS	36	1200	800	----	----
257	DF9PY	JO30	DK	36	731	----	----	----
258	OE1ERC/9	JN57	FH	36	709	----	----	----
259	HG2KML	JN97	JH	36	600	----	----	----
260	UR2AO	KO29	MT	35	1131	----	----	----
261	UR2GZ	KO28	MS	35	1035	----	----	----
262	DL9DAK	JO31	DL	35	824	----	----	----
263	UR2RGM	KO29	MT	35	820	----	----	----
264	DG5BQ	JO43	EN	35	739	----	----	----
265	DL7YW	JO62	GM	35	724	----	----	----
266	YU3USB/3	JN66	GG	35	632	----	----	----
267	I3ZVN	JN55	FF	34	866	----	----	----
268	F6EAS	IN98	ZI	34	630	----	----	----
269	SM3UL	JP81	IV	34	585	674	----	----
270	OK1VAM	JO60	GK	34	511	----	----	----
271	OE3HJW/9	JN77	HH	33	1643	----	----	----
272	OE3HJW/3	JN77	HH	33	1643	----	----	----
273	DK2PR	JO43	EN	33	1200	----	----	----
274	HB9CRQ	JN47	EH	33	1012	----	----	----
275	DL9PW	JN59	FJ	33	1000	----	----	----
276	SM3BIU	JM77	HX	33	920	720	----	----
277	DL5BBL	JO42	EM	33	841	----	----	----
278	OE1KTC	JN88	II	33	808	----	----	----
279	DF1EQ	JO31	DL	33	767	----	----	----
280	EA3LL	JN01	AB	32	1315	----	----	----
281	UR2RIW	KO18	LS	32	1100	----	----	----
282	DJ5LZ	JN58	FI	32	931	----	----	----
283	DB9SB	JN49	EJ	32	853	----	----	----
284	SM5EVK	JO88	IS	32	740	----	----	----
285	I1JTQ	JN35	DF	32	550	----	----	----
286	OK3AU	KN08	KI	31	1172	----	----	----
287	OE3RRA	JN88	II	31	889	----	----	----
288	UR2RIC	KO18	LS	31	673	----	----	----
289	SP6ARE	JO81	IL	31	610	----	----	----
290	UQ2GCG	KO17	LR	30	1275	396	----	----
291	F6HEO	JN16	BG	30	761	----	----	----
292	DC7HF/A	JO43	EN	29	1001	----	----	----
293	DB7NW/A	JO50	FK	29	649	----	----	----
294	I0AKP/P	JN61	GB	28	1158	----	----	----
295	YO2IS	KN05	KF	28	1020	----	----	----
296	G8MFJ	IO91	ZL	28	941	----	----	----
297	DF5BL	JO32	DM	28	616	----	----	----
298	EA1ED	IN53	VD	27	1200	----	----	----
299	OE8JDK/8	JN66	GG	27	585	----	----	----
300	EA1RCA/P	IN63	WD	26	1166	----	----	----
301	DK5OD	JO42	EM	26	1023	----	----	----
302	EA3FD	JN12	BC	26	1011	----	----	----
303	UR2QA	KO38	NS	26	803	----	----	----
304	I2KSX/8	JM78	HY	25	1830	----	----	----
305	OE3PUW	JN88	II	25	1315	----	----	----
306	EA2AA	IN83	YD	25	1082	----	----	----
307	DB6AV	JN48	EI	25	788	----	----	----
308	OE1KTC/5	JN68	GI	25	706	----	----	----
309	DH0FAB	JO40	EK	25	669	----	----	----
310	UR2JL	KO29	MT	25	405	----	----	----
311	UA3TCF	IO66	WQ	24	1131	903	----	----
312	IW0AQF	JN61	GB	24	1080	----	----	----
313	DL0SZ	JN58	FI	24	931	----	----	----
314	IW3EYG	JN55	FF	24	751	----	----	----
315	UB5JIN	KN74	RE	24	561	----	----	----
316	OE1FQS	JN88	II	24	540	----	----	----
317	IS0DKU	JM49	EZ	23	1092	----	----	----
318	IW4AJS/P	JN35	DF	23	1045	----	----	----
319	DL4OJ	JO52	FM	22	1040	----	----	----
320	IW1AHH	JN35	DF	22	885	----	----	----
321	IW0AWH	JN61	GB	22	500	----	----	----
322	UQ2AO	KO26	MQ	22	487	----	----	----
323	UR2QY	KO19	LT	21	650	----	----	----
324	DK0MB/P	JO42	EM	21	514	----	----	----
325	OE3OKS	JN87	IH	20	1354	----	----	----
326	OE3CEW	JN88	II	20	702	----	----	----
327	IW2BNA	JN45	EF	20	602	----	----	----
328	EA7PZ	IM77	XX	19	1824	----	----	----
329	OY7O	IP62	WW	19	1560	----	----	----
330	EA1TA	IN53	VD	19	1519	----	----	----
331	DF2CA	JO43	EN	19	680	----	----	----
332	YO5NU	KN17	LH	19	580	----	----	----
333	EA4AAW	IM69	WZ	18	1533	----	----	----
334	EB5BOD	IM98	ZY	18	1407	----	----	----
335	EA4QR	IN80	YA	18	544	----	----	----
336	SP5AD	KO02	KM	17	1331	----	----	----

