

DUBUS INFORMATIONEN FÜR UKW AMATEURE

erreichweiten
au von Geräten

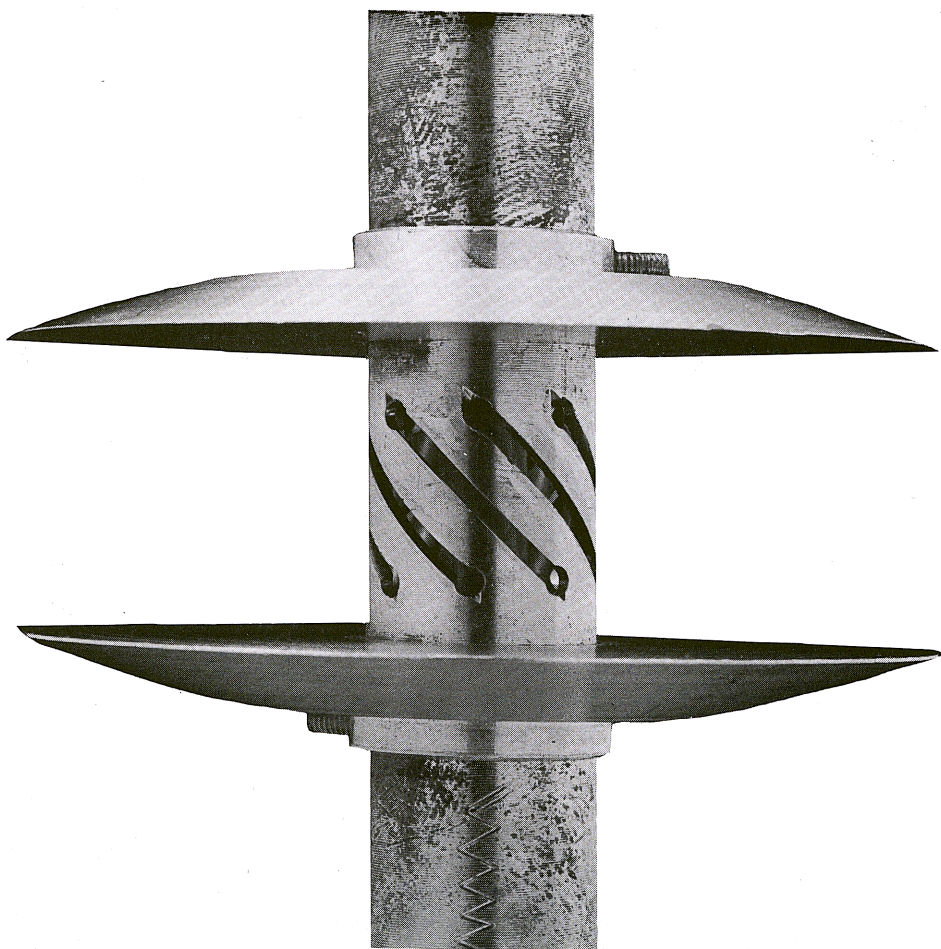
HF HF

Zusammengestellt von der DUBUS Gruppe

INFO: **2182**

Please send your information about VHF, UHF - Bitte schicken Sie Ihre UKW Informationen an folgende Anschrift:
 Klaus Neie, DL7QY, D-7181 Rudolfsberg 24 Phone: 07951-7418

DK2RV'S X-BAND ANTENNA



Private Communication from Radio Amateurs for Radio Amateurs

Private Mitteilungen von Funkamateuren für Funkamateure

Distributors of DUBUS - INFO in Europe:

DL	7	QS	Ulrich Neumann, Ostburger Weg 79d, D-1000 Berlin 47
CT	1	WW	Tiago J.Frederico, 5130 Nagoselo do Douro, Portugal
EA	4	AO	Martin Cordova Barreda, Paseo de Extremadura 170-4 Madrid 11
EI	5	BH	Paul Quast, 1 Auburn Villas, Athlone/IRELAND
F	1	FHI	J.P.Maidon, La Hee, F-44120 VERTOU
G	3	NSM	Bob Mc Henry, Charlbury Road, OXFORD OX2 6 UU, U.K.
HB	9	QQ	Pierre Pasteur, Sunnhaldenstr. 28 A, CH-Dübendorf
HG	5	FN	Bela Kertesz, Besci Ut 219, H-Budapest 1032
I	4	EAT	Fausto Minardi, Via Catagalli 18, I-48018 FAENZA
LA	2	IM	Rolf Wollan, Stolan, N-7200 KYRKSÆTEROPA
LX	1	DU	Franz Kronauer, 140 Rue Aessen, LX-EHLERINGEN
LZ	1	AB	Wassil Terziev, P.O.Box 311, SOFIA/BULGARIA
OE	3	LI	Christof Libowitzky, Giannonig. 5, A-MOEDLING
(OH	Ø	NI)	XYL-Irjaliisa Mansnerus, Skillnadsg.37, Mariehamn FINLAND
OK	3	AU	Andrej Oravec, Ul Slobody 31, 04001-Kosice/CZECHOSLAVAKIA
ON	5	QW	Robert van Damme, Broekstraat 48, B-LAARNE
OZ	7	IS	Iwan Stauning, Bartholinstraede 20, DK-263 TASTRUP
PA	3	BIY	Peter Hoefsloot, Sir Winston Churchillstr. 5, 2631AK Nootdorp
SM	4	AXY	Lars Wahlström, P.O.Box 39, S-VINTROSA
SP	6	ARE	PZK Headquarters: Polski Związek Kotkofalowcow, Zarząd Główny, Box 320,
SV	1	DH	Costas Fimerelis, 23 Ellianou Str. ATHENS 817, GREECE 00-950 Warszawa
UB	5	WN	Karel Fechtel, P.O.Box 303, USSR-25001 LIEW
YO	2	IS	Sueli Julius, Str Iasi 1, TIMISOARA/ROMANIA
YU	2	CBM	Radio Club "MARJAN", Smodlakina 2, P.O.Box 155 YU-58001 SPLIT
9H	1	CD	Henry G.Souchet, Davis 29/2, SAN GWUAN, MALTA
5B	4	AZ	N. Kyriazis, P.O.Box 1662, Limassol, CYPRUS

COVERPICTURE: Omnidirectional circular polarized 10 GHz antenna

CONTENTS:

Page

TECHNICAL REPORTS (edited by DC7PV es DL7HG)

Omnidirectional X-Band Antenna with circular Polarization	
by DK2RV	97
13 cm Transverter by OE2PMJ	104
Low Cost 70 cm GaAsFET Preamp by F1EIT	109
Es Alarm Receiver For OIRT Standards by PA3AOU	111
Comments to technical Reports by LABAK	114
IC 211 E and IC 245 E Modification by PAØFTF	115
AZ/EL Indication for an EME Antenna System by YU1AW	116
<u>NICROWAVE NEWS</u> by DC7BQ	119
<u>TROPO NEWS</u> by DL7ACG	125
<u>METEOR SCATTER NEWS</u> by DF2ZC	130
<u>Es INFORMATIONS</u> by DK2ZF	142
<u>MOON BOUNCE</u> by DL9KR	154
<u>COMMENTS</u> by DL7RU	158
<u>BEACON NEWS</u> by DL7RU	159

OMNIDIRECTIONAL X-BAND ANTENNA
WITH CIRCULAR POLARIZATION

by Ulf HÜlsenbusch, DK 2 RV

E.:

The bicone is an antenna type exhibiting the properties in the head line. It is used preferably in satellite communication systems. Radio amateurs can use it for beacons and transponders. In the following a brief review of the theory is given. The diagrams of an X-band antenna are shown, which is made as a diminished model for S-band satellite antenna.

Theory: The magnetic equivalent of a linear electric dipole is a slot in a metal plane. In contrary to the dipole, the slot emits a wave, which is polarized perpendicular to the slot. The bicone has slots in a tube, which are arranged in an angle of 45° with respect to the tube axis. the tube is part of a coaxial line. Two discs are arranged beside the slots (s. cover picture). Without the discs only a linear polarized wave would be emitted. The generation of a polarized wave can be explained in the following way: The wave, linear polarized with an angle of 45° , can be split into a horizontal and a vertical component (tube assumed to be vertical). Suitable dimensions of the discs will produce a phase shift of 90° between both components (s. formula (1) in german text).

Suppose $A = B$, then formula (2) holds. A and B are choosen to be 0.7 .

Construction: The dimensions of the coaxial line are to choose so that only one TEM mode will propagate and no higher modes can occur. For this formula (3) must be fulfilled.

The upper end of the coaxial line is closed by a sliding ring which short-circuits the coaxial line. It is adjusted to optimum matching. Each slot is the halve of a wavelength long. They can be made by drilling holes at their ends and cutting between them with a circular saw. The width of the slots is not very critical. It should be abt. 0.07 . The lower end of the coaxial line is soldered to a N-type connector.

The antenna is realised with following dimensions: $A = B = 20$ mm; $L = 14$ mm; 8 slots each 15×2 mm; inner conductor 6 mm diam.; tube 16×2 mm.

Electrical Properties: The vertical radiation angle (-6 dB) is abt. 120° (fig. 2). Vertical and horizontal diagram are measured using a rotating horn antenna with linear polarization for to measure also the quality of circularity. It can be seen by means of the ripple in the diagrams. It is minimum in the main radiation directions. Matching in the main frequency ranges can be seen in the Smith chart (fig. 4).

Alignment: At first both discs are moved on the tube until optimum circularity is achieved. For this the horn antenna is used which can be tuned into the vertical and the horizontal position to observe both components to have equal amplitudes. Then the sliding ring is moved to best matching. Matching can be enhanced furthermore by line transformation with stepped inner conductor.

Eine rundstrahlende Antenne mit zirkularer Polarisation

=====

Einleitung

Unter dem Namen Bicone sind in der Fachliteratur (1) seit langem Antennen mit obigen Eigenschaften bekannt. Sie wurden bisher vor allem in der Satellitentechnik eingesetzt. Im Bereich des Amateurfunks könnten sie z.B. Verwendung bei Baken oder Umsetzern finden.

Im folgenden soll kurz die Theorie hierzu angeschnitten werden. Anschließend werden Diagramme und Anpassung einer X-Band-Antenne gezeigt, die als maßstäblich verkleinertes Modell für eine S-Band-Satellitenantenne entwickelt und vermessen wurde.

Theorie

Das magnetische Pendant zum gestreckten elektrischen Dipol ist ein Schlitz in einer Metallfläche. Umgekehrt wie beim Dipol, strahlt ein waagerechter Schlitz eine vertikal polarisierte Welle ab.

Beim Bicone sind die Schlitze unter 45 Grad in einem Rohr angebracht, das Bestandteil einer Koaxialleitung ist. Oberhalb und unterhalb der Schlitze sind Scheiben angeordnet. Ohne diese würde nur eine linear polarisierte Welle abgestrahlt. Der Erzeugung einer zirkular polarisierten Welle liegt nun folgendes Prinzip zugrunde:

Die 45 Grad linear polarisierte Welle denkt man sich zerlegt in eine vertikale und eine horizontale Komponente. Durch geeignete Dimensionierung der Scheiben kann nun eine Phasenverschiebung von 90 Grad zwischen beiden Komponenten erreicht werden. Die rechnerische Beziehung für diese Bedingung lautet:

$$\frac{\lambda_c}{4} = L - \int_0^L \sqrt{1 - \frac{\lambda_c^2}{4(A + \frac{B-A}{L}x)}} dx \quad (1)$$

Setzt man $A = B$ und geht davon aus, daß diese Größe bekannt ist, so ergibt sich neben einer mechanischen Vereinfachung auch eine rechnerische:

$$L = \frac{\lambda_c / 4}{1 - \sqrt{1 - (\lambda_c / 2A)^2}} \quad (2)$$

A bzw. B wählt man zu $0,7 \cdot \lambda_c$.

Aufbau

Die Abmessungen für das koaxiale System müssen so gewählt werden, daß sich nur eine TEM-Welle ausbreiten kann und keine höheren störenden Moden auftreten können. Nach (2) gilt hierfür die Faustformel:

$$\lambda_c > \pi \frac{D+d}{2} \quad (3)$$

Am oberen Ende der Antenne ist ein Kurzschlußschieber, mit dem die beste Anpassung eingestellt wird. Die Schlitzte sind $\lambda/2$ lang. Sie können z.B. so hergestellt werden, daß zunächst am Anfang und Ende des Schlitzes ein Loch gebohrt wird und dann dazwischen ein Schnitt mit einer Kreissäge erfolgt. Die Breite der Schlitzte ist nicht sehr kritisch und beträgt etwa $0,07 \cdot \lambda$. Innen- und Außenleiter sind am unteren Ende mit einer N-Buchse verlötet. (Fig.1)

Bei der vorliegenden X-Band-Antenne ergaben sich folgende Maße:
A=B= 20 mm, L=14 mm, 8 Schlitzte 15x2 mm, Innenleiter 6 mm,
Außenrohr 16x2 mm

Elektrische Eigenschaften

Die vertikale Halbwertsbreite beträgt etwa 120 Grad (Fig.2). Vertikal- und Horizontaldiagramm (Fig.3) wurden gemessen mit einer rotierenden linear polarisierten Gegenantenne, um gleichzeitig die Güte der Zirkularität zu ermitteln. Sie ergibt sich aus der Größe des "Ripples" im Diagramm und ist in der Hauptstrahlrichtung am besten. Die Anpassung im interessierenden Frequenzbereich ist dem Smithdiagramm (Fig.4) zu entnehmen.

Abgleich

Zunächst werden die beiden Scheiben auf dem Außenrohr so verschoben, daß sich beste Zirkularität ergibt. Hierzu benutzt man, wie oben bereits erwähnt, eine linear polarisierte Gegenantenne (Horn), mit der man durch Drehen um 90 Grad die vertikale und die horizontale Komponente erfassen kann. Die beiden Scheiben werden auf gleiche Amplituden eingestellt. Anschließend wird mit dem Kurzschlußschieber die beste Anpassung ermittelt. Sie kann noch weiter verbessert werden durch geeignete Maßnahmen, wie z. B. Leitungstransformation mit abgestuftem Innenleiter.