THE LIST IS PUBLISHED CONTINUOUSLY. DATA COMPILED ABOVE BASED ON UNCONFIRMED CLAIMS BY OPERATORS.

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WORLD WIDE SHF TOP LIST 1296 MHZ 16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO
1	PA0EZ	JO22	CM	88	1261
2	PE1CHQ	JO32	DM	88	1200
3	PA0FRE	JO21	CL	83	1340
4	F1FHI	IN97	ZH	80	1538
5	PA0WWM	JO22	CM	80	1298
6	G3LQR	JO02	AM	80	1232
7	DL7QY	JN59	FJ	79	1261
8	G3LTF	JO01	AL	78	1078
9	F6DZK	JN08	AI	77	1229
10	DF3XU	JO53	FN	74	1277
11	SM6HYG	JO58	FS	71	1685
12	HB9AMH/P	JN37	DH	71	1264
13	PE0AGO	JO32	DM	70	1196
14	G4BYV	JO02	AM	69	1028
15	ON5GF	JO20	CK	69	1010
16	PE1CQQ	JO32	DM	67	1167
17	PA3DIJ	JO33	DN	66	988
18	DK2UO	JO31	DL	66	871
19	DB6NT	JO50	FK	65	1105
20	DC9XO	JO42	EM	64	963
21	DB6BX	JO32	DM	62	1052
22	PA2DOL	JO21	CL	62	1027
23	OZ2OE	JO45	EP	61	1425
24	PA0CRA	JO22	CM	61	1286
25	DK3UC	JO53	FN	60	1223
26	OZ7IS	JO65	GP	60	1205
27	DK0NA	JO50	FK	59	1096
28	DL7ZL	JO62	GM	57	1285
29	OE3LFA	JN88	II	57	1260
30	PA3AOH	JO31	DL	57	940
31	DF5JJ	JO31	DL	56	897
32	OK1AIY/P	JO70	HK	55	1351
33	DL6NAQ	JO40	EK	55	1253
34	OK1KIR/P	JO60	GK	55	1208
35	G4LRT	IO92	ZM	55	1152
36	DL4EA	JO31	DL	55	906
37	DC9BU/A	JO40	EK	54	1253
38	PA2DRV	JO21	CL	53	1318
39	DK6AS	JO52	FM	52	990
40	DF1EQ	JO31	DL	52	908
41	DF3EE	JO31	DL	50	882
42	HB9RG	JN47	EH	50	820
43	DD3KL	JO30	DK	50	719
44	DL7YC	JO62	GM	49	1040
45	OH0NC	KP00	KU	47	1529
46	DB2VY	JN39	DJ	46	783
47	SM0DFP	JO89	IT	45	1057
48	PE1GHG	JO21	CL	45	867
49	PE1ALA	JO22	CM	44	1315
50	DH4NAG	JO50	FK	44	1096
51	DK5AI	JO51	FL	44	883
52	SM6CKU	JO67	GR	44	820
53	F6CER	JN18	BI	43	1350
54	OZ3ZW	JO54	FO	42	1183
55	OK1CA/P	JO70	HK	42	1089
56	DK2NH	JO53	FN	42	805
57	LA8AE	JO59	FT	41	1271
58	F1FEN/P	JN25	CF	41	1190
59	DL3NI	JO31	DL	41	798
60	PA0JOZ	JO22	CM	40	892
61	SM0FZH	JO99	JT	39	1254
62	G3COJ	IO91	ZL	39	963
63	SM5BEI	JP90	JU	39	877
64	DC7QH	JO62	GM	38	1216
65	F6DWG	JN19	BJ	38	1196
66	DL5FAU	JO40	EK	38	740
67	G4FRE	JO01	AL	38	641
68	SM5DWC	JO89	IT	37	1060
69	PA3BSK	JO31	DL	37	821
70	DL9GU	JN49	EJ	37	678
71	SM0CPA	JO89	IT	36	1141
72	SM6ESG	JO67	GR	36	980
73	DD2EK	JO31	DL	36	845
74	PE1HWO	JO21	CL	36	830
75	PA0JUS	JO22	CM	36	820
76	SM0FFS	JO99	JT	35	1040
77	DL3NQ	JN49	EJ	35	940
78	PA3BGL	JO23	CN	34	1155
79	DL7APV	JO62	GM	34	1112
80	G3PBV	IO80	YK	34	996
81	DF7VX	JO41	EL	34	886