Literaturverzeichnis

Yasik; Antenna Design

Meinke-Gundlach; Taschenbuch für Hochfrequenztechnik

Dokumentation ARCOMSAT

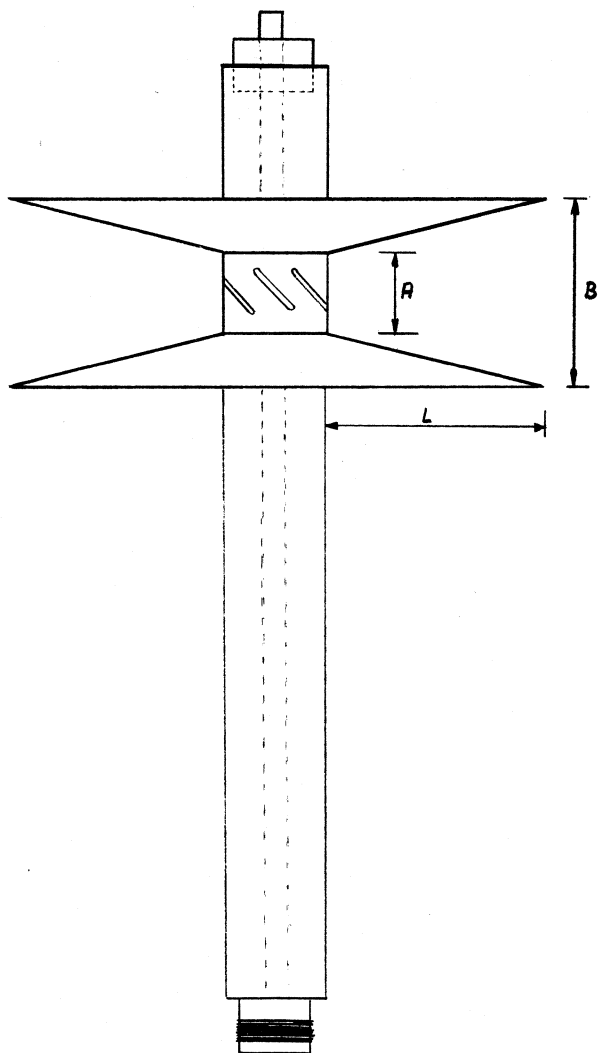


Fig.1

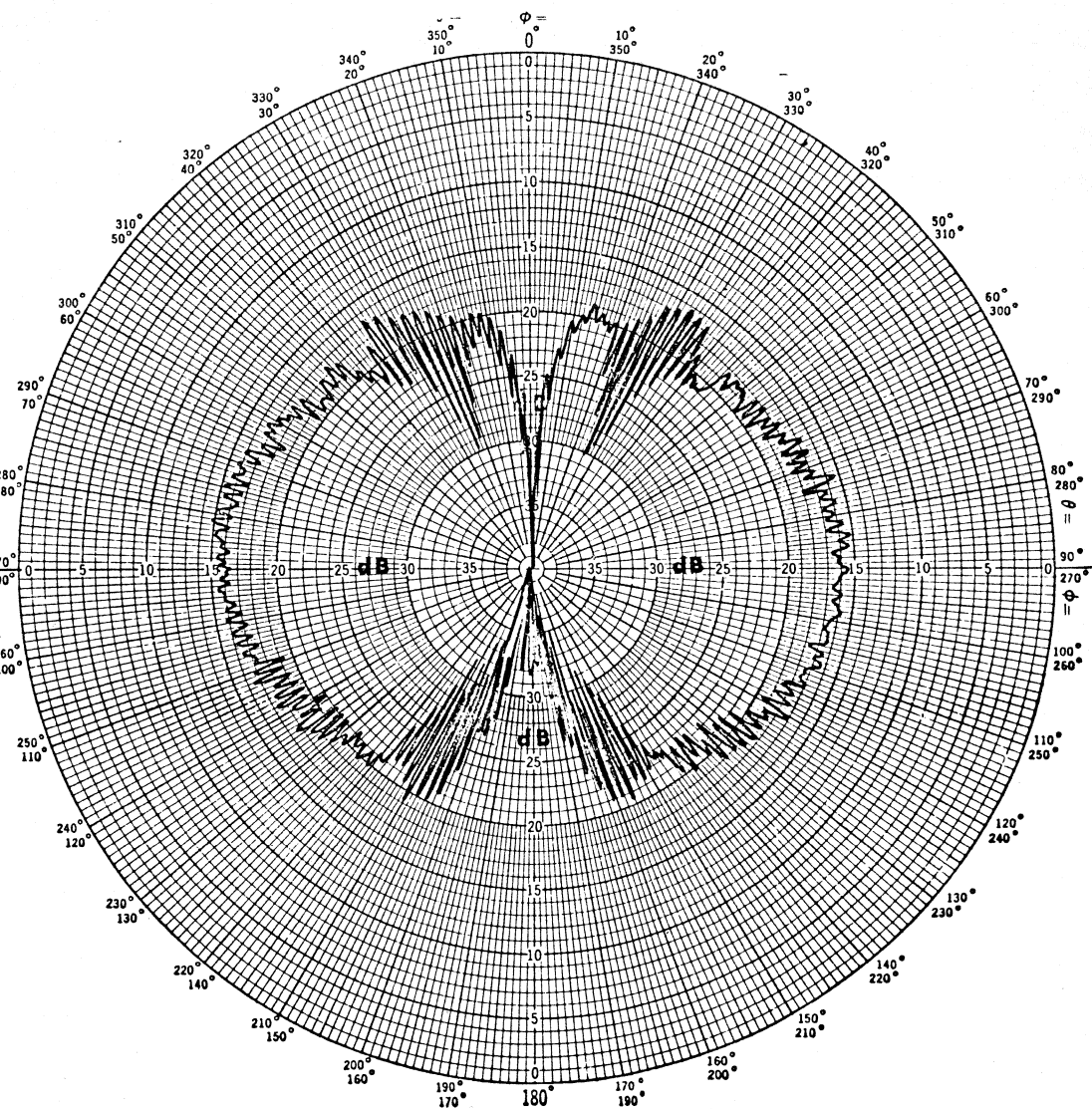


Fig. 2 Vertikaldiagramm

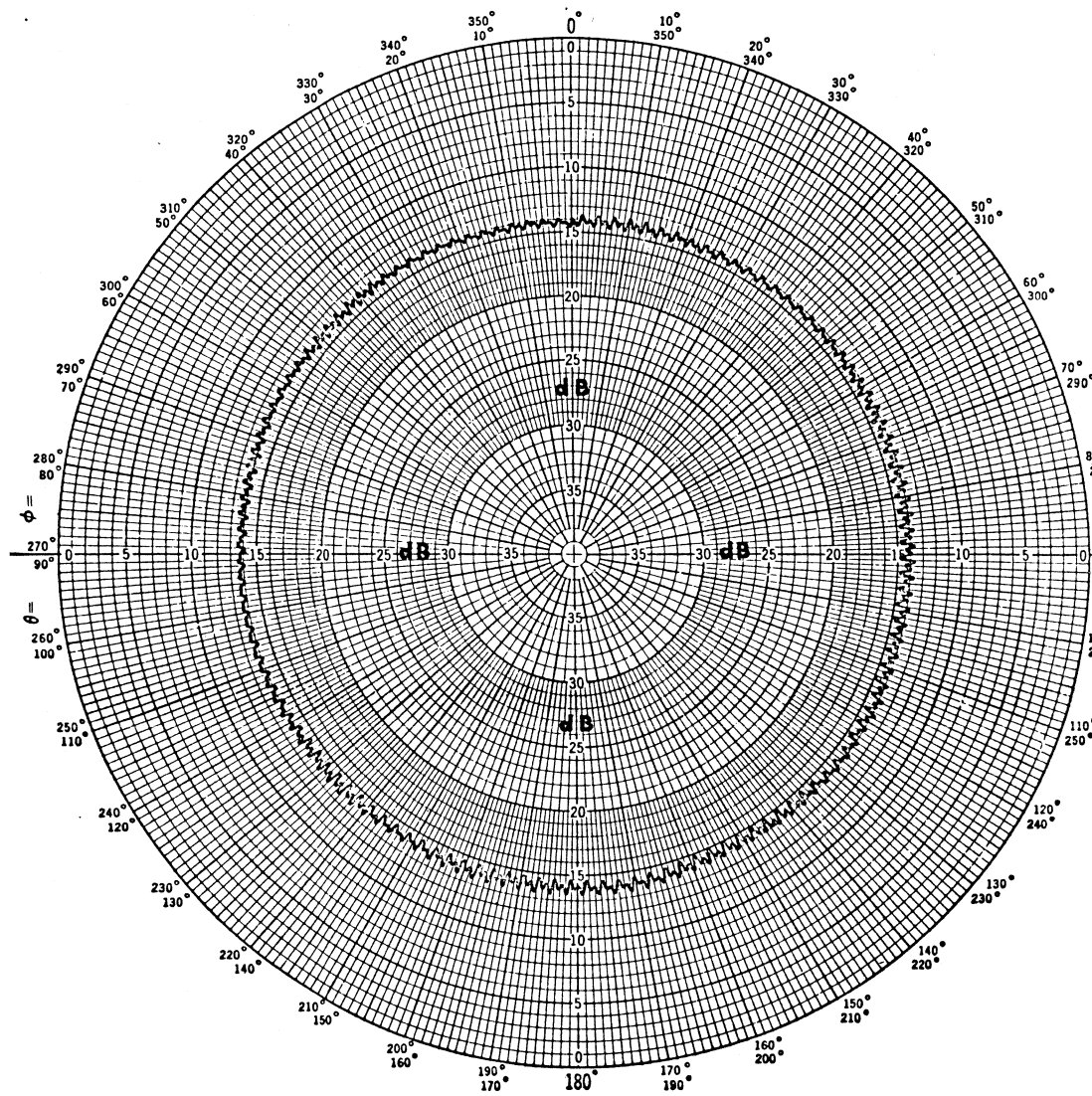


Fig.3 Horizontaldiagramm

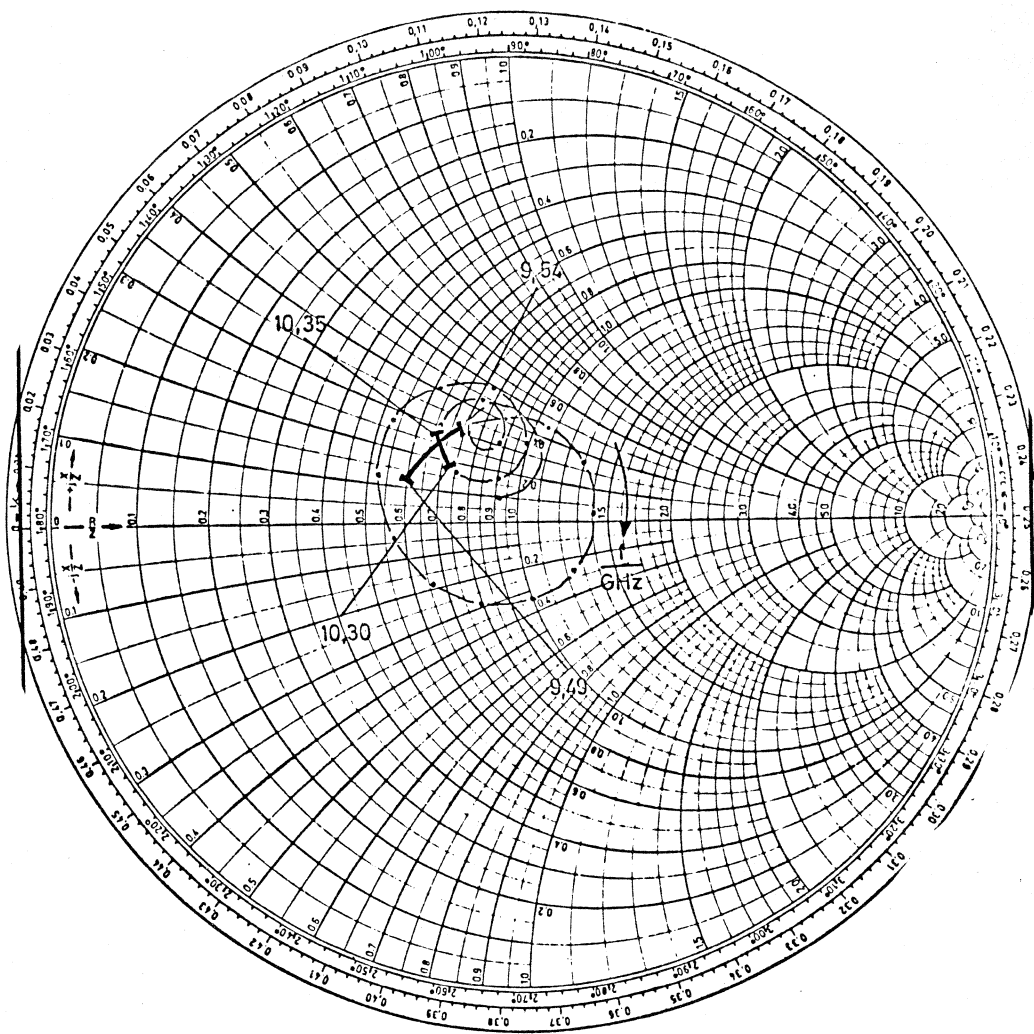


Fig.4 Anpassung

=====

1 3 c m T R A N S V E R T E R

=====

by OE 9 PMJ

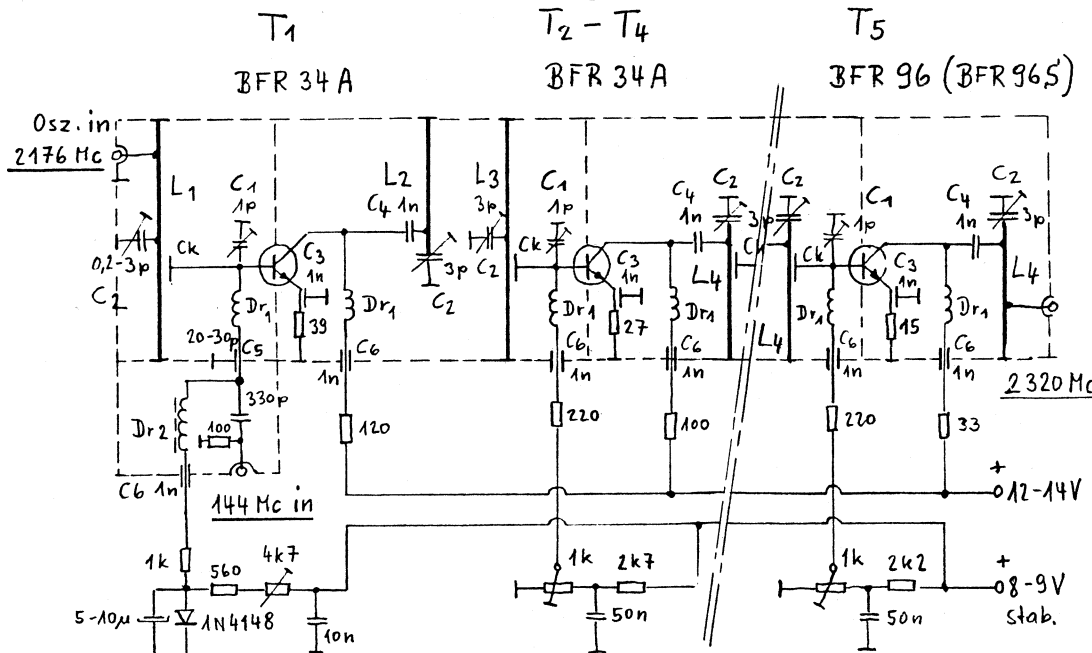
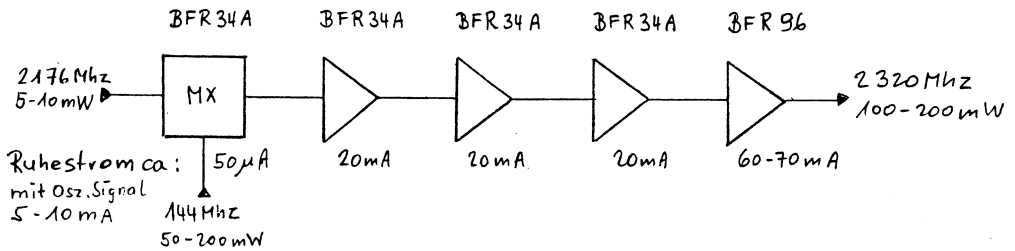
E. + D.:

It consists of three parts, each housed in separate cases:

1) Transmitter mixer and amplifier, 2) Converter, 3) Oscillator.

Der Transverter besteht aus drei Einheiten: 1) Sendermischer und Verstärker, 2) Konverter, 3) Oszillator.

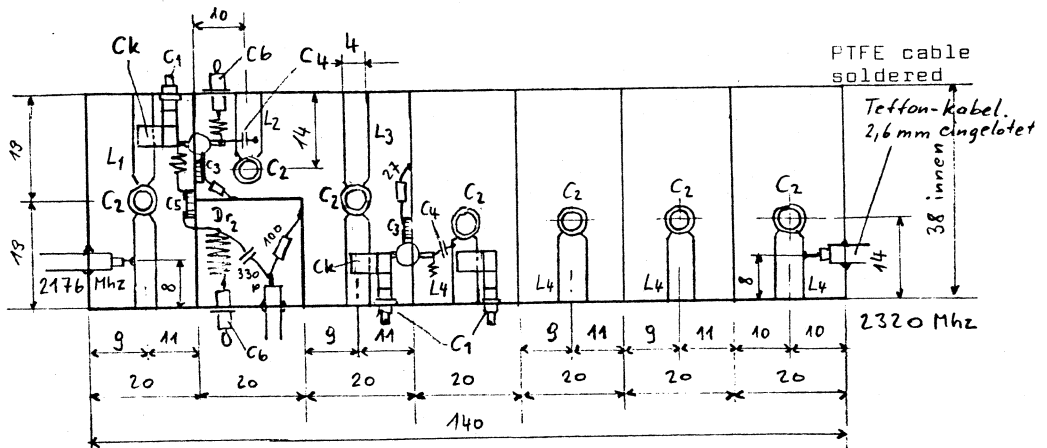
1) Transmitter Mixer and Amplifier



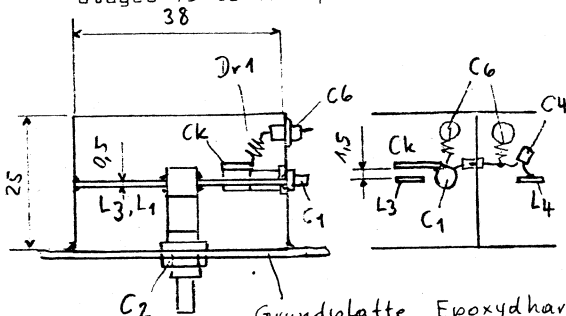
C_1 = keram. Miniatur-Rohrtrimmer 1 pF (Stettner)
 C_2 = keram. Rohrtrimmer 3 pF C_3 = Abklatzkond. 200 pF - 1 nF
 C_6 = Durchföhr.-C ca 1 nF C_5 = Abklatzkond. Durchföhr. 20 - 30 pF
 Dr_1 = 4 Wdg 0,3 CuL auf 3 mm-Dorn Dr_2 = 10 Wdg 0,3 CuL auf 4 mm Dorn
 C_4 = keram. Scheibenkond. 1 - 5 nF mit Anschlußdrähten 2,5 mm Raster

C_1 = Ceram. miniature tubular trim capacitor 1 pF;
 C_2 = ceram. tubular trim cap. 3 pF; C_3 = Bypass cap. .2 ... 1 nF;
 C_6 = feedthrough cap. abt. 1 nF ; C_5 = feedthrough cap. 20 ... 30 pF;
 Dr_1 = 4 turns, .3 CuL 3 mm diam.; Dr_2 = 10 turns .3 CuL 4 mm diam.;
 C_4 = disc cap. 1 ... 5 nF, 2.5 mm lead distance.

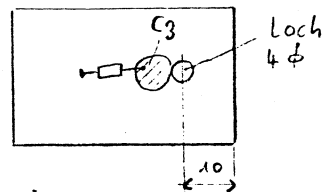
Weißblechgehäuse tin plate case



Stufen mit T_3 bis T_5 wie T_2 ausgeführt
 stages T_3 to T_5 equivalent to T_2



Trennwand
 Separation sheet



Grundplatte Epoxydharz-Platine
 beidseitig kaschirt
 Main plate = Epoxy resin board double copper clad

L_1 bis L_4 u. Ck = Cu-Blechstreifen 0,5 mm x 4 mm

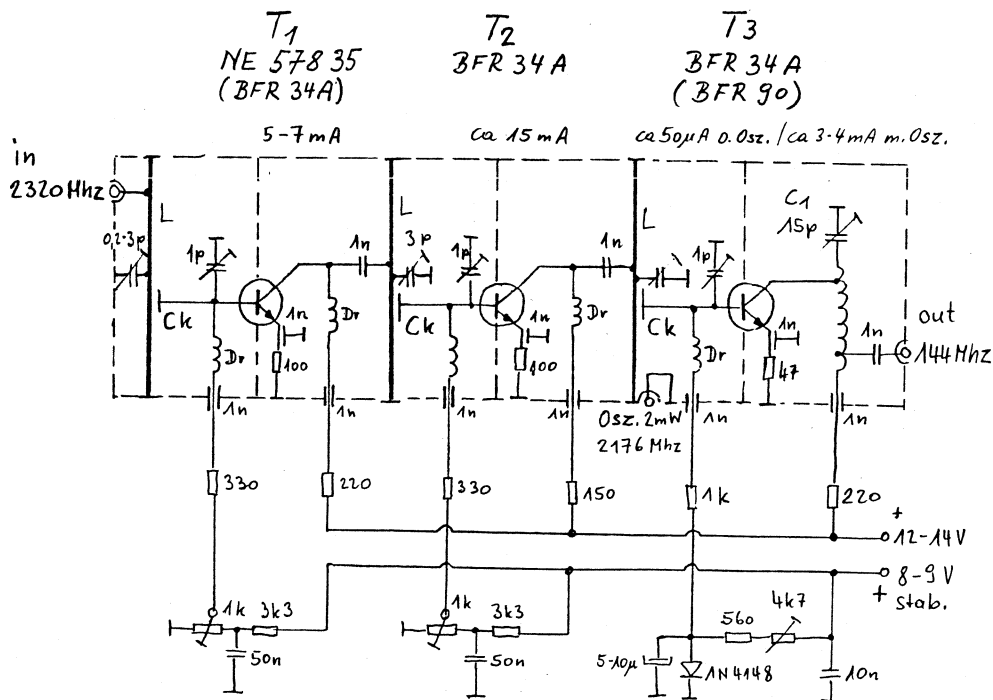
L_1 through L_4 and Ck = copper sheet strip 0.5 mm x 4 mm.

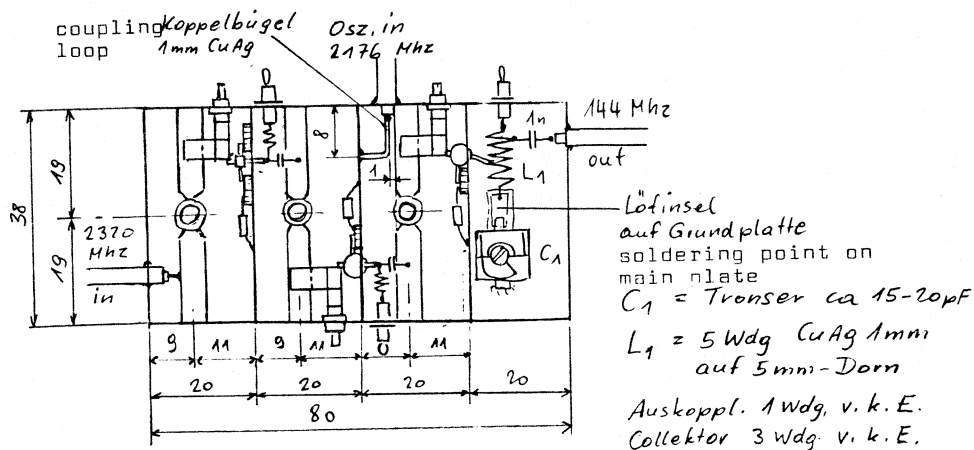
Abgleichhinweis: Ruhestrome einstellen, Basistrimmer ausdrehen, Oszillatoraufbereitung anschließen und alle Stufen auf 2176 MHz abgleichen. Trimmer von L2 bis L4 geringfügig ausdrehen, 144 MHz zuführen und mit Absorptions-Frequenzmesser auf 2320 MHz abgleichen. Endabgleich und optimieren der Ruhestrome auf max. Verstärkung

Alignment: Adjust quiescent currents; base trim caps to minimum positions; apply oscillator signal and adjust all stages on 2176 MHz; trim caps at L2 through L4 to be lowered a bit; apply 144 MHz and tune to 2320 MHz with Absorption frequency meter. Final adjustment and optimising of quiescent currents to max. gain.

2) Converter

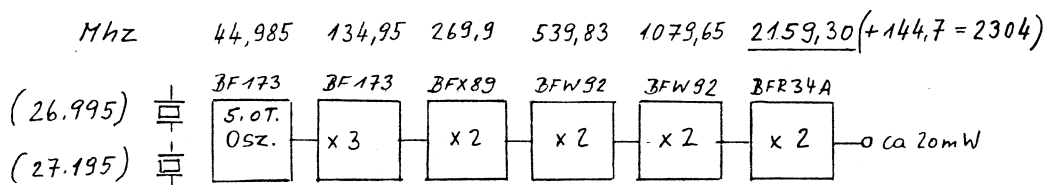
2320 / 144 MHz



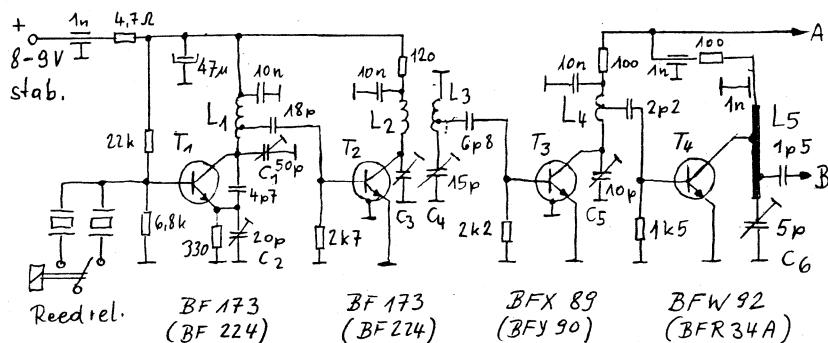


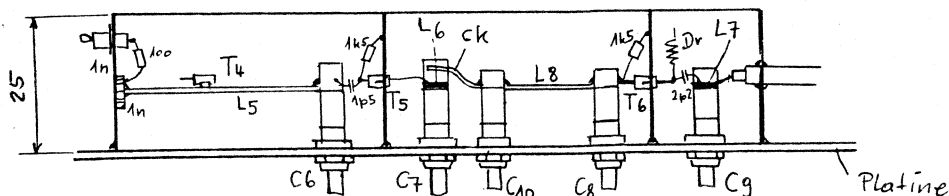
$L_1 = 5 \text{ turns, } 1 \text{ mm wire, } 5 \text{ mm diam.}; \text{ output tap } 1 \text{ turn from cold end; collector tap } 3 \text{ turns from cold end.}$

3) Oscillator



MHz 45,319 135,95 271,9 543,83 1087,65 2175,30 (+144,7 = 2320)





Part side of the board is ground. Parts mounted in isolated holes and soldered on the rear side.

Die Teileseite der Platine ist Masse. Die Teile sind in angesenkten Löchern montiert und auf der Rückseite verlötet.

=====

LOW COST 70 cm GASFET PREAMP.

=====

by F 1 EIT

E.:

Introduction in Europe of low price UHF dual gate GASFET 3SK97 permits this good tropo. preamp. with performances like NEC 645, but better intermodulation. Mechanical arrangement is the same as JA 1 CZD / DL 7 YC with a different bias system.

L1 silver coated copper wire 1.2 mm 1 turn $\varnothing$ 5mm, L2 same but $\varnothing$ 4mm. R1 adjusted for 15 mA drain current (about 150 Ω).

Noise figure is about 0.8 db with associated gain 16.5 db. Balanced values of C1-C2 are critical. The best way seems to align the 3 capacitors for maximum gain and then adjust slowly and simultaneously C1 and C2 until minimum NF. Then retune also C3 a little.