82	DK1PZ	JO51	FL	34	865
83	DL0SO/A	JO31	DL	33	642
84	LA8AK	JO38	DS	32	1117
85	OE9XXI/9	JN47	EH	32	742
86	LX1DU	JN29	CJ	32	600
87	G4BEL	JO02	AM	31	1025
88	DC0DA	JO31	DL	31	815
89	PA2HJS	JO20	CK	31	690
90	DK0IK	JO43	EN	31	672
91	OZ1HDA	JO47	ER	29	888
92	PA0RDY	JO22	CM	28	817
93	DF3CK	JN57	FH	27	1240
94	DJ6MB	JO30	DK	27	879
95	DC8UG	JO30	DK	27	802
96	DG4BB	JO43	EN	27	741
97	PE1JSE	JO21	CL	26	737
98	GBKBQ	IO81	YL	25	926
99	OE3XUA	JN77	HH	25	900
100	F6BSJ	JN26	CG	25	720
101	UR2EQ	KO39	NT	25	588
102	SM4AXY	JO79	HT	24	1000
103	I2FUM/2	JN44	EE	24	779
104	PA0VV	JO22	CM	24	622
105	SM5CPD	JO89	IT	24	610
106	PA0JME	JO21	CL	22	867
107	DF1EO	JO31	DL	22	756
108	HB9MIO/P	JN37	DH	22	715
109	HB9AOF	JN36	DG	22	581
110	OZ2LD	JO54	FO	21	1186
111	I3ZVN	JN55	FF	20	972
112	PA0KDV	JO33	DN	20	724
113	OE1ERC/9	JN57	FH	20	657
114	SM0DYE	JO99	JT	20	485
115	DL7AN	JO62	GM	19	814
116	DK0IK/P	JO34	DO	19	758
117	OE3PQU	JN78	HI	19	546
118	DL0UL/P	JN48	EI	19	531
119	OE9PMJ/9	JN47	EH	18	890
120	IW5AVM	JN52	FC	18	672
121	OE3RLC	JN77	HH	18	554
122	DG1NZ	JN59	FJ	17	668
123	OK1KTL/P	JO60	GK	17	467
124	OE3EFS	JN78	HI	16	643
125	DG4GAN	JN48	EI	16	580
126	I2FHW	JN44	EE	16	414
127	IW1ALW	JN35	DF	15	600
128	SM3AKW	JP92	JW	14	808
129	DJ8QL	JN49	EJ	14	778
130	I4XCC/6	JN63	GD	14	425
131	F6HLD/P	JN26	CG	13	740
132	G6HKT	IO81	YL	12	830
133	OZ3GW	JO56	FQ	12	760
134	ON6UG	JO11	BL	12	700
135	OZ1CFO	JO47	ER	12	622
136	OE1KTC/5	JN68	GI	12	545
137	I0AKP/P	JN61	GB	11	1166
138	I0AKP	JN61	GB	11	1166
139	OZ1EKI	JO45	EP	11	645
140	SP6LB	JO70	HK	11	429
141	OE1KTC	JN88	II	11	423
142	OE5XPL	JN78	HI	11	321
143	OH2BWL	KP20	MU	10	1098
144	UQ2OW	KO26	MQ	10	522
145	DJ6XV	JO31	DL	10	365
146	OE3JHC	JN78	HI	10	290
147	UQ2NX	KO27	MR	9	522
148	DB9SB	JN49	EJ	9	438
149	DL0SP/P	JO62	GM	9	430
150	OH3TH +	KP11	LV	9	418
151	OK1KTL	JO60	GK	9	403
152	DB6AV	JN48	EI	8	588
153	OK3CBD	JN88	II	8	380
154	DF2CA	JO43	EN	8	378
155	IW3EYG	JN55	FF	7	505
156	IW4AJS/P	JN35	DF	7	350
157	RQ2GAG	KO26	MQ	7	192
158	I2KSX/8	JM78	HY	6	1396
159	EA7PZ	IM67	WX	6	1360
160	EA3XU	JN11	BB	6	730
161	UQ2AO	KO26	MQ	6	522
162	DB8FPQ	JO40	EK	6	380
163	I2CVC/2	JN45	EF	6	365
164	OZ1FDH	JO65	GP	6	319
165	HG1YA	JN87	IH	6	265
166	ON5QW	JO11	BL	6	261
167	GBSFM	IO81	YL	6	237
168	IW2BNA	JN45	EF	6	234
169	SP9FG	JN99	JJ	5	876
170	EA6ET	JM19	BZ	5	670
171	DF1OH	JO42	EM	5	229

WORLD WIDE SHF TOP LIST 2320 MHZ 16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO
1	PA0EZ	JO22	CM	39	827
2	DL7QY	JN59	FJ	34	1018
3	DB6NT	JO50	FK	34	742
4	G3LQR	JO02	AM	30	924
5	DK0NA	JO50	FK	30	527
6	G4BYV	JO02	AM	29	1028
7	OK1KIR/P	JO60	GK	29	866
8	PA0FRE	JO21	CL	28	865
9	PE1CQQ	JO32	DM	28	685
10	SM6HYG	JO58	FS	27	1290
11	PE0AGO	JO32	DM	27	730
12	DK2UO	JO31	DL	27	638
13	PA3DIJ	JO33	DN	26	622
14	DC9XO	JO42	EM	23	701
15	OK1AIY/P	JO70	HK	20	1027
16	G4LRT	IO92	ZM	20	1022
17	DL3NQ	JN49	EJ	20	890
18	DL5FAU	JO40	EK	20	582
19	PA0WWM	JO22	CM	20	542
20	ON5GF	JO20	CK	19	800
21	DL3NI	JO31	DL	19	788
22	DH4NAG	JO50	FK	18	528
23	DL9GU	JN49	EJ	18	374
24	PA2DRV	JO21	CL	17	776
25	DF1EQ	JO31	DL	17	461
26	DC0DA	JO31	DL	17	429
27	OZ7IS	JO65	GP	16	860
28	PE1GHG	JO21	CL	16	559
29	PA2DOL	JO21	CL	15	781
30	DK3UC	JO53	FN	15	661
31	OZ2OE	JO45	EP	13	809
32	DL7YC	JO62	GM	13	634
33	DC3QS	JO32	DM	13	419
34	OE1ERC/9	JN57	FH	12	657
35	G4FRE	JO01	AL	12	641
36	OE3LFA	JN88	II	11	870
37	DC8UG	JO30	DK	11	648
38	PA0JGF	JO32	DM	11	444
39	OE9XXI/9	JN47	EH	11	439
40	G3LTF	JO01	AL	10	1017
41	DD3KL	JO30	DK	10	549
42	DF5QZ	JO31	DL	10	468
43	DF5JJ	JO31	DL	10	213
44	LA8AE	JO59	FT	9	829
45	DF3CK	JN57	FH	9	418
46	PA2HJS	JO20	CK	9	388
47	PA0JME	JO21	CL	9	262
48	SM6ESG	JO67	GR	8	880
49	DJ8QL	JN49	EJ	8	463
50	DB2VY	JN39	DJ	7	339
51	LX1DU	JN29	CJ	7	300
52	I2CVC/2	JN55	FF	7	267
53	DF3XU	JO53	FN	6	416
54	OE3XUA	JN77	HH	6	414
55	IW1ALW	JN35	DF	6	350
56	I2FUM/2	JN44	EE	6	215
57	I1PE/1	JN34	DE	5	350
58	OK1KTL/P	JO60	GK	5	235
59	IW2ALW/1	JN35	DF	5	198
60	DL0UL/P	JN48	EI	5	195
61	I2SG	JN45	EF	5	185
62	I2ROM	JN45	EF	5	185
63	IW1ALW/1	JN35	DF	5	182
64	OE3EFS	JN78	HI	4	381
65	DK5AI	JO51	FL	4	275
66	I2PE/1	JN34	DE	4	267
67	OK1CA/P	JO70	HK	4	243
68	I2OGC/2	JN45	EF	4	196
69	IW3EYG	JN55	FF	4	192