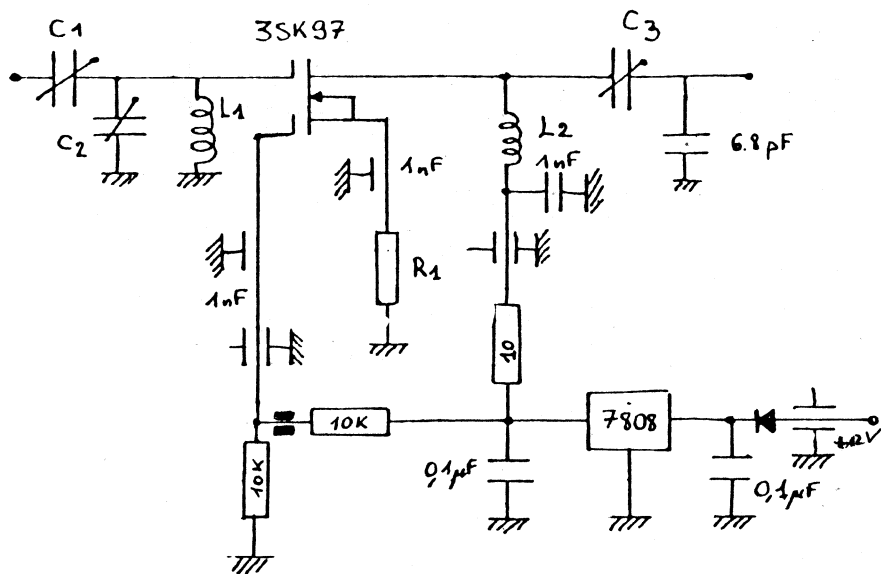
Measured 3rd order intercept point is +7 dbm at input (-11.5 dbm and -16 dbm for 2 tested NE 645, -5 dbm for MGF 1400 SSB Electronic)

D. : Billiger 70cm GASFET Vorverstärker

Seit der Einführung, in Europa, des billigen UHF Dual Gate Gasfet s 3SK97 werden damit gute Tropo Vorverstärker gebaut, mit ähnlichen Werten wie die des NE 645, aber besseren Intermodulationseigenschaften. Der mechanische Aufbau erfolgt wie bei JA 1 CZD / DL 7 YC, aber mit veränderter Vorspannungserzeugung.

R1 muß ca. 150 Ω betragen, damit 15 mA Drainstrom fließen. L1 besteht aus 1,2 mm versilbertem Kupferdraht und hat eine Windung $\varnothing$ 5mm, L2 wie L1, aber $\varnothing$ 4mm.

Die gemessene Rauschzahl liegt bei ca. 0,8 db bei 16,5 db Verstärkung. Die gegenseitige Abstimmung von C1 und C2 ist sehr kritisch. Am einfachsten ist es C1 - C3 auf maximale Verstärkung abzugleichen und dann langsam simultan C1 und C2 auf beste Rauschzahl zu trimmen. Auch C3 wird ein bisschen zurückgedreht. Der gemessene 3rd order Intercept Point liegt bei +7 dbm (-11,5 dbm und -16 dbm bei den getesteten NE 645, -5 dbm beim MGF 1400 SSB Electronic)



Circuit of the GaAsFET preamp

=====

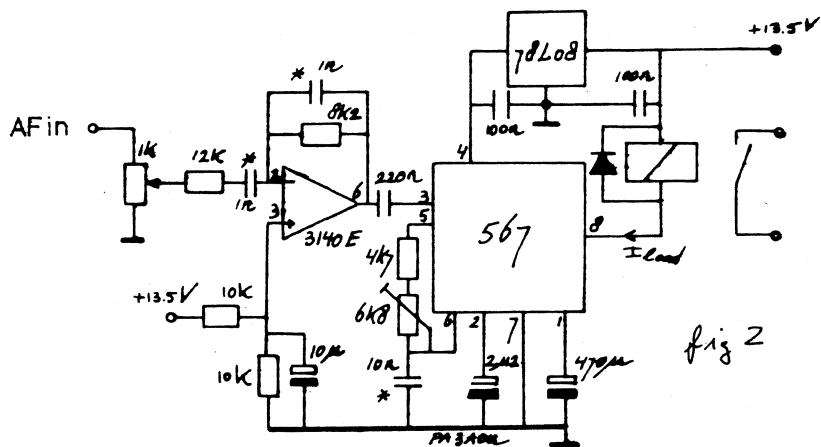


Fig. 2 Decoder of the Alarm Receiver

E.S. ALARM RECEIVER FOR O. I. R. T.-STANDARD

by Harry Goldhoorn, PA 3 AOU

An automatic warning system for Es to OIRT-countries can be obtained by using an AM-receiver for 93.25 MHz plus a 15625 Hz tone decoder. The most reliable way to make a short term prediction for a 2 meter opening is listening to the VOR beaconband (108-118 MHz). The highest available MUF checkpoint in the OIRT standard is television channel R5; picture 93.25 MHz, sound 99.75 MHz. The picture carrier is AM modulated and contains a 15625 Hz component and should be chosen to obtain an automatic warning possibility.

The 93.25 MHz AM receiver is shown in fig. 1. Given component values are not very critical, just take care of a proper HF construction. A cheap 27.515 MHz crystal is used. The tripler stage brings it to 82.545 MHz and feeds the dual-gate mixer. Special care should be taken of the VHF-preamplifier in order to achieve a small bandwidth and a large mirror-frequency rejection. Use high Q resonators and be careful with the input tap (high coupling factor decreases the selectivity). Precise reception frequency setting as well as the IF bandwidth with alignment can be done with all IF coils ($93.25 - 82.545 = 10.705$ MHz). The S-meter output is limited to 4 volts maximum and can be used for AVC. With respect to minimum intermodulation AVC should be avoided.

The 15625 Hz decoder is shown in fig. 2. A bandpass filter is used to achieve some preselection (passband 13-19 kHz). With respect of stability, a ten turn potentiometer should be used for the 6K8 resistor. Take foil capacitors (if not available, MKM) for the marked capacitors.

Disconnect the AF input or adjust the 1K potentiometer for no signal on the sleeve. Connect a frequency counter to pin 5 of the decoder IC and adjust the 6K8 potentiometer to the desired frequency (15625 Hz). The 1K potentiometer must be set that the background noise will not activate the decoder. A trigger delay of a few seconds is caused by the 470 pF capacitor, so interference, music and other undesired signals do not lead to false triggering. The relay can be used to drive any load; e.g. an alarm bell. Instead of the relay, a low buzzer could be connected as long as the load current does not exceed 100 mA.

The whole circuit should be taken in a metal box to be sure of sufficient spurious suppression as well to keep the home made RF out. I tested the receiver by transmitting with all the rigs at the same time. No troubles, even though my 93.25 MHz antenna was only removed away about 4 meters from all other radiators. To avoid interference with CCIR broadcast stations in your area, it is sensible to use a vertical polarised antenna. In summer of 1981, the picture-carrier could be heard many times, even as the TV set did not show much Es activity.

Note: It is not allowed in all countries to receive TV signals to check Es propagation! (editor)

Fig. 2 on the left side

D. : E.S. ALARMEMPFÄNGER FÜR O. I. R. T. - STANDART

Der zuverlässigste Weg um eine kurzzeit Voraussage zu machen für eine 2m ES Öffnung ist das VOR Bakenband abzuhören (108-118 MHz). Der höchste Testpunkt für die MUF beim OIRT Standart ist der TV Kanal 5, 93,25 MHz Bild und 99,75 MHz Ton. Ein automatisches Warnsystem für ES bei OIRT Ländern kann verwirklicht werden, wenn man einen AM Empfänger benutzt für 93,25 MHz und einen 15625 Hz Todecoder. Der Bildträger ist AM moduliert und enthält eine 15625 Hz Komponente und ist daher geeignet für eine automatische Warnung.

Der 93,25 AM Empfänger ist in fig. 1 dargestellt. Die angegebenen Werte sind unkritisch, es muß nur ein sauberer HF Aufbau sein. Ein billiger 27,515 MHz Quarz wird benutzt. Die Verdreifacherstufe bringt das Signal auf 82,545 MHz und geht dann auf den Dual Gate Mischer. Besondere Vorsicht ist beim Vorverstärker geboten auf die kleine Bandbreite und hohe Spiegelfrequenzunterdrückung. Benutzt werden nur Kreise mit hohem Q. Vorsicht beim Eingangskreis, (hohe Koppelfaktoren verschlechtern die Selektion). Genaue Empfangsfrequenzeinstellung, soweit es die ZF Bandbreite erlaubt, kann man bei allen ZF Spulen machen (93,25-82,545=10,705 MHz). Der S-Meter Ausgang ist auf 4 Volt maximal begrenzt und kann für eine AVC benutzt werden. Wegen der dadurch verschlechterten Intermodulationseigenschaften wurde darauf verzichtet.

Der 15625 Hz Todecoder auf fig. 2 gezeigt. Ein Bandpassfilter wird benutzt um eine Vorselektion zu erreichen (Bandbreite 13-19 kHz). Wegen der Stabilität wird ein 6,8K Zehngang Potentiometer benutzt. Die gekennzeichneten * Kondensatoren sollten Folienausführungen sein (wenn nicht vorhanden, MKM).

Der AF Eingang wird abgetrennt oder das 1K Potentiometer auf keinen Empfang eingestellt. Dann wird ein Frequenzzähler an Pin 5 vom De oder IC angeklemt, und am 6,8k Potentiometer wird die gewünschte Frequenz eingestellt (15625 Hz). Das 1K Potentiometer muß so eingestellt werden, daß das Hintergrundrauschen den Decoder nicht ansprechen läßt. Eine Einschaltverzögerung von ein paar Sekunden wird durch den 470 pF Kondensator erreicht, sodaß Interferenzen, Musik und andere unerwünschte Signale den Decoder nicht ansprechen lassen. Ein Relais kann zur Steuerung benutzt werden, z.B. einer Alarmglocke. Statt des Relais kann auch ein kleiner Summer angeschlossen werden, wenn er nicht mehr als 100 mA Strom zieht.

Der gesamte Aufbau muß in ein Metallgehäuse eingebaut werden, um eine ausreichende Störsignalunterdrückung zu gewährleisten und auch die eigene HF auszusperrern. Ich habe den Empfänger getestet, als ich alle eigenen Sender in betrieb hatte. Keine Störungen, trotzdem die 93,25 MHz Antenne nur 4m von den Sendeantennen entfernt war. Um Störungen durch CCIR Rundfunkstationen zu vermeiden, ist es besser die 93,25 MHz Antenne vertikal zu polarisieren. Im Sommer 1981 konnte der Bildträger sehr oft empfangen werden, auch wenn der Fernseher nicht viel ES Aktivität zeigte.

Zur Beachtung: In vielen Ländern ist es nicht erlaubt TV Signale zum Zwecke der ES Beobachtung zu empfangen! (Die Red.,)

Erratum : Up-converter for MS reception by IA 8 AK (DUBUS-INFO 2/81, p.99-103)

Page 99: The first keyed stage is Q7 while the next is Q1.

Die erste getastete Stufe ist Q7, weil die nächste Q1 ist.

...RV2 is adjusted for minimum carrier.

...RV 2 wird auf minimalen Träger abgestimmt.

Page 101: A-D-B are inverters. Pin 2-13-5 on CD4070 are connected to pin 14. The 22K potentiometer is CARRIER-balance. The 10 ohm resistor is 10 K.

A-D-B sind inverter. Pin 2-13-5 vom CD4070 werden mit Pin 14 verbunden. Das 22K Potentiometer ist für die Trägerbalance. Der 10 ohm Widerstand ist 10K.

Page 103: Upper left resistor is not 12k but 1.2K. D2 can be replaced by a 1K resistor.

Der Widerstand unten links ist nicht 12k sondern 1,2K. D2 kann durch einen 1K Widerstand ersetzt werden.

Correction: A scanner for Gunnplexer transceivers

by IA 8 AK (DUBUS-INFO 4/80 p. 208)

A resistor is missing in the circuit diagram between IC1-CD4016BE pin 5&9 to VCC(+10V), suitable value 100K-1M.(fig.1).

Ein Widerstand fehlt in fig. 1 zwischen IC1-CD4016BE Pin 5&9 zur Spannung +10V. Werte von 100K-1M sind brauchbar.

Correction: A 70cm high power amplifier by DL 7 YC

(DUBUS-INFO 4/79 p. 240)

Sorry for my comment in

Dubus 3/80 p. 140. The

circuit will not work anyway, the problem is

that there will be negative voltage on the base. The

connection from terminal 2 shall not go to base, but

emitter. If the circuit has been installed as shown it

has not been tested correctly, but I presume it is only

drawn incorrect.

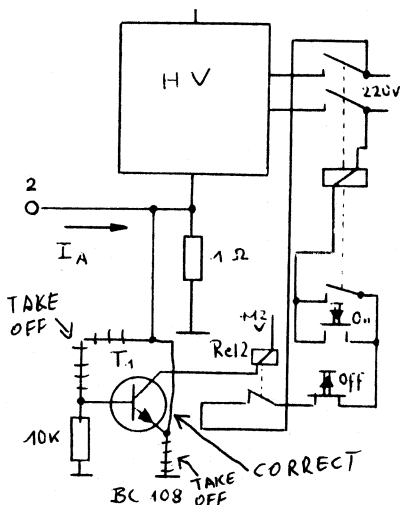
Entschuldigung für meinen

Kommentar in Dubus 3/80

S.140. Die Schaltung kann

so nicht funktionieren, das

Problem ist, daß negative Spannung an der Basis liegt. Der Anschluß von Punkt 2 darf nicht zur Basis gehen, sondern zum Emitter.



IC - 211 E AND IC - 245 E MODIFICATION FOR SPLITFREQUENCY

OPERATION

by W. Holtmann PA Ø FTF

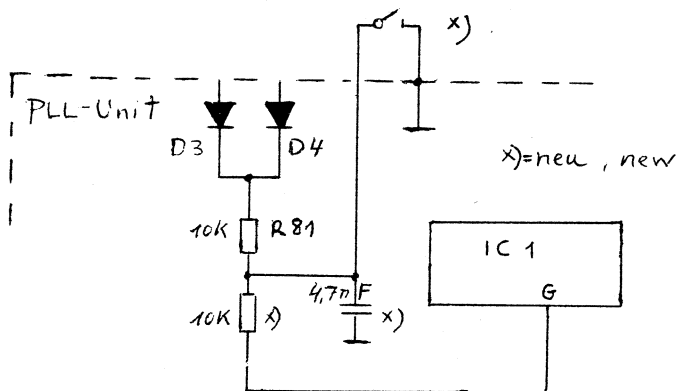
E.:

For sporadic - E openings or DX - expeditions it would be an advantage to work with two independent frequencies, one for receiving and one for transmitting.

With three additional components, the troublesome interaction between A and B VFO in duplex position is cancelled (switchable). The switch must be grounded at the PLL - UNIT !

D.: IC 211E und IC 245E Modifikation für Splitfrequenz - Betrieb
Für Sporadic E Öffnungen oder DX - Expeditionen ist es manchmal vorteilhaft auf 2 verschiedenen Frequenzen zu arbeiten, einer Sendefrequenz und einer Empfangsfrequenz.

Mit 3 zusätzlichen Bauteilen werden die lästigen Wechselwirkungen zwischen A und B VFO in der Stellung Duplex behoben (schaltbar). Der Schalter muß in der PLL - UNIT geeerdet werden!



IC 202 FURTHER MODIFICATION

by PE 1 DGF and PA 2 DWH

E.:

To make the IC 202 even fit for eme work, it needs some supplementary changes. Those are:

Taking away the noise producer Q 1 which provides the current to switch D25 the antennaswitch. Now you need a relay if you like to keep the IC 202 for portable too. The nitrogenrelay made by National does it. Switching of the relay can be done by point 5 of the huge plug near the VXO. Q1, R1, R2, C5 are the parts which can be taken off now. Another source of noise is the ALC via R3. For the transistor 3SK40 it is moreless necessary because of the limited dynamic range. Also

for noise reducing reasons a BF981 would do it better, it also works well in the place of the 3SK40, the only thing is that you have to take off the whole print to reach the place. We needed 1,5 hours. Now also the ALC is not needed because of the great dynamic range of the BF981. So we simply take off R3 and shortcircuit C3, g1 of Q1 lays on $\emptyset$ level now via L1. The voltage on g2 has to be 6 volt to provide enough current through the BF981. R5 must be replaced for 28 K.

Measured noise figure was less than 1,5 db.

D. : Verbesserungen am IC 202

Um das IC 202 EME tauglich zu machen, bedarf es einiger Änderungen. Die wären : Entfernung der Rauschquelle Q1 der die Spannung für D25 zum Schalten der Antenne liefert. Wer das Gerät auch noch portabel betreiben möchte, kann ein Nitrogenrelais von National einsetzen. Die Schaltspannung kann an Punkt 5 vom großen Stecker am VXO abgenommen werden. Q1, R1, R2, C5 können nun entfernt werden.

Eine weitere Rauschquelle ist die ALC über R3. Für den Transistor 3SK40 wird sie dringend benötigt wegen dem begrenzten Dynamikbereich. Besser wäre hier ein BF981, der hier eingesetzt werden kann. Dafür muß die ganze Platine aus dem Gerät ausgebaut werden. Das dauert ca. 1,5 Stunden. Nun kann die ALC wegen dem großen Dynamikbereich des BF981 abgeklemmt werden, indem man R3 entfernt und C3. g1 von Q1 liegt nun auf $\emptyset$ über L1. Die Spannung an g2 muß 6 Volt betragen, damit genug Strom durch den BF981 fließt, dafür muß R5 auf 28 K geändert werden.

Die gemessene Rauschzahl betrug nach der Modifikation weniger als 1,5 db.

AZ / EL INDICATION FOR AN EME ANTENNA SYSTEM

=====

by Dragoslav Dobričić, YU 1 AW

The problem of the accurate indication of AZ/EL in EME work is often present and can be solved in many ways. One of the most efficient, though very simple, is using analog mechanical-electrical convertor with variable resistor.

Taper of the resistor is mechanically coupled to the antenna used in antenna rotors, like HAM II, CD44 etc. But when you need an accuracy of 1° , existing scale cannot satisfy you, as it is drawn for $0-360^\circ$ degrees in quite a limited space. To obtain a needed accuracy, scale should be expanded in a way that a full deflection indicates only 45° , i.e. improve an accuracy for 8 times. Evidently, you need 8 bands of 45° each to cover the whole circle of 360° in azimuth, and two bands for elevation control.

As you can see in the schematic, it is simple Wheatstone bridge whose instrument is used to read bridge unbalance due to the moves of the taper caused by antenna rotation. To compensate possible errors caused by temperature and voltage variations, calibration was needed. The calibration is done by simple voltage measurements on each resistor divider. This voltage is used to obtain the full scale deflection by the 5K potentiometer connected to the instrument.

One kilohm variable resistor whose tapers are mechanically coupled to an antenna should be wire type and linear to offer a reliable service. Resistors used in dividers must have a tolerance of at least plus/minus 5%. Calibration potentiometers are usual type, with axis approachable in the front of the case.

Mechanical coupling of the taper on the potentiometer for azimuth indication is done directly from the axis around which antenna is rotating, either by direct coupling at the bottom, or by transmission 1:1 if you have a potentiometer with 360° working range. If 360° potentiometer are difficult to find, you can use common 270° ones with 3:4 transmission ratio. Elevation potentiometer can be easily coupled to the antenna in a manner that the body is tightened to the antenna, while a burden is hung from the axis downwards. It is interesting to note that only central part of the potentiometer is in used in order to avoid certain non linearities on both ends.

Evidently, it is possible to extend the instrument scale several times, though higher accuracy announced by the large scale may be deteriorated by resistance tolerance which tend to be high, resistances of the linear taper and slight variations in supply voltage.



D. : AZ/EL ANZEIGE FÜR EINE EME ANTENNE

Das Problem genauer Anzeige von AZ/ELswinkeln für EME ist schon öfters diskutiert worden und kann auf verschiedene Weise gelöst werden. Die einfachste und vielleicht beste Lösung ist ein analoger mechanisch elektrischer Konverter mit einem variablen Widerstand.

Der Schleifer von einem Potentiometer ist mechanisch mit dem Rotor-oberteil gekoppelt, wie beim HAM II? CD 44 etc. Wenn eine Auflösung von 1° gefordert wird, kann die normale Skala nicht befriedigen, bei 360° in einem so kleinen Anzeigebereich. Um die gewünschte Auflösung zu erlangen, wird die Skala gespreizt, indem der Endausschlag nur 45° beträgt und die 360° in 8 Bereiche aufgeteilt werden.

Wie man aus der Zeichnung ersehen kann, ist es eine einfache Wheatstone Brücke, und das Instrument wird benutzt, um die Abweichung aus der Balance anzuzeigen. Um mögliche Fehler durch Temperatur- und Spannungsschwankungen auszugleichen, wird eine Calibrierung benötigt. Diese wird durch eine einfache Spannungsmessung, bei jedem Widerstandsbereich gemacht.

Der variable $1K\Omega$ Widerstand sollte ein Draht-Typ sein und linear um eine zuverlässige Anzeige zu gewährleisten. Die Widerstände im Teiler dürfen nur eine Toleranz von 5% haben. Das Calibrierpotentiometer ist eine gebräuchliche Ausführung, mit der Achse vorne aus dem Gehäuse.

Wenn Drahtpotentiometer mit anderen Werten benutzt werden (0,5-5K), müssen die Werte der Widerstände in dem Teiler entsprechend geändert werden, so daß der Gesamtwiderstand dem des Potentiometers entspricht, oder sehr nahe kommt.

Die mechanische Kopplung vom Schleifer des Potentiometers für die horizontale Anzeige wird direkt am Drehrohr befestigt, oder mit einer Übersetzung 1:1, wenn ein 360° Potentiometer zur Verfügung steht. Es kann auch eine Übersetzung 3:4 benutzt werden für ein 270° Potentiometer. Das Potentiometer für die Elevation wird direkt in der Antenne befestigt, und am Schleifer wird ein kleines Gewicht an einer Stange befestigt. Hierbei wird nur die Mitte des Potentiometers genutzt um die Unlinearitäten an den beiden Enden zu vermeiden.

Für die OMs, die ein polar gerichtetes EME System benutzen, kann die Skala des CD44, HAM 11, etc. benutzt werden; beachtet werden müssen dabei die Werte für das Potentiometer und die Spannung für das Instrument und der maximale Drehwinkel. Wenn die Antenne nur 120° gedreht werden kann, ist es möglich die Skala in drei Teile zu unterteilen, wenn der serienmäßige Widerstand durch drei ersetzt wird (3,3 bis 10k) und benutzt den Rotor nur im ersten Drittel des Kreises.

Zweifelloos ist es möglich die Skala noch weiter zu spreizen, aber genauer kann die Anzeige nicht werden, wegen der Toleranzen der Widerstände, der Unlinearität des Potentiometers und der Spannungsabweichung.

=====

To be reported in the next issue:
Im nächsten Heft wird berichtet:

J. Senckel, DF 5 QZ : 13 cm Transverter
=====

Erstverbindung DL - OE auf 24GHz

Nachdem erst am 1.1. 1982 das 24GHz -Band auch für die Funkamateure in OE freigegeben wurde, gelang am 23.1. 1982 der SHF-Gruppe Salzburg und der 10 GHz -Gruppe Bayerwald die Erstverbindung DL -OE auf 24GHz.

DL8RAH, DL9RAH und DJ4YJ waren nach einem 2 stündigen Aufstieg mit Skiern vom Hirschenstein Bay. Wald GI Ø5j, 1095m asl, grv. Auf dem Gaisberg GH 16c, 1286m asl, warteten bereits OE2BM, OE2GKM und OE2JG.

Um 0911 UTC wurde die erste 24GHz Verbindung DL- OE von DL8RAH/p- und OE2BM/2 über eine Entfernung von 134km mit beiderseitigen Rapporten 5 9 getätigt.

In den folgenden 2 1/2 sStunden wurden weitere QSO's der beteiligten OM's mit sehr guten Lautstärken durchgeführt.

Die Station auf dem Hirschenstein: Durchblasemischer, 4mW
60 cm Parabolspiegel mit Doppelschlitzstrahler.

Die Station auf dem Gaisberg: dito jedoch nur 1 mW !!!

Bemerkenswert war, daß trotz dichten Nebels im Bay. Wald und hoher Luftfeuchtigkeit die Signale konstant blieben während der QSO's.

tnx fer info Hans

OE 9XXI/9 (EH39c) 950m asl wkd on 1296 MHz via tropo

6.3.82	HB9AMH	DH66c	DC9BU	EK7ob	DJ5BV	DK26h
7.3.82	DK2UO	DL74e	DF1EQ	DL76a	DD7KA	DK24g
	DL9LU	DK13j	DD3KL	DK13j	DL6CX	DK21b
	PE1AKJ	CL8oh	PAØWRC/p	CL38a	DL6WT/a	DJØ9b

and on 2320 MHz

6.3.82	DK4GD	EHØ3c	DKØVL	EH11h	DL7QY	FJ61e
7.3.82	DJ9PC	DI8of	DL9GU	EJ33a		

tnx fer info Peter

LA 8 AK (Ds80b) wkd on 1296 MHz via tropo

5.5.82 1958 OZ1AXX 54 54 FQ61j, 2125 OZ8WK 429 529 ER8oc
214o OZ1FEF 56 57 BQ25c
12.5.82 213o G4BYV 429 539 AM25c
13.5.82 2o1o LA8AE 53 57 FT72h
14.5.82 1942 PA0EZ 52 53 CM66b, 2o57 G4KIY 529 559 ZM4oj
214o PE1CHQ 53 56 DM52h, 2144 PA0AGO 42 55 DM53h
2151 PA0CRA 54 57 CM75a, 22o2 PA2DOL 529 519 CLo3j
22o7 PA0FRE 529 529CL03j, 221o PE1AAQ 54 58 CM24f(§)
15. 5.82 23oo G4KUX 529 519 YO2oc, (§)= 3Watt !!
LA8AE was worked only at reflexion north of skagen
(Denmark), QTF 95/175 .

Telephone No for 70/23 cm skeds: +4642 13363, I take the
telephone you need only say your call and proposed frequency,
pse do not suggest 1296,25o (everybody uses it). I use 1296,22o
I prefer CW, max 15o-2oo LPM

tnx fer info Jan-Martin

PA Ø WWM (CM63g) wkd via tropo on 1296 MHz

7.1.82 DL0BX/A DL, DJ5BV DK, 1o.1.82 DF8DO DL, 13.1.82 DF7YU EL,
DC0DA DL, 14.1.82 G4KKF ZO, 16.1.82 DD2EK DL,
18.1.82 DL9LU DK, DJ5VM DK, DD3KL DK, 25.1.82 G4BYV AM,
31.1.82 F6DZK AI, 1o.2.82 DJ3ZU DL,
5.3.82 DL6CX DK, DL0BX/A DL, DK1VC DL, DD3KL DK, DL9LU DK,
24.3.82 DJ5VM DK, G3WHK ZL, DF4LY EO, G3ZEZ AL,
25.3.82 G4FWF AL, G3OSS ZL, G8VLL AM, G8ZXG/p AL,
GW3KFT YJ, G4GLN ZL, G4CCH ZN, G8KWI ZL,
26.3.82 DJ8XO FN, DD7LR EO, DK1KR FN, 27.3.82 DF9LN FO,
28.3.82 G8PNN ZP, G4KKF ZO, G8BTX AM, 15.4.82 G8KAX AL,
21.4.82 G4KCT ZN, 2.5.82 G4JAR/p ZK, G4KIY ZM,
2.5.82 DK0IK/p DO, 12.5.82 G8PNN ZP, G4EKT ZN,
G8PWX ZP, 14.5.82 LA8AE FT, DF9LN FO,

and on 23o4/232o MHz

16.12.81 PA0GUS CN 1o.1.82 PA0GUS CN, 13.1.82 PE1AKJ CL,
DC0DA DL 14.1.82 G4LRT ZM, 18.1.82 DL9LU DK,

PA Ø WWM (CM63g) wkd on 2304/2320 MHz via tropo

6.3.82 PAØEHG/p CL, PAØJGF DM, PAØJRS/A CK, 24.3.82 DL3NI DL,
24.3.82 G4BYV AM, 25.3.82 G3ZEEZ AL, G4FRE/p AM,
1.5.82 PE1BWX cL.

tnx fer info Wim

DL Ø UL/p (EI39b) wkd on 1296MHz via tropo

7.3.82 09.50 DCØZF 52 51 EK35h 232km
10.30 DL6WT/A 57 56 DJ09b 211 "
1.5.82 16.30 DKØNA 55 51 FK58b 234 "
2.5.82 07.10 IN3TZL/3 31 53 FG5og 287 "
8 08.01 HB9MIO/p 53 54 DH8oe 225 "
08.04 HB9AMH/p 52 52 DH66c 250 "
11.37 DJ5BV 53 43 DK26h 307 "

Rig: TX: 2c39 PA ca 30 W RX: NE645 frontend 2x29 el loop Yagi
Alt: 770m asl.

tnx fer info Walter

DK Ø IK/p (DO7oj) 1982 Helgoland SHF DXpedition 1.5.-7.5.82

Heavy winds at the 1 st of May up to 28m/s (100km/h) broke our tower with the antennas for 70 and 23cm. So our first expedition to DO - square on 23cm was a difficult one not only because of the bad weather but also because of the bad conditions. Nevertheless we managed(OP's:DJ9BV,DC2XK) to work 56 stations in 19 squares with a best DX of 775km during the one week of our expedition.

Rig: RX:IC730+transverter +MGF1400 TX:PA3xBFQ68+ PA 2c39 100W
Ant: 2x 48el -DL6WU-Yagi, vertically stacked 5m AGL, 45n asl

1.5.82	2342	DJ5 BV	529	529	DK26h	389 km
2.5.82	1340	PAØFRE	51	51	CLo3j	338 "
3.5.82	1325	DF1EO	53	52	DL66f	343 "
4.5.82	2153	DL7YC	519	419	GM47j	408 "
5.5.82	2200	PA1ALA	559	529	CLo3j	338 "
	1615	HB9RG	519	319	EH63b	775 " !!!!
6.5.82	1817	OZ7IS	419	419	GP33f	326 "

tnx fer info

DF 1 EQ (DL 76a) wkd on 1296 MHz via tropo in SSB

19.1.82	1757	DC7QH	51	51	GM37c
7.3.82	859	OE9XXI/9	55	53	EH39c

2320 MHz (cw)

20.1.82	2025	DJ9PC	529	519	DI8of
25.1.82	2026	DL9GU	519	519	EJ33e

3456 MHz (SSB)

6.2.82	1035	DF5JJ/p	559	59	DK46j
6.3.82	1900	PAØJRS/A	599	55	CK10c

tnx fer info Reinhard

DG 4 BB (EN76e) wkd via tropo on 1296 MHz

11.5.82	2207	G4BYV	55	55	AM25c	547 km
	2219	G4CCH	55	57	ZN48h	644 "
13.5.82	2116	G8CKV	53	59	ZM39b	628 " 1Watt!!
	2126	G4KIY	59	59	ZM40j	620 "
	2135	G8DKK	59	59	ZL08d	657 "
	2218	G3DAH	57	57	AL56b	571 "
	2235	G8MIW	59	59	ZM05a	682 "
	2246	G8PNN	59	59++	ZP52d	741 " 1,2Watt ODX
	2259	G4LRT	54	54	ZM45d	685 "
	2305	G4FXW	51	52	ZN54b	689 "
	2312	G8VVD	53	59	ZN27d	649 "
	2326	G8VRJ	56	59	ZN57j	653 "
14.5.82	923	G4KKF	54	59	ZO02d	731 "

RX: NE645 TX -60Watt ANT: 4x23 el F9ft ,21AGL

He wkd also on 10 GHz via tropo

13.5.82 2018 DI4 BV 53 51-2 DN 37e 132 km!!!

Diese Verbindung kam rein zufällig zustande und lief absolut ohne Sichtverbindung (theoretisch) und über ca. 35km direkt über die Großstadt Bremen hinweg! Verwendet wurden Gunnplexer mit 30MHz ZF-Nachsetzer und 17dB -Hornstrahler auf beiden Seiten.

Die Höhe über Grund betrug bei mir etwa 22m =52m NN; bei DI4BV etwa 12m über Grund. Die Verbindung war mehrfach durch QSB-

Phasen von einigen Minuten total unterbrochen. Die Querverbindung lief auf 23cm, auch hier ein Super-Signal von 40dB über S9! Zustande kam diese Verbindung durch einen CQ-Ruf auf 23cm in Richtung G von DI4BV.

Mich würden Erfahrungen von anderen OM's über 10 GHz -Verbindungen ohne Sichtverbindungen interessieren.

tnx fer info Werner

DL 7 QY (FJ61e) wkd on 23cm via tropo

6.3.82	1500	DLØUL/p	59	59	EI39b			
	1510	DC9BU/A	59	58	EK6Ob			
	1555	HB9AMH	54	55	DH66c			
1601	DF5SL/p	54	55	EI25h	1602	DKØBC	56	59 EI20d
1609	PE1BW	53	51	CL7of	1757	DB6AV	59	59 EI06j
1800	DJ9PC	55	55	DI8of	1813	DKØVL	59	59 EH11h
1940	DG4GAN	51	53	EI76a	1944	DF9ZP/p	41	51 EJ17a
2053	OE9XXI/9	57	59	EH39d				
7.3.82	0147	DK2UO	53	55	DI74e,	0147	DJ5BV	529 549 DK26f
	1243	DK6QK	53	59	EJ76e,	1350	F1DLT/p	51 52 CH29f
1.5.82	1902	F1SK	52	57	CI15c,	1330	PAØEZ	52 53 CM66b
22.5.82	2100	F6KFN/p	519	529	BG52g,			
6.6.82	0815	F1EA	59	59	DI39c,	0832	F1SA	53 57 CI15e
	0936	HB9AMH	56	57	DH66c.			

and wkd on 2320 MHz

2.5.82	1200	DL9GU	529	539	EJ33a,	1225	DJ9PC	54 53 DI8Øf
	1229	DJ5AP/p	55	55	EH11h,	1242	DKØNA	55 55 FK58b

tnx fer info Claus

DG 4 GAN (EI76a) is qrv on 70cm --4x21ele.--Yagi 75-80 w

and on 23cm - - - 1,4m Parabolspiegel -10W --820m asl.

Telephone for skeds 07573/503

tnx fer info Hagen

DK Ø NA (FK58b) wkd on 13cm via tropo

5.4.82	DL9GU	EJ,	19.4.82	DC9KK	DK
19.4.82	DC6TV	DK,	15.82	PAØJRS/A	CK
1.5.82	DC9PC	DI,		DL9GU	EJ
2,5.82	DJ5AP	EH	3.5.82	DJ9VS	EJ

and on 9cm

6cm

3cm (ssb)

2.5.82	DB8NC/p	FK	59	59
2.5.82	Y24in	GK	59	59
	DB8NC/p	FK	59	59
4.6.82	Y24 IN/p	GK	52	59 62km
20.6.82	DB8NC/p	FK	59	59

tnx fer info Michael

S U P E R D X O N 2 m !
=====

<u>DK 1 KO</u>	(FN12g)	} wkd	<u>UA 1 ZCL</u>	(RCØ8c) !
es				
<u>DK 3 UZ</u>	(EN20c)			

on June 27, 1982, at 0250 UT. Reports were 419 and 519 resp.
The distances to DK1KO and DK3UZ are 2123 and 2131 km.
The qso's happened just after an aurora event, yet the signals
had typical tropo sound.
The beacon SK2VHG from KB square was audible at that time and
also later on, but no more signals from that region could be
copied.

TROPO NEWS

2m: > 500 km
70cm: > 300 km de DL7ACG

2m 2m 2m 2m 2m 2m 2m 2m 2m 2m 2m 2m

EA3LL (AB56b) wkd:

11.4.	9H1ES HV	F1GTR ZF	F1BDE BH	12.5.
F1FEN CF	IT9ZRQ GY	F1QIK ZH	F1DPX ZH	ISWBE FD
F1DV BG	1.5.	2.5.	EA4CY XY	ISPGC FD
9H1BT HV	F1KQN ZF	F1KNO BH	EA7XY YX	ISADJ FD
9H1SP HV	F6ARQ ZF	F1EZQ CI	F1EHN AG	14.5.
9H1ED HV	F1CHP ZG	F1DKE CH	F6FRE DD	ISPGC FD
I0SVS GC	F6GCJ AG	F5BV ZF	F1EAN ZG	ISYMR FD
IS0GF EZ	EA4AAW WZ			

tnx fer info

HG1YA (IH63b) wkd:

31.1.	6.3.	DF0OC EJ	I2ESE/2 EE	PA2VST/
IW2BXY FF	I2ZJO/IA5 FC	27.3.	8.5.	LX/p DJ
28.2.	DK0BC EI	I0FHZ GC	ED3UVO BB	PA0RDY/
Y21PL GL	YU6NGS JC	IW0AIJ GB		LX CJ
HB9QQ EH	DL0HN/p EJ	17.4.		
	DL0UL/p EI	I2ADN/1 EE		

tnx fer info, Gabor

OE1APS (II63g) wk d > 600 km:

2.1.	4.1.	13.2.	5.2.	ISWBE FD
I5ELQ/6 GD	DK2DB EI	DG6GAH EH		
I4AUM/4 FE				tnx fer info, Alfred

ON4YZ (CK53e) wk d:

22.1.	EA1CR XD	21.3.	24.3.	26.3.
F0GWN/p XH	5.2.	F1FHI ZH	OZ9KT EO	G4GSR YN
30.1.	OK1IDK/p GK	22.3.	25.3.	G8KOP/p YN
F0GWN/p XH	6.2.	G3CHN YK	OZ1DPR EP	G8PNN ZP
Y23BD GM	OK1IDK/p GK	OZ60L FP	GD4GNH XO	30.3.
F6EQQ YI	12.2.	23.3.	G8DYK ZN	DL0JT FO
F0GWN/p XH	OZ1DPR EP	DF2HC FN	GD3YEO XO	31.3.
31.1.	12.3.	OZ60L FP	OZ1DPR EP	DF8LK FN
F1HI AD	DL2LAA FO		OZ1ELF EP	DL0JT FO
EA1ED VD				

tnx fer info, Paul

UQ2IV (KQ36f) wk d:

2.2.	DL1JF FO	SK1VHF hrd	SK7VHF hrd	OZ7IGY hrd
PA0RDY EM				tnx fer info, Oscar

DE3CEW (II52f) wkd:

<u>20.2.</u>	DG8FF	EJ	<u>7.4.</u>	DG5FBL	EJ	DL2KAL	DK		
DG7FI	EJ	<u>20.3.</u>	DC1ZY	DK	DD3KU	DK	<u>10.5.</u>		
DK1HO	EJ	DG7FI	DL9ZAD	EJ	<u>19.4.</u>		I4PWL	FE	
DG5FBL	EJ	DG8FAV	8.4.	DG5FBL	EJ	DG5FBL	GD		
<u>21.2.</u>	DG6GAH	EH	DG5FBL	EJ	DL9ZAD	EJ	<u>11.5.</u>		
DG7FAB	EK	<u>21.3.</u>	DC1ZY	DK	<u>21.4.</u>		I4XCC	GE	
DG7FI	EJ	DG7FI	DL9ZAD	EJ	I4PWL/4	FE	<u>13.5.</u>		
DL4NAA	EJ	DG7FBL	9.4.	I4ERN	GE	I4XCC	GD		
DD3KU	DK	DG6NO	DJ5EN	EJ	I4PAI	GE	<u>14.5.</u>		
<u>27.2.</u>	DG8FF	EJ	DL9ZAD	EJ	<u>24.4.</u>		I4GOC	GE	
DB7IR	EJ	<u>22.3.</u>	DK1HO	EJ	DL9ZAD	EJ	<u>15.5.</u>		
DG7FI	EJ	I4XCC	DG8FF	EJ	DD7UZ	EJ	DL4NAA	EJ	
DG5FBL	EJ	<u>27.3.</u>	DD3KU	DK	DG5FBL	EJ	DG5FBL	EJ	
DG6SAE	EI	DJ5EN	DG5FBL	EJ	DG9FAW	EK	DL9ZAD	EJ	
<u>28.2.</u>	DG5FBL	EJ	DG3FAG	EK	<u>29.4.</u>		<u>16.5.</u>		
DG7FI	EJ	DC6AP	10.4.	I6DQE	GD	DL4NAA	EJ		
DG9NB	EJ	I4MKN	DL9ZAD	EJ	I60XG	GD	DL9ZAD	EJ	
DD3KU	DK	I4ERN	DG6NO	EJ	IW6AGH	GD	<u>19.5.</u>		
DG9FAW	EK	<u>28.3.</u>	DC6AP	EK	<u>1.5.</u>		I4GOC	GE	
<u>1.3.</u>	DG7FI	EJ	DG5FBL	EJ	DL9ZAD	EJ	I4PVU	GE	
DG4NAE	EJ	<u>3.4.</u>	11.4.	DG5FBL	EJ	DK1HO	EJ	I4XCC	GD
DG7FI	EJ	DG7FI	DG5FBL	EJ	DG6NO	EJ	<u>21.5.</u>		
<u>4.3.</u>	DG5FBL	EJ	DG6NO	EJ	DL4NAA	EJ	DG6GAH	EH	
I4XCC	GD	DK1HO	DL9ZAD	EJ	<u>3.5.</u>		<u>22.5.</u>		
<u>6.3.</u>	DJ5EN	EJ	<u>12.4.</u>	DL9ZAD	EJ	DL9ZAD	EJ		
DG7FI	EJ	<u>4.4.</u>	I3EGD	FF	<u>5.5.</u>		DL4NAA	EJ	
DL4NAA	EJ	DL9ZAD	DL9ZAD	EJ	I6SGD	GD	DG5FBL	EJ	
DG6NO	EJ	DG5FBL	<u>14.4.</u>	DG5FBL	EJ	<u>8.5.</u>	DG6NO	EJ	
<u>7.3.</u>	DG8FF	EJ	DL9ZAD	EJ	DL9ZAD	EJ	I3UKY	FF	
DK2DB	EI	DG6NO	DD8UW	EK	DL4NAA	EJ	I2ODI	FF	
DL6FAW	DJ	DC6AP	<u>17.4.</u>	DL4NAA	EJ	DF4VQ/A	DJ	<u>23.5.</u>	
I4VOS	FE	<u>5.4.</u>	DL4NAA	EJ	DK6VV/A	DJ	DL9ZAD	EJ	
DG7FI	EJ	DL9ZAD	DD3KU	DK	DK3IG/A	DJ	I4UGB	GC	
<u>9.3.</u>	DG5FBL	EJ	DC1ZY	EK	DG5FBL	EJ	<u>29.5.</u>		
DJ5EN	EJ	DK7BP	DG5FBL	EJ	<u>9.5.</u>		DL9ZAD	EJ	
<u>13.3.</u>	DD3KU	DK	DL2KAL/A	DK	DL9ZAD	EJ	I6WJB	HC	
DG7FI	EJ	<u>6.4.</u>	<u>18.4.</u>	DL2KAL/A	DK	DK1HO	EJ	<u>30.5.</u>	
DG5FBL	EJ	DL9ZAD	DL9ZAD	EJ	DL4NAA	EJ	IW4ABF	GE	
<u>14.3.</u>	DC1ZY	DK	DL4NAA	EJ					
DG7FI	EJ	DG5FBL	EJ						

tnx fer info, Erik

DE60WG (HH78j) wkd:

<u>16.1.</u>	<u>30.1.</u>	IW4AIJ	GB	<u>27.3.</u>	<u>28.4.</u>		
YU1PIY/6	JD	I4UGB	GC	I7HVP	IB	I6WJB	HC
<u>17.1.</u>	<u>31.1.</u>	I4AKP	GB	<u>28.3.</u>	<u>2.5.</u>		
I6WJB	HC	IW4AIJ	GB	I7FHZ	GC	IW2BNA/p	EE
<u>23.1.</u>	<u>7.2.</u>	I4UGB	GC	<u>11.4.</u>	<u>9.5.</u>		
I4UGB	GC	<u>14.2.</u>	I6WJB	GC	I7DLP	GB	
I7FHZ	GC	I6WJB	HC	<u>17.4.</u>	<u>15.5.</u>		
IW4AIJ	GB	I4BXN	FE	I2ADN/p	EE	I2ADN/p	EE

tnx fer info, Walter

OZ3ZW (F018e) wkd > 800 km:

<u>14.1.</u>	<u>19.1.</u>	GM8BDX	YP	GM4IFG	YQ	G3UNU	ZM
G8VES	DN6FG	GM8OFX	YR	GM4FZH	YS	<u>7.6.</u>	
G8TQL	<u>2.2.</u>	GM8MBP	YR	GM8MHU	YR	DC2EU/OY	
G8XZM	UR2RQT	GM8BZX	YQ	G8TQL	ZP	1365 km	
GM3UU	GM8MBP	G6CHB	ZD	G8FFX	YR	<u>8.6.</u>	
GM4JEJ	GM8OBX	GM8FRU/p	YR	<u>13.5.</u>		G4DHF	ZM
<u>17.1.</u>	GM3FAV	GM4GNR/p	YR	G6EVQ	ZN	G4LHV	AL
OH3AZK	<u>12.5.</u>						
OH2QY	GM80EG						

tnx fer info, Torben

UQ2GLO (KQ49a) wkd:

<u>2.2.</u>	G4DVP	ZN	DF3EY	FO	OZ1LFC	EQ	PA2VST	CN
DF5CS	DL1ER	FO	PA3AOU	DN	PAØKDV	DN	PJ9YE	EN
DL1ER	PAØROY	CN	PA3AMF	CM				

tnx fer info, Victor

DF9PY/p (DK64b) wkd:

<u>22.2.</u>	<u>6.4.</u>	OZ5TG	EP	OZ1EDS	EP	OZ1ALS	
OE5GDL	DLØJN	FO					

tnx fer info

YU2CCB (IF35c) wkd:

<u>16.1.</u>	<u>17.1.</u>	<u>19.1.</u>	<u>21.2.</u>	<u>7.3.</u>
OK1MBS	OH1MAI	I4GBZ	I4GBZ	I3LDS
OE5OLL	18.1.	20.1.	IW3ESW	I4VOS/4
OE5GDL	IW3ESW	I4BXN		
	I4BXN			

tnx fer info, Zlatko, YU2EU

YU2AAY/2 (IF47d) wkd:

<u>7.3.</u>	I4VOS/4	FE	DL2ML	GJ	DJ8WS	GI	DDØMF	FI
OK1MIX/p	OK1KRA	HK	DC8GP	GI	DL5MAE	GI	DLØNN	FN
OK1KKH/p	OK1ATQ	HK	DF9RJ	GI	OK10A	HK	DK5RQ	GI
OK1KKI/p	DL8MAS	FI	DC6AM	GI	DJ8CAE	FI	DG9RY	FJ
OK1KRZ/p	OK6RP	GI						

tnx fer info, Ogi, YU2QS

YU2RKY (ID33f) wkd:

<u>6.2.</u>	IT9ZWV/9	hrd	<u>28.2.</u>	<u>6.3.</u>	IT9DWW	GY
ISØIPG/ISØ	EA		IT9TDN	HY	IT9TDN	HY

tnx fer info

YU2AAY/2 (IF47d) wkd:

<u>9.1.</u>	OK1AIY/p	HK	OK1VZR	HK	<u>17.1.</u>	OK1MHJ	HK
OK5MY	OK1DVC	HK	OK1ARP	HK	OK1VZR	HK	OK1SPA
<u>16.1.</u>	OK1MWD/p	HK	OK1ATT	HK	OK1MCW	HK	
OK1MBS	OK1DEF/p	HK	OK1VLA	HK			
OK1MCW	OK1ATQ	HK	OK1AFN	IK			

tnx fer info

YU2CCB (IF35c) wkd:

9.1. DF1ZE/A FH

10.1. DK5MY FH

tnx Zlatko, YU2SBD

YU7AZ (JF8øf) wkd:

15.1. OK1GA HJ

OK1AFN IK

OK28EM IJ

OK2VMD/p IJ

OK1ADW HJ

OK1KPU GK

OK2AQK IJ

OK1DEF/p HK

OL4BBP HK

OK1VLS HK

OK2TUO IJ

OK1BI HJ

OK1DKS HK

OK1DLDP GK

tnx fer info, Zlatko

YU1AWW (KE13j) wkd > 600 km:

16.1.

OK1JKT/p GK

18.1.

IW3ESW FF

19.1.

I4BGN FE

GC

FE

24.1.

I4BGN FE

12.4.

OK1ATQ HK

OK1ATQ HK

OE5GDL GI

21.1.

I4BGN FE

FE

I4GBZ FE

I3LDS FF

OK1DCK HJ

I4BGN FE

FE

FE

25.1.

I4BGN FE

14.4.

OK1ATQ HK

17.1.

OE5GDL GI

19.1.

I4GBZ FE

I6WJB HC

FF

I4GBZ FE

16.4.

OK1ATQ HK

OE5JFL GI

20.1.

I4GBZ FE

22.1.

I4BGN FE

FE

30.1.

I6WJB HC

17.4.

OK1ATQ HK

DL3MBG GI

I20DI FF

ISØCSX/4 FE

27.3.

I4BGN FE

IW3EKZ/3 GF

DC6AH GI

I20DI FF

ISØCSX/4 FE

OK1AGE/p GK

IØFHZ GC

tnx fer info

70cm 70cm 70cm 70cm 70cm 70cm 70cm 70cm 70cm 70cm

DG4BB (EN76e) wkd > 500 km:

14.1.

G8JJR ZN

16.1.

SM6HYG FS

G8TFI/A AL

13.5.

G8DKK ZL

G4KGC ZM

G3HHD ZO

7.3.

F1DCT/p CH

2.5.

OE1ERC/9 FH

G3AWL ZO

G4KKF ZO

G8PWX ZP

F1DCT/p CH

F1KCP BI

14.5.

G4AFJ ZM

G3MMK ZN

G3NWU ZO

F6FJE/p BJ

OE9XXI/9 EH

G4IRX ZM

G6AVL ZP

G3MMK ZN

OE9PMJ/9 EH

G3ZWK/p AL

G4IRX ZM

G6ADE ZN

G8AWN ZN

4.4.

G4LOJ AM

11.5.

G4BYV AM

tnx fer info

DKØIK/p (DØ7Øj - Helgoland) wkd > 500 km:

OPs: DJ9BV, DC2XK, DF4HR, DK9HE

1.5.

F1EBN BI

G3ZWK/p AL

DB7UG/A FK

DF3CK FH

5.5.

G3VYF AL

DL7QY FJ

G6HGB/p AN

DL7QY FJ

DL7QY FJ

G4FUF AL

3.5.

DF8IK EJ

DG4GAN EI

DG4AN EI

2.5.

DKØAT EI

DB2VY DJ

4.5.

DJ1BZ EI

tnx fer info

EA3LL (AB56b) wkd:

2.5.

EE4KI YA

F6ELI ZE

F1EHB AE

13.5.

EB5BEB ZY

tnx fer info

DL70Y (FJ31e) wkd:

3.1.	4.4.	DKØIK/p	DO	5.5.	F1DLJ	BK
I2ADN/1	EE	G4MRS/p	AM	F6KCP	BI	H89ASB
6.3.	8EFTI	AL	2.5.	F6KBK	BI	F1FEN
F6FJE/p	BJ	5.4.	I4CIV/6	GO	F6AJI	CI
PAØGUS	ON	F1EGJ/p	BH	5.6.	F1FHR	BI
F6GRC/p	CF	F6GRC/p	CF	F1EUS	CI	F6QKW
7.3.	1.5.	H89AOF/p	DO	F6TNS	BK	F1FXR
G4JAR/p	AL	F1SA	CI			

Vy 73, Claus

DLØUL/p (EI39b) wkd > 400 km:

6.3.	7.3.	1.5.	DLØBX/A	DL	DC5JC	DL
DFSLQ	EO	DLØMI/p	EM	OE3EFS	HI	PA3BSK
DLØCS/p	EO	DG3LC	EN	DK1I2/PA	DM	PAØERW
DCØXO	EM	PE13WX	CL	DL2LAS	EN	
F1DLT/p	CH	DF9LN	FO			

tnx fer info, Walter

H89BMC/p (EH73e) wkd:

5.3.-7.3.	DJØLU	EK	DFØML/p	EK	DLEFN	EK	DC5YI	FJ
DLØFF/p	EK	DLØFO	EK	DF7PS/A	DJ	DG4FAD	EJ	DF9FD
DL5ZAY	EK							

tnx fer info, Robert

OE1APS (II63c) wkd > 400 km:

3.1.	I4LCK/4	FE	7.3.	DK2GR	FJ	DB9SB	EJ
IM4ADT	FE						

tnx fer info, Alfred

OE9XXI/9 (E439d) wkd:

6.3.	7.3.	DG5ZI/p	EL	PE1DAP	OK	PAØJRS/A	OK
PAØPFW	DL	DC6XO	EM	F6DLT	CH	DLØBX/A	DL
DO8KV	DL	DJ7YP	EM	DG3LC	EN	DC6QK	DL
		F6GRC/p	CF				

tnx fer info

PAØUNIM (OM63c) wkd:

10.1.	G8LZM	ZO	2.2.	SM1BSA	JR	G4ERO/A	ZK
ØB2VY	DJ	G3AWL	ZO	G8PKN	ZP	G6ADE	ZN
13.1.	G8IFT	YM	ØZ7IS	GP	G6GN	YL	G4BYV
DL7XM	GM	ØZ1HRA	EQ	ØZ9FW	GP		
14.1.	31.1.	F6DZK	AI				
G4KKF	ZO						

tnx fer info, Wim

PA3BGL (ON7/a) wkd:

12.4.	13.5.	14.5.	OY5NS/p	WW	LA3FV
ØZØIT	EO	GM8DX	YP	OY9SD	WW
ØZ1CFO	ER	GM8XZY	YQ		

tnx fer info, Albert

METEOR**S**CATTER**N**EWby
Bernd DF2ZCImportant Change!

As some OM already know I had to move my QTH from DK to EO, I have of course a new address now:

It runs: Bernd Mischlewski D F 2 Z C

P.O. Box 1612

2390 Flensburg W-Germany

My PO Box in my old QTH is still good, too, until the end of this year, but please send all your MS-Info to my new address now.

For MS-Skeds: I am only temporarily grv at the time, but from DK and from EO-square. If you are interested in one of the squares you can write me.

73 Bernd

Supplements to the MS-List:

OE3CEW II E.Cechota/Lehrerwiese 9/A-3400 Scheiblingstein
 F5DE AF B.Delage/Lotissement Beauregard/Touvre/16600 Ruelle
 only SSB Phone:(45)656240
 PA6HWM CK J.Hansen/Hekerdelstraat 4/6343 AL Klimmen
 Phone:(04405)3017
 I1KTC EF A.Zampogna/via priv. Formaggio 11/28100 Novara

OK2SGY IJ37g wkd:

2.01.	1800-2000	OH5IY	NU	27	26	4b	30p	NC	no	RRR
	2200-2400	PA6NIE	CL	26	26	2	27	NC	no	RRR
3.01.	0000-0200	LA5IH	CU	26	26	2	4	NC		
	0600-0800	OH3TH	LV	only pings						
	0800-1000	F6EOQ	YI	27	--	3	15	NC		
	1000-1200	F6KCP	BI	27	--	3	5	NC		
	1200-1400	IS6PUD	EZ	27	26	12	25	C		

NIL:SM3JAW

tnx fer info, Pavel

YU3CAB HG55f/HG64f:

13.12.	1530-	F1FHI	ZH	26	26	3	10	NC		
14.12.	0400-0425	UR2EQ	NT	27	26	10	17	C	2s	
	0532-0537	G3UNU	ZM	27	27	3		C	SSB	RANDOM
2.01.	1145-1245	LA6HL	CS	26	--	2	1	NC		
3.01.	0600-0800	OZ1EKI	EP	26	26	10	35	C	16s	tnx
	1600-1800	F6FTN	CG	26	27	3	3	NC		fer
	1800-1900	GM4CXM	XP	26	26	3	2	C?	5s	info

DK3UZ (EN20c) wkd via MS on 144 MHz in CW:

820405	0200-0235	OE6WIG	HG29b	27	26	8B	3P	C	0.5 sec.
820406	0300-0500	I6DQE	GD48d	--	--	----	----	NIL	
820416	0500-0550	I1ANP	EE79b	26	26	4B	14P	C	0.5 sec.
820421	0000-0040	I1JTQ	DF79j	27	26	12B	6P	C	0.5 sec.
820424	0600-0725	EI2CA	WM10a	26	26	15B	22P	C	10 sec.
820521	0200-0325	UK3AAC	SP19e	27	26	8B	13P	C	1 sec.
820606	0200-0350	SM2BAI	LZ32h	27	26	60B	64P	C	3 sec.
820609	0200-0400	YU3DRW	HG64g	26	26	27B	25P	NC	0.5 sec.

vy 73,

Aditi

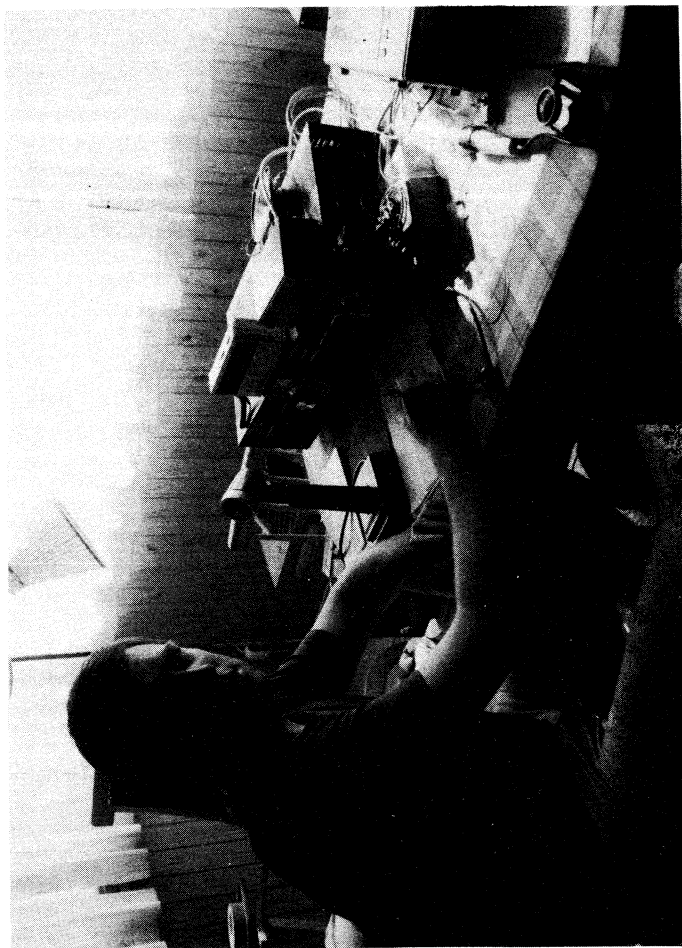
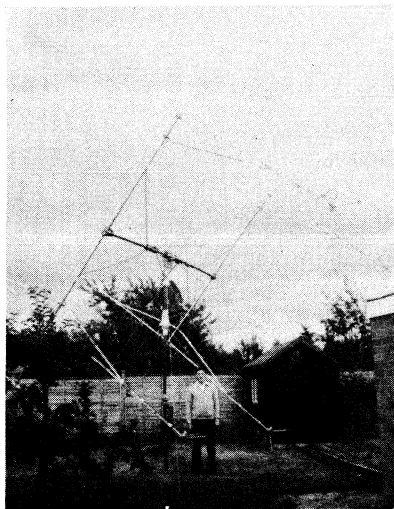


Photo shows DK6AS/0HP on his VHF/UHF expedition to KT/KU-Squares in July 1980.
Thanks for it, Andy

G4ASR YM76d writes about his station:



G4ASR YM76d

In my new QTH in YM76d I have not yet got my tower up but am using a 40 ft mast to support my 144 MHz Aerial.
From this year (1982) I'm using my new linear I got from USA:
-TEMPO 2002 (2 x 8874) It goes, wow!

On the photograph it's my experimental 144 MHz EME system 4x16 el TONNA. It was not good mechanically because of the guyed mast (the TONNAS banged the guys). I'm now replacing the 2" mast with a tower section cemented in the ground and hope to be QRV EME in the summer '82.
I heard quite a few stations off the moon using no preamp, so the antennas seem to be OK.
When complete the system will be 4x16 el TONNAS/2 x 8874 1 kW and a BF 981 at Aerial feed point.

I have also 16 x 15 el NBS yagis for 432 MHz but I don't know how to get them in the garden.

Thanks for the nice report, David
Hope to work you via the moon in autumn?!

-2ZC

OESEFM (HI53h) 144 MHz:

10.8.81	2200 - 2300	out	SM3DCX (IV)	37 26	37b 23p	C 8sec
11.8.81	0000 - 0100		G 4 MJS (ZM)	27 26	9b 15p	C 2sec
	0100 - 0125		F1 JG (CD)	26 26	13b 27p	C 3sec SSB
	0130 - 0140		SM Ø FFS (JT?)	26 26	Random	NC
	1800 - 2000		LA7 YN (FX)	26 -	2b -	NC
	2000 - 2100		LA9FY (EU)	27 26	5b -	NC SSB
12.8.81	0000 - 0200		UA3MBJ (SS)	26 26	16b 17p	NC
	0200 - 0250		PA3BFW/LA (DR)	27 27	56b 26p	C 10sec
	1800 - 1900		GW4LXO (YL)	26 26	5b 2p	C
	2000 - 2105		SM4KVM (HT)	26 26	15b 13p	C 10sec
	2200 - 2250		SMØIOT (JT)	37 38	Random	C 8sec
	2300 - 2350		LA7KK (FU)	38 27	Random	C 7sec
14.8.81	0000 - 0037		GW3NYY (XL)		9b 11p	C 5sec
NIL: LA1K (QRM C31LD-YU3CAB)						

RANDOM Meteorscatter Frequencies:

144.100 CW + 144.145 CW 1 min period

144.200 SSB + 144.400 SSB

remember them, please!

F. Ø DUL (DC Ø1 b) wkd via MS(OP: DK 6 AS):

2.9.81	2100-2200	SP 6 ASD	HL	27	27	5b 3p 2sec
3.9.	0500-0530	Y 22 QG	FM	36	26	5b 3p 2sec
	2100-2155	DJ 8 PB	DL	26	27	14b 8p 1,5s
4.9.	0500-0610	G 4 GZA	ZN	26	26	31b11p 1sec
6.9.	2100-2200	OK 1 KKH	HJ	26	26	15b12p 2s
	2100-2200	OK 1 MDK	HJ	26	26	
7.9.	0400-0435	DJ 8 MT	FM	26	26	8b 5p 1s
8.9.	2000-2100	OK 1 DIG	HK	26	26	6b 1p 4s
9.9.	0430-0500	YO 5 AVN/3	NE	26	26	4b 5p 2s
	2000-2055	DL 7 YW	GM	26	28	9b 3p 1.5s
	2100-2155	DK 4 TG	DL	26	26	38b17p 1s
	2200-2225	DL 9 GS	DL	27	26	12b 4p 3s
10.9.	0400-0445	PA 3 AQM	CL	26	26	25b 2p 1s
	1415-1535	PA 2 DWH	CM	36	26	16b 3p 1.5s
	1900-1935	DK 3 FW	EM	26	26	14b 2p 2s
	2100-2135	DL 1 MF	GH	26	26	11b 2p 4s
	2200-2230	DJ 9 CZ	DL	26	26	13b 5p 2s

NC with DF7RG, DF7VX, UO5OGF, G3VYF, YO2IS, ON7EH, PA3BIY, F6FHP, G8VR, OZ1EKI, G4FUF, LA6HL, Y24QO, DL6NAA

rig on expedition: 10el yagi, 1dB front end, 150 watts out
QTH: Ile de Porquerolles, DCØ1b

HG 1 YA (IH63b) worked via MS on 08.5.82, 0400-0530: UA 3 TCF
in WQ14a with 26-27-4b-8p-C . DX = 2182 km !!!