DEADLINE IN 1984 (1)15.2. (2)15.5. (3)15.8. (4)15.11. WKD=NUMBER OF SQUARES WORKED +=OP. HAS DIED PRINTED BY DL 7 QY

WORLD WIDE SHF TOP LIST 3456 MHZ 16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO
1	DB6NT	JO50	FK	14	528
2	PA0CRA	JO22	CM	13	802
3	DK0NA	JO50	FK	13	528
4	DF5JJ	JO31	DL	13	417
5	G3LQR	JO02	AM	12	924
6	G4BYV	JO02	AM	11	903
7	DC0DA	JO31	DL	11	429
8	DL3NQ	JN49	EJ	11	398
9	PE1CQQ	JO32	DM	11	346
10	DL7QY	JN59	FJ	10	565
11	DC9XO	JO42	EM	10	341
12	PA2DOL	JO21	CL	9	528
13	DF5QZ	JO31	DL	7	587
14	DC3QS	JO32	DM	7	419
15	PA2DRV	JO21	CL	7	243
16	DH4NAG	JO50	FK	6	528
17	DD3KL	JO30	DK	6	434
18	G4FRE/P	JO01	AL	6	256
19	PA0JME	JO21	CL	5	220
20	SM6HYG	JO58	FS	4	925
21	PA2HJS	JO20	CK	4	388
22	PA0JGF	JO32	DM	4	376
23	PE1GHG	JO21	CL	4	234
24	DF1EQ	JO31	DL	4	118
25	G4AGN/P	IO93	ZN	4	115
26	PE0AGO	JO32	DM	2	134
27	DC8UG	JO30	DK	2	106
28	DF5JJ/P	JO30	DK	2	80
29	DL3NI	JO31	DL	2	74
30	DK3UC	JO53	FN	2	63
31	DJ6TA	JO30	DK	2	42
32	G4LRT	IO92	ZM	1	26
33	DD2EK	JO31	DL	1	10