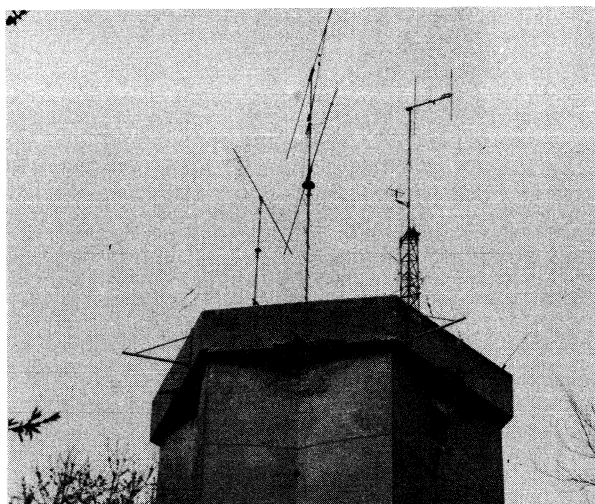


FOTO : QTH of OK1KKH/p - HJØ6c - 470 m A.S.L. - 6 km West of Kutná Hora.
144 MHz antennas : 10 ele PAØMS, 2x16 ele F9FT, repeaters ant.,
Equipements: FT 221 R + PA 250 Watts.
Good QTH for 2m work, very poor for 70 cm. HI.

see over

735 de *Papil OK1MDK*

EXTRAUDK continue:

13.12. 0630-0655 UR2EQ MT 38 37 mni C
1000-1200 G3WOF YR 27 - 5b 13p NC
1200-1400 G3WZT ZK 26 26 6b 13p NC
1600-1640 SMJEU HX 28 27 12b 13p C ufo QSO
1800-1855 UKCMAY TS 26 26 3b 16p NC
2200-2225 GW4LXO YL 27 26 7b 7p C
14.12. 0600-0705 UR5EDV QG 26 27 7b 9p C
0400-0700 F1EIT YG 27 26 5 12 NC
0650-0730 LA3VU FV 38 27 10 30 C
22.12. 2000-2155 UB5IOR SH 27 26 4 7 C
2200-0030 G3WZT ZK 27 26 9 32 C
3.01. 0600-0930 JA1K FX 27 27 5 3 C
All other skeds in Quatranids were NIL, vy QRM/no good
Conix.

tnx fer info, Pepik

Y22WE HM53a wk4:

6.12. 0900-1020 G4IJJ ZL 26 26 26 8p 6s C
12.12. 2200-2220 F6EZV ZG 27 27 mni 30 5 C
2300-2400 YU2RSD HF 26 27 20 16 2 C
13.12. 0200-0400 OHGNU MW 27 26 mni QRTTNG
2200-2300 UT5BN OK 26 27 7 5 1 C
14.12. 0000-0200 UA4FCW WN 26 -- 1 3 NC
0400-0515 GW4LXO YL 26 37 31 14 15 C
0515-0610 G4FWQ YN 26 26 19 16 5 C
2.01. 1200-1300 F1GHU BD 26 27 15 8 C
3.01. 0800-1000 UA3TEM WQ 26 37 5 3 4 NC
1100-1300 RPSLKW SJ 26 -- 2 1 NC
1300-1445 OHGNU MW 27 27 44 15 4 C
1800-1900 UAGYAF TE 26 27 8 9 10 C
2000-2130 UA3FET SO 26 26 25 16 4 C

NIL:UG6AD,RP5LKW,UA4SP,EA4GY,UA4FCW,EA7AGO

danke für die Infos,
1br Jürgen

11KTC ER44E:

3.01. 0800-0920 DL4EA DL 28 26 6b 2p C
1200-1245 YU7BOX KF 27 27 6 C
1245-1345 YU7NWN KF 27 27 16 7 C
1400-1500 G4DQG FM 26 26 6 2 C
1800-2000 Y22QG FM 26 26 5 5 C
2200-2350 GW4LXO YL 27 26 23 10 C
27.03. 0500-0700 SM6CHU ER 26 -- 3 25 NC
28.03. 0300-0700 LA6HL EU 26 26

NIL: LA9BN

tnx fer info, Alberto

OK3KFP II66j Radio Club "OMEGA", 814 12 Bratislava, CSSR.

8.12.81 2200-2325 UB5EFQ QH06d 26 26 16b 12p C
9.12. 2200-2325 SM0TOT JT51f 26 26 11b 11p C
10.12. 2000-2200 PA0AKN C111j 27 27 13b 9p C
11.12. 2000-2045 G4DSC Z063e 26 26 3b 6p C
2100-2135 UR2GZ HS04b 28 28 8b 4p C
2200-2340 F6FOE Y113c 27 27 12b 11p C
12.12. 0000-0055 G4IJE AL12g 26 26 3b 5p C
0200-0325 G4DEZ AL35g 26 26 mni C
0600-0755 SM2KW XY65e 26 26 4b 5p C
1800-2005 G3IWT ZL07h 26 - 5b 14p NC
2200-2355 UA3RFS HM06j 27 27 3b 10p C
13.12. 0240-0315 SM6EAN 26 26 mni C
0500-0555 F6BSJ G024f 27 27 7b 12p C
0800-0840 F6EZY YG10. 27 27 7b 15p C
1925-1955 UQ2GFZ NR57a 27 27 4b 7p C
2105-2135 UA3DHG TQ71c 27 27 mni C
14.12. 0450-0550 SM3JLA ? 37 37 mni C
2300-0050 GW3NYI X104b 26 26 4b 7p C
3. 1.82 0000-0105 PA0NIE CL03j 26 26 16b 17p C
0800-0850 LX1GR DJ21g 26 26 5b 3p C
1800-1855 G4IJJ ZL18b 27 27 8b 2p C
2100-2154 UA3LRO 0021h 26 26 25b 17p C

+ RANDOM

73 ops: Vlado OK3YDZ, Julo OK3YQC,
Julo OK3CFN

DF2ZC wk4:

1. from E029h: C SSR
30.04. 2000-2120 F1JG CD 26 26

2. from DK5pd:

3.01. 0200-0320 I6IDQE GD 26 27 C 2s
5.06. 0650-0710 OH5IY NU 26 28 14p 11b C 2s
6.06. 0750-0835 LA1K FX 27 26 C 1s

TX: 1 kW ANT: 1. 160 ele Group
2. 16 ele 1Y

73

Boyd

PA3BIY CW72C wkd:

29.08. 0400 UQ20W MQ 27 -- 5b 7p NC
12.09. 0800 F6DUL DC 26 26 16 15 NC
25.09. 0400 QHTTN/4 00 26 26 31 52 NC
27.09. 0400 QHTPI NW 27 27 31 52 NC
3.10. 0400 EA1QJ VY 27 26 102 36 C 2s
11.10. 0400 SK7JD IR 27 26 m a n y C 2s
15.11. 0035 OK2LG IL 28 27 m a n y C 7s
22.11. 0700 SF6FVN LV 26 27 15 15 C 1s
29.11. 0400 CH3TH IL 26 26 19 29 C 3s
8.12. 0600 SP9QSO JJ 26 26 16 22 C 1s
12.12. 0525 YU2RSD HF 27 27 m a n y C 4s
0600 IN3LHI FG 26 26 m a n y C 4s
13.12. 0315 I1ANP EE 27 26 m a n y C SSB
0500 OH3CU MU 26 26 m a n y C TROPO 519
0600 F6EZY YG 27 27 m a n y C 2s
0700 IW5AHP FD 27 27 m a n y C 8s
0800 LA3SU FV 37 38 m a n y C 47s
28.12. 0400 LA8OW EU 27 26 17 66 NC
31.12. 0600 LA8OW EU 26 26 12 60 C 3s
from /A QTH CW72C:
3.01. 1200 LA91C HB 47 37 10 23 C 2 x 30s!
1400 UA2FAY KC 27 29 7 14 C 5s
1600 YU6GAS JC 27 26 19 15 C 30s
1915 OH6NU MW 27 27 m a n y C 5s
1800 OK3RNV JI 27 26 NC no calls
Hrd RANDOM-YUTNNW, RA3YCP, UQ2GLO, I4BXN, OH6NU, YU3BS, I1ANP, YU2AAV, Y21PL, YU1400, OK3KPF, I6ZAU, OK3KHF, YU3RSH, U41MC, YU11EB, YU6NGS, I6WJEB, Y42EPL, YU3UIM, YU2RSD, YU1400, YU3ZSV, IY3EHW, RQ2GAS, OK10A, OK3TEY, HG8ET, SM2EFC, UA1ASH, RF2FED, EA3ADW
NIL:I2AV, YU3TSD

tnx fer info, dr Peter

DF4SO EI27d wkd:

11.08. 0400-0600 SM40K HT 36 37 8 3 C 37s
0600-0800 GDEUQ/P XO 27 27 9 8 C
0700-0755 SM5BEI JU 36 -- 2 4 NC
1100-1140 PA2HKR/LA 37 36 4 2 C
2200-2225 SM5CUI IT 37 27 10 8 C 10s
2335-2355 O29RW FP 37 -- 2 NC
12.08. 0435-0515 SK2HAB FP 37 -- 1 NC
0800-0850 YU1RB/1 JE 27 27 4 2 NC
1000-1200 EI6AS WN 26 -- 5 1 NC
13.08. 0800-1000 EI6AS WN 26 26 3 4 C
14.08. 0500-0550 SK7JD IR 27 38 7 7 C
0500-0700 YU1EU KE 36 27 3 6 C
NIL:SM7GEP, CH4KQ, F4JOGX, Y04AUL, YU2KDE, YU1EU, SM2BAI, I7CVG, UB5JIN, OH7UB, SM5NQ, YU2DI, EB1AK, GM41PK, OH3OH, 6AMJS, ON5FF/CH1, UK2RDI, UA3MB1, UR2RQT, UR2GM, SP6APV/8, SM2ILF, GW3NYI, HG1ESO.
vieren Dank für die Infos, Dieter
sni fer delay

F1FPHI wkd MS from ZH-Square:

9.08. 0437-0455 YU1EU KE 37 27 3b 6p C 15s
0500-0507 I6WJB HC 26 27 3 3 C 10s
0800-0821 OK2BFH IJ 37 26 3 mn C 14s
1400-1515 SM5BEI JU 37 26 3 12 C 2s
1500-1535 SM6GOU FR 37 37 3 mn C 15s
1800-1827 OZ1FDH GP 26 26 3 mn C 4s
2300-2329 HG4AT JH 26 26 3 mn C 35s
11.08. 0800-0840 OK1KKH HJ 26 27 4 8 C 2s
0800-0859 OK2VSO JJ 26 26 5 15 C 3s
2300-2324 LA2ET FT 37 26 m n 1 C 5s
2356-2400 HG5A ? 37 59 10 35 C 20s
12.08. 0021 YU1EU KE 27 38 5 12 C 30s
0500-0510 SM5DRV HR 27 27 3 3 C 20s
0600-0610 OK2IG IJ 37 26 3 3 C 10s
0716 OZ1OF EQ 51 51 3 3 C 10s
0800-0808 OH6JN KU 37 37 3 3 C 20s
0824-0835 I25IL GL 37 37 3 3 C 10s
0850 I22ME HM 37 37 3 3 C 30s
1005-1020 OB30BC II 37 37 6 12 C 10s
1400-1500 OK3AU KI 26 27 5 16 C 3s
2000-2100 OK1GW HK 26 26 5 16 C 3s
2200-2225 SF6GZ IL 26 27 4 12 C 2s
2226-2305 SF6BTI IL 26 27 4 12 C 2s
13.08. 0002 YU3AB ? 37 27 3 3 C 25s
0444 I1BSP DE 27 27 5 12 C 30s
0600-0720 OH2BHF LT 26 26 5 12 C 18s

merci beaucoup pour les infos

F6FTN CG55E wkd:

2.01. 2200-2300 I6WJB HC -- -- 2p NC
0900-1000 YU7PXB KF 27 38 25 5 C
3.01. 1000-1030 OK1DIG HK 27 -- 3 1 NC
1400-1500 OK3RNV JI 26 27 10 2 C
1500-1600 OB6WIG HG 27 37 24 10 C
1600-1700 YU30AB HG 27 26 5 2 NC

hrd 3.1.: F1FTH DK30W 28, 144.200; OZ4YV, SM3ZW3, SM4FXR 144.:
OK1DIG R27R27" during sked F1FEN-OK1DIG
4.1.: OK1IDF R26" during sked EA3ADM-OK1IDG

F6HLD ex F1EZE wkd from CG55a (OP: 6HLD, -6FTN):

13.12. 0300-0400 SF9DSD JK 26 26 7 3 NC 12s
0500-0600 Y23FG FM 26 -- 1 7 NC 2s
0600-0700 Y22HA GO 27 26 5 4 C 4s
0700-0800 DL7AFB GM 27 27 4 0 6s
0750 hrd SK4MPI 47 (23s)
14.12. 0500-0600 YU7AJH 26 -- 4 5 NC

NIL:DL6DAE, OK2VVD, I45IH, EA1ED
Sorry not qrv for bad wx (snow): DH8OAB, YU7QED

merci pour les infos , cher Bernard

SPBAOV LU533 sent his last MS-QSOs:

25.11. 1700-1900 UA3URD WU 26 27 5b 6p NC 5s
 27.11. 2200-0110 OH5JK BU 27 27 8 C 1s
 28.11. 0400-0600 1J1TQ DP 27 26 12 23 C 2s
 0600-0800 1V3HT GF 27 42 10 NC 5s
 29.11. 2200-2400 GM4COK FN 27 26 16 10 C 4s
 0500-0700 DP5HC YN 26 15 C NC
 2200-2335 1V3HWT GF 27 26 17 15 C 5s
 6.12. 0400-0600 G4CDD ZN 26 26 5 5 NC 1s
 0600-0800 PA2REH CG 27 26 9 5 C 5s
 8.12. 0400-0600 056WIG HC 26 18 41 C 1s
 10.12. 2000-2200 DP10H EM 28 27 18 2 NC 1s
 2000-2200 DP5HC FN 28 27 18 2 NC 1s
 11.12. 0200-0400 15WBE ED 27 26 16 45 C 9s
 0200-0400 F6BSJ GI 27 26 9 26 C 3s
 1800-2000 DL3WBG LV 28 7 10 NC 1s
 2200-2400 043RG ZN 27 27 12 23 C 1s
 12.12. 0000-0050 G4ERG ED 27 27 2 7 NC 5s
 0200-0400 DP5DZ ED 27 27 2 7 NC 5s
 0400-0600 DL6AE HG 28 26 11 15 C 2s
 1900-2000 056WIG HU 26 26 11 15 C 11s
 2000-2200 G41SE AL 27 27 15 27 NC 8s
 13.12. 0200-0400 053FQ Q3 26 15 5 NC 8s
 0600-0800 0218Q PK 27 27 15 23 C 11s
 2200-2320 DL6MA CN 27 27 m a n y C 16s
 2350-0005 PA2RUS DL 37 28 m a n y C 16s
 14.12. 0000-0110 DL5JR DL 37 28 m a n y C 16s

H+J RANDOM: PA4BLS, RUY G4ERG, DF5JT, 14EXN, PA6OOM, DF6OB,
 UQ2OLO, SW7AED, Y22ME, UR28G, SM5GKH, SK2KW, PA2REH
 NIL: UO5OGF, G4DEZ, UB5JIV, -JIN, -EFS, -LIQ, OZ1FDH, UA3URD,
 F6ERG, UD6DFD, GW3NYT

NOT QRV after 14 December evening:
 Y14BS, Y21YD, G41JJ, DF6OB, PA3XON, F6FOE, UA3TEM, OZ1DSK, LA9FY,
 DF7RG sorry, not have licence, not have running!

I'm very interested in MS skeds! Please look for my call sign
 in SP-QRV time on the VHP-Net.

FA6RDY	GM45e	wkd:	hope to hear you soon again	tnx fer info, dr Zbig	-20C
26.08.	2000-2145	11NVP	EE 26 26	13 9 C 1s	
5.09.	0400-0530	IA1K/P	FW 26 26	18 27 C 2s	
10.12.	0400-0600	EA1QJ	VD 27 27	11 26 NC 4s	
11.12.	2000-2100	SR2KW	KY 26 27	8 12 C 3s	
12.12.	2200-2400	UA2FAY	KO 26 26	23 23 C 2s	
12.12.	0200-0400	UK5MAV	TS 26	2 5 NC 3s	
12.12.	2200-2400	FA6AU	BZ 27 27	26 75 C 11s	
13.12.	0528-0600	YU2RSD	HF 27 27	RANDOM C 3s	
13.12.	0800-1000	YU100	KC 37 27	17 42 C 54s	
14.12.	0230-0300	HG8ET	KG 27 28	RANDOM C 4s	
29.12.	0000-0200	YU10NB	KE 26 27	17 18 NC 2s	

LALF (FZ42c) wkd MS in Percids

10.08. 0300-1000 FA3AJG DM 26 -- 4 8 NC
 1000-1100 Y22UI/P HU 26 27 15 11 C 1s
 0000-0200 DL3AAL EK 26 -- 15 ? NC 1s
 11.08. 0600-0730 F6BSJ CG -- -- 16 mnl C (odx)
 0800-0900 F1FJR AH 26 26 7 mnl C
 1000-1200 F6JHG BF 27 26 2 4 NC
 2200-2400 1J1TQ GF 26 27 1 0 NC
 0000-0200 YU3BS GF 26 -- 6 17 C 3s
 12.08. 0200-0400 DL03H GM 26 26 mnl mnl C 4s
 1310-1450 DL03F/P DO 27 37 38 mnl mnl C 4s
 2345-0030 OK3THY IJ 47 37 37 mnl mnl C 4s
 0035-0120 OK2KZ/P IJ 47 37 37 mnl mnl C 5s
 0112 O112 HI 26 27 1 2 NC
 0200-0400 OK28SY IJ 27 -- 2 NC
 1000-1200 G16UQ/P XO 27 26 mnl mnl C
 1250-1330 G16UQ/P HI 27 -- 4 18 NC
 2300-2400 045RFN UL 27 36 6 3 NC
 0600-0800 DL4EA JF 26 27 4 8 OF
 0800-1000 OK2HPR WO 37 36 5 3 NC
 1100-1300 G14SO IL 26 27
 2200-2400 SF6RNI

NIL: Y22HG, G4JIGU (asb), F6EQQ, UB5JIN, Y02IS, I3TUQ, DF6OF,
 GM4IPV, ON5SA, YU203B

1) QRM from Y24QO. 2) LALF QRT from 0600-0700
 3) First C SSB-MS from LALK.
 4) Random CW
 5) Random SSB- 1 burst qso - (40 sec)

The Opr. from LALK : -38W, -38AA, -8KV, -9VV.

OK28SY IJ37g op.: Pavel
 11.12.81 2200-2400 UK5IEG TI - - 5p N QRM
 12.12. 0000-0200 DL5JR DL65e nil hrd N
 0400-0600 SM3JAW JX nil hrd N
 2000-2200 F80P GF 27 26 17b 49p C max
 2200-2300 F6BSJ CG24f 27 26 9b 41p C
 0000-0200 PA6XMA DM44h hrd nil N
 0200-0400 OH3TH hrd nil N
 0400-0600 UA1ASA PU 26 - 7b 53p NC
 0600-0800 GW3NY YL44b 28 26 6b 24p C
 2200-2400 DL4EA DL hrd nil N
 14.12. 8W00-0200 SM6TOT JT51f 27 27 1b 9p NC

F6BSJ QG24f wk4:

10.10. 2305-0025 L48AK DS 26 27 12b 16p 1s C
 12.11. 2400-0600 UR2GZ MS 26 26 5 4 2s C
 28.11. 2400-2135 SP6GZ IL 26 26 15 7 5s C
 29.11. 1600-1850 SM6IOT IT 27 26 8 10 3s C
 30.11. 1800-1905 SP9CSO JJ 26 37 6 25 3s C
 1.12. 2000-2100 DF5HC FN 26 27 10 8 2s C
 1.12. 2200-2315 I6AKP GB 27 26 18 30 2s C
 10.12. 1800-1945 SP8AOV LL 27 26 10 25 2s C
 11.12. 2000-2145 OK1AFN IK 27 26 7 14 3s C
 12.12. 0200-0300 SK5BN IS 27 26 13 15 3os C
 13.12. 2200-2300 OK2S8Y IJ 26 27 14 28 4s C
 0400-0500 SP9SDS JK 26 26 9 9 C
 0500-0600 OK3KFF II 27 37 26 45 1os C
 2100-2205 UP2RJB IP 26 37 13 5 1os C
 2300-2345 IW3QBG GG 27 26 12 8 3s C
 0300-0345 IN3CGG FG 26 26 6 1 4s C
 2015-2100 HG1YA IH 26 27 14 7 2s C
 2100-2200 Y25HA GO 27 27 21 11 3s C

NIL:UK3MAV, OK2VIL, U22RGM, UA2FAY, OH5IL, OK3RWM, SP6AZT, SK2KW, I4GOC.

I have called UQ2GLO on the RANDOM frequency 144.102 the 12th from 0000 to 0200 GMT - very strong bursts but no answer from him! (j'ai fait la meme experience le 5 Janvier. -t-il pas de RX? -ZC)

merci pour les infos, Jean-Marie

OH2BWL MU56e wk4:

12.12. 1420-1620 OK1MAC HJ 26 26 8p 8b C 5s
 2000-2105 UA9FAD CR 26 27 mn C 3s
 13.12. 0000-0025 OK10A HK 27 37 mn C 2s
 1900-1935 YU2EZA IG 27 27 6 6 C 2s
 27.12. 0200-0400 DL6DFA EL 27 27 20 5 NC 1s
 0600-0800 PA3AQN CM 26 27 11 8 C 2s
 3.01. 0700-0800 DK6JF DL 26 26 6 3 C 1s
 0800-0900 G4NDZ AL 27 -- 4 3 NC 1s
 0900-1000 G8YR AL 36 26 mn C 6s
 1200-1400 F6KCP BI 26 26 mn C 8s

NIL:OK3TBY, UA6YAF, UK6DLZ, F6EQ4, YU7NWN, HG8CE, UK5IEC

tnx fer info, Esa

G4IGO YL39f wk4:

2.09. 0500-0655 DF5IZ/IA5 FC 27 26 73b 97p C 1,5s s9
 12.12. 2355-0045 UQ2GLO KQ 26 -- mni no answer!
 3.01. 1315 EA5ADW BB 38 38 1 C 2os SSB
 1552-1551 YU3ULM GF 27 26 mni C 12s s9

NIL:UR2GRM
 Hrd Quadrantids SSB/CW/F6CJG, HG8CE, I1ANP, SP3AZV?, I43WU, I4BXN,
 I5WJW, IW5ACZ, EA3ADM, F6PHZ, F7JG, I1BEF, I6WJB, YU2CNS, OE3OBC, I3LGF,
 OK3KFF, IW3QBC, OE5KE, YU3ZV, IW3QBF, Y23ED.

tnx fer info, Ken

UA3DHC wk4:

10.12. 2000-2200 UA4GDT YL 27 27 7b 9p C
 12.12. 0400-0600 OZ1EKI EP 26 27 11 17 C
 0600-0600 UA6YAF TE 27 27 7 2 C
 13.12. 1600-1800 OK1DPB HK 27 28 18 4 C
 2100-2135 OK3KFF JJ 27 27 8 5 C
 2200-2250 OK3AU KI 58 38 5 C
 2200-2250 OK3IG LI 27 27 6 5 C
 3.01. 1530-1610 OK2IG II 27 27 6 5 C
 2000-2200 PA3JIG DM 28 38 9 11 C
 2200-2225 FA6OOM DN 38 39 7 7 C

tnx fer info, Alex

UA3TRM WQ51j:

10.10. 1900-2400 SP9AI JJ 26 27 26 12 C
 11.10. 2200-2400 UA6YAF TE 27 27 3 6 C
 13.12. 2000-2200 UG6AD WA 27 27 2 4 C
 13.12. 2000-2200 SW5GKH HS 47 56 12 31 C
 1400-1600 SW6OMU FR 26 27 3 10 C

NIL:HG1YA, UA2FAY, IA9FY, DL1MF, DF6OB, SM7GWU, OK2KFF
 Hrd RANDOM: R050AA, OK3AU, UL5F, INZ, UK5IEC, UA4GDT

tnx fer info, Slava

UA3LBO QO21h:

12.12. 1600-1705 UA6YAF TE 26 27 8 9 C
 1800-1910 UA4CAV XM 26 27 4 3 C
 13.12. 2240-2310 R050AA OG 26 27 m a n y C
 1800-1915 OZ1DSK EP 26 26 5 7 C
 2200-2400 HG6NQ JJ 27 27 8 10 C
 1020-1110 UK6ABI TF 26 27 6 4 C
 1400-1425 DL1MBV FI 27 27 m a n y C
 1500-1514 DF9RJ GI 27 27 m a n y C
 2030-2050 DK2PH EL 27 27 m a n y C
 2055-2110 FA6GIS CM 39 38 m a n y C
 2110-2200 OK3KFF II 26 26 10 20 C
 2200-2350 G4M4IFK YP 26 26 m a n y C
 4.01. 2200-2250 DL3MBG GI 27 26 8 5 C

tnx fer info, Valera

F4HJ/p YG1pe:

7.06. 0700-0800 Y22QG FW 26 26 21p 5b NC
 0800-0900 OZ1DSK EP 26 -- 5 2 NC

NIL:DL4EA, I4GHL

On 7th of June the generator collapsed and couldn't be repaired
 on place. Apologizes to YU2JL, DL4EA, SM7DLZ, OZ1ASL, OZ1DSK, UK1PZ.
 I can't be qrv in persids (you're not alone, Jo, I also can't
 be qrv then -ZC) but maybe my friends will go to somewhere.
 I think to be qrv in geminids from BG with 800 W/13 ele.

merci pour les infos et la drôle carte, Jo
 malheureusement pas à Weinheim cette année, peut-être en '83?!

PSEVZ and FIELT wkd /p from ZG64o:

13.12. 2000-2100 G3IMV ZL 27 26 37b 11p NC
2100-2140 PEHND CM 27 27 42 11 C 3s
2200-2225 Y22ME HM 27 27 47 21 C
2300-2350 SP9EWU JK 26 27 16 15 C
13.12. 0000-0100 HG2SU JH -- -- 2 NC
0200-0300 OK1DIG HK 27 -- 2 NC
0400-0430 OZ4VV EQ 26 38 13 22 C
0500-0600 Y22QG FM 27 27 11 16 C 54s
0600-0655 PA3BIY CM 27 27 11 18 C TROPO
0700-0736 PA2NIE CL 26 27 8 12 C 2s
0800-0840 OK3KFF II 27 26 24 5 C
1600-1700 DL3MBG GI -- -- 3 NC
1700-1800 DF1CF PH -- -- 2 NC
1900-1939 EA3LL AB 27 27 3 18 C 4s
2000-2200 LA9BM HU 26 36 5 3 NC
2200-2217 SM4IMV ET 27 27 5 9 C
2300-2339 I6WJB HC 38 27 6 11 C 9s
14.12. 0022-0031 YU3ZVZ m a n y C
0052-0059 IV3WMT GF 29 27 38 m a n y C
0100-0111 DK1WB FM 27 27 13 17 C 8s
0111-0120 DL7AFB GM 38 37 14 12 C 7s
0128-0141 YU1EU KE 27 27 m a n y C
0200-0220 Y21PL GL 26 26 6 14 C 5s
0300-0400 OK1KKH HJ -- 2 NC
0400-0500 OK1MDK HJ 26 27 2 12 NC
0500-0600 LA6HL CS -- 2 NC
0900-1000 PE1PMU CM -- 6 NC
1700-1800 PA3EBI CM 26 -- 1 NC
1800-1900 LA6HL CS 37 26 8 2 C 10s
1900-2000 DJ8PB DL 27 27 5 11 C
NIL: Y05AVN/3, YU1AWW, DL4EA, SP6GSO, SP6FUN, LA5IH, DL5JR, C4DSC,
DL6NAA
Hrd RANDOM: D33VV, OB5XE, G4MWG?, OZ1EKI, F1ELL, I4BXN, P6DWQ, HG8ET,
FJG, DCTOI, OK1MDK, I6WJB, PA6RDI, OZ1CLN, G4HVH?
+ we learn only afterwe were back home why nothing on the
other SP skeds-hope we soon can get new ones!
// OZ1EKI-UK3MAV on the same frequency/54s burst with Y22QG
and OZ1EKI
Couldn't be qrv from YG because of very bad wx-very sorry!
It was impossible to get the material to the operating point,
so we had to go to ZG under snow to find another place.
We'll try better next time!

merci pour l'excellent report, Jo et Alain

YU2AAX IF57d:

10.12. 2000-2200 SP2EMV JM 26 27 6b 5p C
13.12. 0600-0800 UG6YAF TE 26 27 0 mm C
24.12. 2000-2200 UA5JAW FO 28 27 9 3 C
ttx fer info

UQ2GLO KQ49a wkd:

13.12. 2035-2240 DK3IAJ 27 27 7b 11p C RANDOM
14.12. 0315-0430 R05OAA 27 27 5 7 C " "
3.01. 0505-0625 UK5EDT 27 27 27 27 C " "
0800-0920 YU3ES GF 27 26 C
1200-1310 HG1YA IH 27 26 C
1600-1715 OGUG EL 27 27 C
2200-2310 Y02IS KP 27 27 C
4.01. 0300-0420 UB5EFQ QH 27 27 C
17.01. 0200-0320 DL4EA DL 26 26 11 6 C
0600-0810 G3IMV ZL 26 26 7 12 C
ttx fer info

PA6WWW OH63G wkd:

5.12. 2200-2400 SP6FUN IL 27 -- 3b 6p NC 1s
11.12. 0000-0114 I1ANP EE 26 26 9 19 C 2s
0200-0310 YU7AJH JF 36 37 15 36 C 7s
12.12. 0600-0730 RA3YOR RN 26 26 9 22 C 4s
13.12. 0200-0605 IG6QE GD 27 27 16 29 C 3s
2025-2050 LA1K FX 27 27 15 13 C 6s
2200-2300 LA3UU FV 27 27 21 37 C 5s
NIL: YU3TSD, YU2IQ, SP6FUN
ttx fer info, Wim

During September 1981 a short expedition was made by PA2VST,
PA6ASH, PA6RDI to Luxemburg. Two stations were operated on
144 MHz Meteorscatter: PA2VST/IX and PA6RDI, from CU16d and
DJ61f:

12.09. 0800-0900 OH7UE OW 26 -- 1 3 NC
0900-0930 SM3DCX IV 26 26 43 C 4s
0900-0930 CH2BET JA 26 27 38 C 3s
0800-1000 SM2ILF KY 26 -- 3 NC
1000-1200 HG8CE KG 26 26 9 23 C 1s
2100-2200 LA6HL CS 27 26 16 4 NC 2s
2200-2250 SM5AQJ JT 37 27 18 C 3s
0400-0525 SM7GWU HS 26 26 28 38 C 3s
0900-1050 YU2DG JF 26 37 25 4 C
1100-1215 I31GP GF 26 26 6 2 C
1300-1700 YU3TSD3HG GJ 26 26 14 C
1800-1930 LA6HL CS 26 26 21 C
1900-0200 UO3GQX OH 26 26 7 24 NC!
0200-0400 UQ2GLO IJ 26 -- 1 3 NC

NIL: YU2IQ, HG1YA, YU2KDE, YU1BW, YU2DI, YU2NTU, YU2COB, SP9AI

From the stations we worked we could copy I3LGP and HG8CE 319
TROPO for several minutes!

ttx fer info, Rob

YU3UXW HG56a wkd QRP MS with 1o W:

3.01. 1330-1430 PA2GFL DM 27 26 3b 8p C SSB 5s

Remember 144,400MHz and 144,145MHz R A N D O M !!!!!!!!!!!!!!!

F1FHI ZH63d wk d:

2	5.82	2000-0000	EJLL AB	---	---	Not QRV
3	5.82	0000-0200	OEWG HG	"	"	"
4	5.82	0000-0200	F1GH ZH	"	"	"
5	5.82	0000-0600	F1GJ CD	"	"	"
6	5.82	2030-0020	OUKRX MT	27	27	6b 20p 1s C
7	5.82	0000-2120	OEWG HG	27	27	7b 22p 2s C
8	5.82	0000-2120	UAGNBJ SS	27	27	12b 25p 7s C
9	5.82	0200-0320	UAGNBJ SS	27	27	12b 25p 7s C
10	5.82	0200-0320	UAGNBJ SS	27	27	12b 25p 7s C

* Our designated MS-Operator, DK3XT, did not arrive at the Expedition and failed to provide the necessary equipment. By kindly help from DF3XU and DF3HO we got a tape-recorder and the keyer at last. The crew of DK6IK apologizes and hopes to have more reliable MS-Operators next year.

G4IG0 YL38f:

8.05	2200-2400	OK1MDX	HJ	27	26	9	15	C	1.5s
9.05	0500-0700	LQAGM	EU	27	26	9	15	C	2.15s
10.05	2200-2400	IV3HWT	GP	27	26	9	14	C	1.5s
16.05	2200-2400	IV3PDH	GP	27	26	9	14	C	1.5s
18.05	0500-0700	P6URO	AD	27	15	11	NC	QRT	0600-not well!
21.05	0505-0650	I1ANP	EE	28	27	11	16	C	4s
23.05	0400-0500	SM7DLZ	IQ	26	26	17	12	C	4s

NTL:LABOW

NIT:LA80W

U050GF OG19b wkð:

	19. 08.	02.00-06.00	01.1KKH	HJ	26	26	6b	5p
		04.00-06.00	OK11KH	HJ	26 <td>26<td>16</td><td>0</td></td>	26 <td>16</td> <td>0</td>	16	0
21. 08.	11.00-13.00	03.3XUA	HH	26 <td>26</td> <td>26</td> <td>15</td> <td>0</td>	26	26	15	0
22. 08.	10.30-13.30	LK1XJH	DJ	26 <td>26</td> <td>7</td> <td>4</td> <td>0</td>	26	7	4	0
25. 08.	18.00-20.00	04.3MS	MV	26 <td>26</td> <td>22</td> <td>5</td> <td>0</td>	26	22	5	0
1. 09.	09.00-11.00	04.2P4S	KO	26 <td>26</td> <td>12</td> <td>0</td> <td>0</td>	26	12	0	0
6. 09.	06.00-08.00	2A3AGS	SP	26 <td>26</td> <td>12</td> <td>9</td> <td>0</td>	26	12	9	0
9. 09.	04.00-06.00	SN6J2S	IT	26 <td>26</td> <td>33</td> <td>12</td> <td>0</td>	26	33	12	0
10. 09.	04.00-08.00	YU3CAB	HG	26 <td>26</td> <td>98</td> <td>74</td> <td>0</td>	26	98	74	0

UB51CR SH39h:

11.12.	1600-1800	OK2WIL	JJ	27	--	1	NC
	2200-4050	OK2WFG	FE	27	--	1	NC
12.12.	0900-0950	14EN	FE	27	5	10	NC
	0900-0400	TD6FG	FE	27	50	many	NC
	0200-0400	TD6FG	GP	22	--	1	NC
	2600-2200	JA21RDH	GP	22	--	1	NC
	2600-2200	JA21RAY	GC	26	--	1	NC
	2200-0400	TC6AFG	MG	27	3	10	NC
13.12.	0900-0200	PA6DOM	DN	25	--	1	NC
	1800-2200	OK10A	HK	27	6	6	NC
	2000-2200	SN5GHK	HS	27	--	2	NC

see over

3.01. 2200-2300 SM5FRH HT 26 27 12b 5p 0
tnx fer info

3.01.

[illegible]

NIL:OK1MDK.TA7KK

Also hrd RANDOM:SM6AEK,YU7PXB,DF7YW,OZ1FDH,I1BEP

merci pour les infos

JA3TCF WQ14a wk4:

1.12.	1800-1850	UA6YAF	TE	27	27	27	6	19	C
3.12.	1700-1730	U5EAG	QI	27	27	39	mn	C	10s
	2000-2040	K51BG	TI	28	29	15	mn	C	
2.01.	2200-2315	U5PER	RI	27	27	15	36	C	
3.01.	0600-0800	O51EX	QZ	26	--	2	1	NC	
	1100-1300	U22KSQ	MD	37	--	6	2	NC	7s
	1350-1410	UK6AB	TF	27	27	19	9	C	
	1700-1900	UK1WB	FM	26	26	6	2	NC	

UIL:OK10A, DH1MAI, DJ5MS, HG1YA, UB5YCU, UB5GBY, UK5EAA, DJ6CA, YU3CAB,
LA1K

rd RANDOM:SM5BEI,SK7JD,SM5CUI,SM6IOT,UA3LAW,RO50AA,UT5BN,

tnx fer info

YU2CCB TF35C wkq:

3.01. 2200-2300 SM5FRH HT 26 27 12b 5n 0

Sub 5p C
tnx for info

UB51QR continues:

14.12. 1800-1900 UQ6GFZ NR 26 27 4 4 C
2200-2400 UA9TDB VQ 28 29 5 4 C
22.12. 2200-2300 OKIMDK HJ 27 28 5 4 C
2.01. 2200-2300 UGZAB Q 26 27 1 1 C
3.01. 0100-0100 OZTQF EQ 27 28 7 1 NC
0100-0200 SM4IVE HT 26 27 4 7 C
1800-1845 HG1IA IH 26 27 15 10 C
4.01. 1600-1800 UA91AQ GR -- 26 1 12 NC
2000-2200 UR2RQT WS 26 27 6 18 C

NIL:OK1AFN, OZ1FTU, DL8PB, OB55AE, DL6NAA, UB53AE, DK1WE, UT5DL,
OZ1EKK, DL5JR, DK3FW

tnx fer info, Alex

G-15556 hrd MS fm ZM13g:

12.11. 2016 Y22QG FM 27 CW sked
14.11. 0222 OESKE HI 26 CW sked
21.11. 2212 SP6GZ IL 27 CW sked
12.12. 0308 SP9CSO JJ 26 CW sked
1933 SP2EMX JM 26 " "
2350 F1JG CD 28 SSB .200
13.12. 0148 YU1EU KE 39 SSB .200
0234 YU2IQ HE 26 " "
0234 YU2IQ HE 26 " "
2050 OESKE HI 28 " "
2124 Y22ME HM 28 CW .100
2132 YU6NGS JC 26 SSB sked
2158 RA3YOR RN 27 " .200
2208 YU2TT 26 " "
2222 F1ELL 26 " "
2222 DK1VI HG 26 " "
2224 YU3ZV 39 " "
2234 YU3UAN GF 36 CW .100
2250 IV3HWT HE 26 SSB .200
2258 YU2IQ HE 26 " .400
2300 F1JG CD 27 " "
14.12. YU2IQ HE 26 " "
0006 I4IXN FE 27 " .200
0140 OKIMBJ HJ 27 " "
0218 I6WJB HC 28 " "
F1JG CD 38 " "
0246 IV3HWT GF 28 " .400
0300 I6WAVM FC 29 " .200
2208 DL7AFB GM 27 CW .100
2259 YU2IQ FM 26 CW sked
2055 IAKX

see over

G-15556 continues:

3.01. 2133 IAKP QB 26 CW sked
1647 HJ 39 SSB .200
2208 SP9CSO IV 27 CW .100
2218 SP9CSO IV 27 CW .100
2241 F1ELL 28 SSB .200
2256 YU5ES GF 37 " "

tnx fer info, dr Mike

IL3GP GF24g wkd:

16.08. 0430-0520 G30CH ZN 26 26 11b 36f 9s C
23.08. 0440-0610 G30CH ZN 27 26 18 95 1s C
30.08. 0430-0540 G30CH ZN 26 26 17 55 28s C
7.09. 2000-2200 F6DDV XI 27 27 20 27 15s NC
13.09. 0430-0600 G30CH ZN 26 26 15 52 1s C
20.09. 1100-1210 F4VSV/LX 26 26 3 5 C QH:GJ
27.09. 0430-0550 G30CH ZN 26 26 19 84 31s C
0450-0230 G4LJE/pak 27 27 15 44 2s C
0440-0550 G30CH ZN 26 26 18 85 3s C
3.10. 0500-0630 DL5JR DL 26 27 15 30 4s C
4.10. 0500-0550 G30CH ZN 26 26 3 52 15s C
11.10. 0540-0620 G30CH ZN 26 26 16 69 1s C
18.10. 0540-0620 G30CH ZN 26 26 11 43 4s C
25.10. 0540-0700 G30CH ZN 26 26 13 98 12s NC
1.11. 0540-0640 G30CH ZN 26 26 11 49 1s C
15.11. 0530-0700 G30CH ZN 47 26 20 62 37s C
22.11. 0530-0650 G30CH ZN 26 26 14 69 1s C
29.11. 0530-0630 G30CH ZN 26 26 5 33 2s C
5.12. 2000-2040 F6DDV XI 27 26 17 20 5s C
6.12. 0530-0620 G30CH ZN 26 26 11 56 C
12.12. 2000-2400 F6GJG BF 27 26 3 6 NC
2000-2040 F5DJE AF 27 26 8 7s C SSB
2100-2150 F1PHI ZH 27 26 6 18 15s C SSB
13.12. 0530-0630 G30CH ZN 26 26 30 72 18s C
20.12. 0540-0710 G30CH ZN 37 26 19 65 13s NC
27.12. 1450-1520 E1CZA WH 27 26 5 29 1s C
5.01. 1540-1600 G8VR 47 27 7 4 35s C RANDOM

tnx fer info, Giuliano

Personal remark:

DUEBS 3/82 the MS-Information will be printed by Roland/DL20M because I will be on a visit to EA8/7X3/8/SV/TA due to my QRL.
So please send your infos either to Claus/DL7QY or (until 30th August) to DL20M. After that day you can send your MS-Infos as usual to my address: PO Box 1612 2390 Flensburg
DL20M's address is: Roland Milker PO Box 1523 5400 Koblenz (only until 30th Aug.) Thank you in advance, Roland!