WORLD WIDE SHF TOP LIST 5760 MHZ 16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO
1	SM6HYG	JO58	FS	9	980
2	PA0CRA	JO22	CM	7	802
3	G3LQR	JO02	AM	6	924
4	DB6NT	JO50	FK	6	528
5	DH4NAG	JO50	FK	6	528
6	DK0NA	JO50	FK	6	528
7	DC0DA	JO31	DL	5	212
8	DL7QY	JN59	FJ	5	171
9	PA2DOL	JO21	CL	4	529
10	HB9AJF	JN47	EH	3	217
11	G4FRE/P	JO01	AL	3	205
12	DF5QZ	JO31	DL	2	326
13	OK1VAM/P	JO70	HK	2	303
14	OK1WFE	JO80	IK	2	303
15	G4BYV	JO02	AM	2	254
16	HB9MIN/P	JN37	DH	2	178
17	F0GOH/P	JN37	DH	2	109
18	DJ7JF/P	JN37	DH	2	95
19	ON8QK/P	JO10	BK	1	191
20	HB9MIO/P	JN37	DH	1	85
21	HB9MDP/P	JN47	EH	1	54
22	IW1ALW	JN35	DF	1	48
23	OE9PMJ/9	JN47	EH	1	43
24	PA0MGA	JO32	DM	1	30

WORLD WIDE SHF TOP LIST 10368 MHZ 16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO
1	I6ZAU/P	JN63	GD	17	832
2	I3CLZ/3	JN55	FF	13	571
3	YU3JN/3	JN65	GF	13	563
4	I4XCC/6	JN63	GD	12	563
5	I4CHY/4	JN54	FE	11	633
6	I3ZJL/3	JN55	FF	11	572
7	IW4AKY/P	JN54	FE	11	570
8	I4QIG/4	JN54	FE	11	440
9	YU3URI	JN76	HG	10	344
10	DJ4YJ/P	JN47	FH	9	358
11	I4BER/P	JN54	FE	9	340
12	YU3TAL	JN65	GF	9	322
13	I2BBH/2	JN44	EE	9	237
14	HB9MIN/P	JN37	DH	8	310
15	I1ANP/1	JN44	EE	8	214
16	G3LQR	JO02	AM	7	376
17	I4AOR	JN54	FE	7	320
18	I4ZTO/4	JN54	FE	7	290
19	PA0CRA	JO22	CM	7	268
20	PA0EZ	JO22	CM	7	262
21	DJ7FJ/P	JN37	DH	7	243
22	PA2DOL	JO21	CL	7	217
23	HB9AJF	JN47	EH	7	204
24	DL7QY	JN59	FJ	7	171
25	I4FKD/4	JN54	FE	6	260
26	G4FRE/P	JO01	AL	6	256
27	HB9MDP/P	JN47	EH	6	205
28	F0GOH/P	JN37	DH	6	184
29	IW3QCV	JN65	GF	5	290
30	DB6NT	JO50	FK	5	285
31	IW1ALW	JN35	DF	5	250
32	HB9MIO/P	JN37	DH	5	217
33	OE2BM/2	JN67	GH	5	153
34	OE8JDK/8	JN66	GG	5	127
35	DL3NQ	JN49	EJ	5	113
36	DK0NA	JO50	FK	4	285
37	PA0JME	JO21	CL	4	220
38	PA2DRV	JO21	CL	4	215
39	PE1GHG	JO21	CL	4	215
40	DK7GN/P	JN48	EI	4	166
41	OE3XUA	JN77	HH	4	77
42	SM0DFP	JO89	IT	4	60
43	OH2BWL	KP20	MU	4	57
44	IW3EYG	JN55	FF	3	315
45	OE5KE/5	JN68	GI	3	254
46	ON6UG	JO11	BL	3	174
47	DH4NAG	JO50	FK	3	171
48	DG4BB	JO43	EN	3	132
49	OE6LOG	JN76	HG	3	127
50	YU3CAB	JN76	HG	3	107
51	OK1AIY/P	JO70	HK	2	285
52	OE9MDI	JN47	EH	2	155
53	DJ6XV	JO31	DL	2	121
54	DF1EQ	JO31	DL	2	74
55	DL0SO/A	JO31	DL	2	65
56	DF1EO/P	JO31	DL	2	63
57	DJ6TA	JO30	DK	2	51
58	OE1WEB	JN88	II	2	50
59	PA0FRE	JO21	CL	2	10
60	DB8FP/P	JO40	EK	1	62
61	SM0DYE	JO99	JT	1	60
62	OE1CHC/3	JN88	II	1	54
63	OE3PUW/3	JN88	II	1	54
64	OK1KTL/P	JO60	GK	1	42
65	OE3GRA	JN88	II	1	37
66	SM5CPD	JO89	IT	1	32
67	I2DZQ/2	JN45	EF	1	27
68	DL0UL/P	JN57	FH	1	24
69	OE3PQU	JN78	HI	1	21
70	OE3EFS	JN78	HI	1	21
71	DK3UC	JO53	FN	1	17
72	LA8AK	JO38	DS	1	16

WORLD WIDE EHF TOP LIST 24192 MHZ 16.05.1984

NR	CALL	WW-QTH	E-QTH	WKD	TROPO
1	DJ7FJ/P	JN47	EH	5	170
2	HB9MIN/P	JN37	DH	3	178
3	DJ4YJ/P	JN57	FH	2	243
4	OE2BM/2	JN67	GH	2	153
5	F0GOH/P	JN37	DH	2	89
6	F1FEN/P	JN25	CF	2	13
7	IW1ALW	JN35	DF	1	48
8	DK0NA	JO50	FK	1	34
9	DL7QY	JN59	FJ	1	13

THE LIST IS PUBLISHED CONTINUOUSLY. DATA COMPILED ABOVE BASED ON UNCONFIRMED CLAIMS BY OPERATORS.

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WORLD WIDE VHF UHF SHF TOP LIST

ONLY A SINGLE CALL SIGN AND A SINGLE QTH COUNT FOR THE LIST (MAY BE /P BUT MUST ALWAYS BE THE SAME). SQUARES WORLD WIDE ARE VALID . QSO'S VIA PASSIVE REFLECTORS COUNT BUT NOT THOSE VIA REPEATERS OR SATELLITES. THE LIST IS PUBLISHED FOUR TIMES PER YEAR - DEADLINES ARE GIVEN AT THE FOOT OF THE LIST. SEND YOUR SCORE ON THE FORM BELOW, OR ENCLOSE IT WITH YOUR ACTIVITY REPORTS TO DL7QY.

FÜR DIE TOP LISTE ZÄHLT NUR EIN RUFZEICHEN UND EIN QTH (KANN /P SEIN, MUSS ABER IMMER DASSELBE SEIN). GÜLTIG SIND ALLE FELDER WELTWEIT. NUR QSO'S ÜBER PASSIVE REFLEKTOREN SIND GÜLTIG, SOLCHE ÜBER RELAIS ODER SATELLITEN ZÄHLEN NICHT. DIE LISTE WIRD 4 MAL PRO JAHR VERÖFFENTLICHT - DER JEWEILIGE REDAKTIONSSCHLUSS BEFINDET SICH IN DER FUSSLEISTE JEDER TOP LISTE. SENDEN SIE IHREN QTH-KENNERSTAND AUF UNTERHALB BEFINDLICHEM FORMBLATT ODER MIT IHREM AKTIVITÄTSBERICHT AN DL7QY.

Formsheet for the Top List on page 133.