Best

E_s INFORMATIONS

by DK 2 ZF

E_s Summary Report 1981 from Bulgaria

LZ1AG MC64e

02.06.81:

1702 F5DE	AF22f	579	579
1722 F5LQ		59	-
1726 F8XT	ZF50e	579	-
1736 F6ELI		59	
1743 F6DBI	YI13d	599	599
1820 G3LEW	ZK09j	559	559

LZ1KRI LC58c

1645 F1GIV		59	hrd
1645 F1EUF		59	hrd
1647 F5DE	AF22f	599	599
1802 F1EIC		58	hrd
1815 F6ELI		59	
1818 F8XT	ZF50e	599	599
1820 F6ARQ		59	hrd
1830 F6DBP		59	hrd
1837 F0THF	AI46h	439	
1843 F6DBI	YI13d	599	599
1917 G4YIA	AL43f	599	599
1920 G3POI	AL43f	599	599

LZ1LX MC62c

1658 F5DE	AF22f	579	579
1710 F8XT	ZF50e	339	

LZ1ZB LC27a

1650 F6FUZ	AF56b	59	59
1651 F6ELI	ZE19j	59	58
1653 F1EUF	AF61e	59	59
1654 F8CF	ZD59g	59	59
1655 F8XT	ZF50e	56	57
1656 F6EGD	CE65j	56	56
1700 F60RO	AB21e	57	57
1701 F1JG	CD24	57	57
1702 F1DQW/p		57	54
1704 F1EIC	AF24g	55	54
1708 F1FVU	ZE01c	56	56
1716 F1ELI	ZE19j	59	58
1717 F1BYM	ZE25f	57	hrd
1722 F6ARQ	AF21e	59	59
1725 F6APB	ZE01a	56	55
1732 F1ENS	YI52f	57	52
1737 F6GLH	ZI72i	59	59
1739 F1CRP		56	56
1741 F1EMH	ZI33g	53	55
1850 F1DYT	0H73g	59	55
1855 G3VXM	ZK15d	55	59

LZ2KBI LDo5a

1641 F6ENS	CE25e	59	59
1655 F1JG	CD24g	59	51
1657 F6ELI	ZE19j	57	57
1700 F6EGD	CE65j	57	hrd
1701 EA3XU	BB51d	57	55
1702 EA6DBP		57	57

LZ2KBI LDo5a Cont'ed

1711 F6DIY	AF63a	59	59
1720 F8CF	ZD59g	59	58
1737 F6EMT	ZH63a	59	59
1741 F1FHI	ZH63d	59	59

LZ1CD MC64d

1742 F6DBI	YI13d	599	599
1815 G3POI	AL43f	599	599

07.06.81

=====

LZ1AG MC64e

1650 SM7ASN	GQ69c	579	559
1653 SM6AEK	GQ26b	579	569
1657 SM6AFH	GQ75b	579	599
1702 SM7BAE	GP26d	559	579
1704 OE1EYX	GQ73h	579	559
1755 DK70B	FM41d	599	599

LZ1BW LC27e

1338 UD6DFD	YA50h	59	599
1405 PA0WWM	CM63g	599	599
1408 DF2JQ	DL44h	599	599
1410 PA3BBI	CM53d	599	599
1412 PA0RLS		699	599
1502 RA6LRR	UI03g	599	599
1515 UK5IEC	TI32f	599	599
1520 UB5MHW	TI38a	579	599
1522 UK4ACO		hrd	
1603 OD5MR	RT08e		
1605 4Z4ZJ			
1625 OZ1FDH	GP22c	599	599
1627 SM6AFH	GQ25c	599	599
1630 SK7VHF	beacon	579	
1633 HB9QQ			
1639 SM6CIX	FS06c	599	559
1643 SM6EHY	GR23g	599	599
1645 SM6CMU	FR50b	599	599
1650 SM6HLN	FR30c	599	579
1651 SM6BZE	GS52e	599	599
1651 SM7AZ	GQ69c	599	599
1652 SM6DXX	GQ24c	579	599
1654 SM6AEK	GQ25b	599	569
1656 SM6EOC	GQ25f	599	599
1659 GQ73h	559	539	OE1EYX
1703 SM7BAE	GP26d	599	579
1703 LA3HF		hrd	
1708 SM6EUJ	GQ26b	559	559
1730 LA6HL	CS09c	599	599
1731 OH1...		hrd	
1800 OZ1CTZ	EQ67h	559	559
1807OZ4VV	EQ17a	599	599
1815 OZ5QF	EP75c	559	559

07.06.81
=====

LZ1LX MC62c

1330	ON5..	BKo8	569	hrd
1338	G3LEW	ZKo9j	579	579
1343	G3WZT		569	hrd
1352	UD6DFD	YA5oh	599	hrd
1358	DF8ME		599	hrd
1403	PA3AQM	CL13a	599	599
1405	PA3BBBA		599	hrd
1408	PA3BBBI	CM53d	599	599
1409	PA2DWH	CM72c	579	539
1412	PA0CSL			hrd
1432	UD6DFD	YA5oh	599	599
1515	F6DWG	BJ41j	599	599
1520	SM6CMU		599	hrd
1525	OZ6GW		599	hrd
1528	OZ1FDH		599	hrd
1533	OZ1CTZ		599	hrd
1536	OZ4VV		599	hrd
1645	SM6AFH	GQ53g	579	579
1648	SM6CMU	FR5ob	579	599
1653	SM6BZE	GS52e	599	599
1657	LA3SU		569	
1705	OZ1EYX	FQ73h	599	599
1708	SM7BAE	GP26b	599	579

LZ1ZB LC27a

1218	F1EAN	AG22f	59	59
1220	F1AGO/p	AG54d	59	59
1224	F1AIV	AG32b	57	56
1225	F1FHU	ZH63d	59	59
1225	F6CDK	AF15g	52	52
1229	F1CCM		55	hrd
1230	F6APE	ZH57b	59	59
1305	UD6DFD	YA5oh	59	59
1338	F1FBE		59	hrd
1401	PE1AHE	CL17a	55	52
1404	PE1DCY	CLo9a	59	59
1408	PE1DES	CM55a	57	57
1409	PA3AGN	CLo8f	52	59
1409	PE0BCS	CM76f	59	59
1410	PE1CCK	CM54f	59	59
1625	SM7FMX	GP35f	59	59
1633	OZ1CSI	HP75h	57	55
1637	SM6GFS	GR12j	59	59
1640	SM7IXU	GP49h	59	59
1644	SM6AFH	GQ25c	599	599
1646	SM6AER	GQ	57	57
1650	SM6LMD	GQ26b	57	55
1651	SM6EUJ	GQ25b	57	59
1654	SM6BZE		599	559
1700	SM6CMU	FR5ob	579	599
1706	SM6AFH	GQ25c	559	599

LZ1CD MC64d

1442	UD6DFD	YA5oh	599	599
1615	SM6CMU	FR5ob	599	599
1624	OZ1FDH	GP	599	599
1634	OZ9QV		599	599
1643	SM7IXU	Gp49h	59	59
1656	SM6AEN	GQ	599	599
1657	SM6AHF	GQ	579	599
1706	OZ1CJF	GP	599	599
1718	OZ1EYX	GQ	559	599
1726	OZ1CTZ	EQ	579	599

LZ2KBI LDo5a

1230	F6FXP	DD27g	55	55
1235	F6CBK	BF17g	57	54
1243	F1EAN	AG22f	59	57
1249	F3ZZ	AG37g	59	57
1254	F6ETI	YH24c	59	56
1256	UD6DFD	YA5oh	59	59
1320	F1DQK	BI23a	59	52
1402	G3IMV		599	599
1403	PA0UTF		599	559
1406	DJ9CZ	DL71a	599	599
1408	G8FNU	ZMo4c	579	599
1410	G3LQR	AM67b	59	59
1411	G8FNU	ZMo4c	59	59
1412	G8VLL	AM27f	59	59
1506	UW6MA	TH69c	599	579
1507	UK6LDZ	ZH65c	599	579
1611	4X4ZJ	RR	57	57
1621	SM7FMX		59	59
1623	OZ9QV	GP22f	59	59
1624	SM7BAE	GP	59	59
1625	SM6CMU	SM6CMU	FR5ob	59 59
1626	SM7IXU	GP49h	59	59
1628	OZ9FW	GP31b	59	59
1629	DM6DXX	GQ24c	59	59
1631	SM6BL	GP12b	59	59
1632	SM6AEK	GQ25b	59	59
1632	SM7FJW	GP	59	59
1633	SM7FMX	GP35j	59	59
1633	SM6EOC	GQ	59	59
1634	LA3EQ	CS29c	59	59
1635	OZ1CJF	GP24f	59	59
1636	SM7D0X	GQ65d	59	59
1638	OZ2GC	FP	59	59
1641	OZ4EM	HP74a	59	59
1644	SM6FKF	GS78f	59	59
1645	SM6GFS	GR11g	59	59
1645	SM6LMD	GQ25b	59	55
1645	SM6AEK	GQ25b	59	59
1646	SM6BLZ	GR76f	59	59
1646	SM6GUS		59	55
1649	SM6EUJ	GQ25b	59	59
1649	SM7EML		59	59
1650	SM6IKB	GR31h	59	59
1652	SM7HFW	GQ69d	59	57
1653	SM7IXU	GP49h	59	59
1655	SK7DD/7	GQ76j	69	69
1655	SM7BHM	HQ71c	59	59
1657	SM7JLE	GQ76j	59	59
1658	BA80W		59	57
1659	SM7D0X	GQ65d	59	59
1702	SM6GWM	GR12b	59	59
1704	SM6DKD		59	59
1706	SM7LHI	GP36h	59	59
1719	OZ5GN	EQ76b	59	59
1724	LA3EQ	CS29c	59	59
1726	OZ10F	EQ78b	59	59
1726	OZ1BGQ	FP	59	59
1731	OZ1CFO	ER79j	59	59
18030	Z3ZW	F018	59	59
1807	LA6HL	CS09g	59	59
1824	DL2LAH	E029a	59	59
1827	DK6XY	FNo5f	59	57
1828	DG2LD	FNo2g	59	59
1830	DD4LK	F074d	59	59

09.06.81

LZ2KAD MC17b

1011	F9LT		579	579
1322	OZ5QF	EP75c	599	599
1332	DK1K0	FN12g	599	599
1334	DL7RU	GM37e	599	599
1345	DF5YX	GM37e	579	599
1353	DJ9YE	EN14a	579	559
1355	DK6XY	FN05f	599	569
1356	DF3XD	FN05f	599	599
1417	DF3XU	FN31a	599	599
1435	DL5LH	F052j	599	559
1440	OZ10F	EQ78b	599	589
1610	DJ8QQ	EN14	599	589

LZ2QG MCo7e

1325	OZ5QF	EP75c	599	599
1414	DK1K0	FN12g	599	599

LZ2KRI LC58c

1409	OZ1EYK	GP73h	wkd	
1410	OZ1FTU	GP23h	wkd	
1420	Y22ME/p	HN22j	wkd	
1425	OZ1EYX	GQ73h	wkd	
1426	Y22SA	FN18b	wkd	
1428	SP6ASD	HL39c	wkd	
1428	OZ9QV	GP22f	wkd	
1429	OZ4VV	GQ17a	wkd	
1434	OZ5XV	GP11e	wkd	
1435	OZ1FGP	EQ68a	wkd	
1437	DK1K0	FN12g	wkd	
1440	OZ10F	EQ78b	wkd	
1443	SM6JSD	GQ03e	wkd	
1447	OZ1CLL	GP23c	wkd	

LZ1LX MC62c

1334	Y22SA	GNo8b	599	599
1338	OZ4VV	EQ17a	599	599
1345	OZ10F	EQ78b	579	559
1348	OZ1FGP	EQ68a	579	559
1353	OZ4VV	EQ17a	599	599
1356	OZ5MM		599	hrd
1357	Y22SA	GNo8b	599	599
1358	OZ3ZW	F018e	579	599
1400	Y22ME/p	HN72j	599	559
1412	Y25JE/p	HN72j	599	579
1413	OZ1BVW	EP48a	599	559
1424	OZ5G..		559	hrd
1428	OZ3US		569	599
1435	OZ3WU	EP66e	569	559
1437	SP6ASD	HL39c	599	599
1558	OZ1EX		56	
1603	OZ3ZW	F018c	559	599
1629	OZ5QF		579	559

LZ1ZB LC27a

1600	OZ5IQ	FP38f	59	59
1601	OZ1FGP		57	hrd
1602	OZ4VV	EQ17a	59	59

LZ1CD cont'ed 11.6.81:

1510	UB5IPF	SH10a	59	57
1709	LA6BQ	CT57		

LZ2KBI LDo5a

1335	OZ9QV	GP22f	579	559
1341	Y22SA	GNo8b	599	599
1428	OZ4MM	EP	59	59
1428	OZ1EKI	EP49c	59	59
1428	OZ1ELF	EP49h	59	59
1429	Y22M/p	HN72j	57	56
1431	OZ1DA0	FP44f	59	59
1432	Y67MH	GM37b	59	59
1435	OZ1BVW	GP48h	57	55
1435	Y25JE/p		57	55
1438	DL7YW	EM	57	58
1440	OZ1ELF	EP49h	59	59

LZ1CD MC64d

1606	OZ1DPR		599	599
1615	OZ1EQX	GP	579	599
1640	DF1CF	FH	579	579

10.06.81
=====

LZ1AG MC64c

1457	I1DMP	DF79j	599	599
1500	F80P	CG36f	599	599
1506	F9DI	CD04c	599	599
1524	F6CEL		559	hrd
1529	F8ZW		579	hrd
1530	DF9IC		559	hrd
1532	I1J7Q	DF79j	599	599

LZ1LX MC62c

1453	IW3VG		559	hrd
1458	IS9...		559	hrd
1505	I1DMP	DF79j	599	hrd
1507	F80P	CG36f	599	599
1512	F9DI	CD04c	599	599
1600	F80P	CG36f	569	569

LZ2KBI LDo5a

1455	EA3AIR	BB41e	59	59
1456	EA3XZ	BB22e	59	59
1458	EA3ADW	BB22g	59	55
1505	F1JG	CD24g	58	55
1524	F1EQF	BC25d	57	58

11.06.81
=====

LZ2KBI LDo5a

1445	UB5IEC	TI32f	599	599
1451	UB5MPP	TI54d	599	599
1459	RA4AC0	WK78j	59	59
1502	UK5IHE	TI71d	599	599
1510	UB5IPF	SH10a	59	57
1709	LA6BQ	CT57g	58	55
1711	LA1A0	CT57a	59	55

LZ1CD MC64d

1612	UK5IEC		599	599
1624	UB5MVM		599	599
1626	OZ1CGP		599	599
1628	OZ1FFP		599	599

17.06.81
=====

LZ1LX MC62c

1445	EA3CSX	569	hrd
1515	EA3ADW	599	hrd
1530	EA3MR	579	hrd
1556	F9DI	CD04c	569 579

LZ2KBI LDo5a

1517	EA3ADW	BB22g	599 599
1522	EA5AMR	ZZ47a	59 55
1600	EA3AXV	BB51a	57 55
1602	EA3LL	AB56b	59 59
1610	EA3XU	BB41d	59 59

LZ1ZB LC27a

1527	EA5AMR	ZZ47a	57 55
1603	F1EQF	BC25d	59 55
1615	F1FAW	AE77a	57 52

30.06.81
=====

LZ1AG MC64e

1523	DF10H	EM57j	579 559
1536	DF7EV		559 579
1538	PA3ANV	DM65a	599 599
1539	PA0PKD		559 hrd
1540	DF7EV	GI16f	599 599
1540	DK1PZ	FL22h	599 559
1542	OK1VBN	HI03a	599 559
1543	PA0PKD	DN64h	599 599
1543	DK2PR	EN76g	599 599
1552	DJ3TF	FJ50g	599 599

LZ1LX MC62c

1525	DF10H	EM57j	579 599
1537	DK2PR	EN76g	579 599
1538	DK1PZ	FL22h	599 599
1545	DK1PZ	FL22h	599 599

08.07.81
=====

1355	UQ2GL0	KQ49g	559 559
1417	OH2BBF	MU65d	579 579
1430	SM5CNQ	HS49g	599 599
1437	SM5CBN	HI26e	599 599
1443	SM4XYK		559 599
1734	UK3MAV	TH75f	579 579

LZ1LX MC62c

1328	UC2ABN	NN18c	599 599
1343	UR2EQ	NT61c	579 559
1403	RQ2GAG	MQ01g	569 559
1428	SM1BSA	JR22e	599 599
1452	SM5CNQ		599 599
1454	SM5DLZ	IQ53h	599 599

LZ1ZB LC27a

1420	UQ2GL0	KQ49g	599 589
1425	RP2BDC	KP36j	599 599
1442	UQ2GFC		599 579
1454	SM4AXY	HT55c	599 599
1457	SP2JXN	J043d	599 559
1500	SM4FXR	HT57g	599 599
1501	SM40Y		559 hrd
1520	SM4COK	HT56c	599 579
1524	SM4GVF	HT76a	579 579

09.07.81
=====8=====

LZ1ZB LC27a

1705	DF1CF	FH	519 hrd via Tropo
1734	GU8FBO	YJ48g	59 59
1742	G8JUM	ZL31c	59 59
1743	G8IXG	ZL46g	59 59
1745	G8JAY	YL10c	59 59
1749	F6EMT	ZH63a	59 59
1750	G3SEK	ZL	59 59
1751	G8MFJ	ZL21c	69 69
1753	G8NGO	ZK09b	59 59
1753	G3WZT	ZK09j	57 57
1755	G8TKF	YL50c	59 58
1758	GW4CQT	YL25d	59 59
1800	G4IGO	YL38f	59 58
1801	F6FLB	AK10h	56 57
1803	G3NSM	ZL14e	59 59
1805	G3VYF	AL23j	59 59
1806	G8TFI		59 hrd
1806	G8SFM	YL39b	59 59
1807	GJ8SJJ		57 57
1810	G3TA	YL20d	57 59
1812	G3C0J	ZL48d	56 57
1813	G8TFI	ZL38c	59 55
1815	G8XQS		57 59
1815	F1DBN	AK19c	59 59
1816	G8EGF	AL61g	59 55
1817	G3LYW	ZK	59 57
1818	F1DFF	BL70e	59 59
1820	F1C0F	XI45f	59 59
1822	F6GYT	ZI72j	59 59

21.07.81
=====

LZ2KAD MC17b

1340	OZ1DJJ	GP22b	559 559
1345	OZ1CLL		599 599

LZ2QO MC07e

1345	OZ1FDI	GP22b	599 559
------	--------	-------	---------

10.08.81
=====

LZ1AG MC64e

1628	F8CS	CH56h	599	599
1632	HB9QQ	EH45e	599	599
1633	F80P	CG36f	599	599
1634	F6AKW	BI33d	599	599
1636	HB9QR	EH37j	599	599
1638	F1FJM	AH34j	599	599
1639	F6BSJ	CG24f	599	559
1641	HB9NCY	D 69d	59	599
1643	F6FTC	CG32g	599	599
1645	F6BSJ	CG24f	599	559
1646	HB9AOF	DG61f	599	569
1648	HB9BZA	DG61c	599	599
1649	F0CZG		599	599
1651	F3KH		579	579
1658	11NU	DF78c	599	599
1706	F5AD	CD12a	599	559

16.08.81
=====

LZ1AG MC64c

0604	DF7IS	EJ73h	569	559
0646	F8CS	CH56c	599	599
0704	HB9OF	DGo5a	599	599
0719	F6FTC	CG32g	599	599
0720	F6GBY	CG32g	599	599
0722	HB9ACA	DG14d	579	579
0730	F6ARQ	AF21c	559	579
0732	F80P	CG36f	599	599
0743	F1EAN	AG22f	59	59
0745	F3ZZ/p	AG32b	59	59
0746	F6CFT	CG15g	55	59
0749	F1AFJ	AG13c	59	57
0752	F1CTK	CG22d	57	56
0758	F6BQX	ZH67f	59	59
0802	F6GBY	CG32g	599	599
0808	F1BRV	BH76g	55	59
0810	F1FTB	ZH45d	59	59
0813	F8AU/p	AG23d	56	55
0814	F6CWO	AF17b	55	58
0820	F1QV	AG72g	56	53
0832	F1DLE	ZG19b	55	55
0837	HB9BCU		599	hrd

LZ1CD MC64d

0708	HB9OF	DG	559	599
0710	F8CH	CH	599	599
0714	F3KH	BH	579	599
0718	HB9ACA		579	599
0726	F6FTC	CG	599	599
0732	F9DI	AD	559	599
0735	F80P	CG	599	599
0743	F6ARQ	AF	559	599
0747	F2IG	AD	559	599
0755	F6GBY	CG	599	599
0808	F8DM	AG	599	599
0811	F1FHH		599	599
0814	HB9RO	DG	599	599
0822	F6BQX	ZH	599	599
0832	F6FTN	CG	59	59
0835	HB9MMC	DG	59	59
0837	F1ZU/p	BH	59	59

LZ1CD MC64e C'ed

0839	F6APE	ZH	59	59
0840	F1ECM	AH	59	59
0841	F1FTB	ZH	59	59
0842	F6BQX	ZH	59	59

LZ2KBI/p LD24c

0710	F9DM/p	AG60g	55	52
0720	HB9MMC	DG61a	59	59
0721	F6CWO	AF17b	59	59
0722	F1EQE	ZF49a	59	59
0724	F6ARQ	AF21a	59	59
0724	F1FVP	ZF80f	59	59
0725	F6CJG	BF21j	59	59
0726	F1GIW/p	AF71d	59	59
0726	F8ZX	ZF35b	59	59
0728	F1DVI	AE09j	59	59
0730	F6DQH	BF63f	59	59
0732	F1EIE	ZF78h	59	59
0734	F1CBL	ZE18a	59	59
0734	F1GFV	AE25e	59	59
0735	F1FHI/p	BE24c	59	59
0735	F6GEV/p	BE40a	59	59
0736	F1FHG	AE14a	59	59
0738	F1FQU	BF16j	59	59
0739	F1GFC	AF63c	59	59
0739	F1AVR	CF19f	59	59
0740	I2MCD	FF61f	59	59
0741	F1ELZ/p	BF59j	59	59
0743	F1QV	AG72g	59	59
0745	I2SRR	EF35f	59	59
0745	F1AGO	AG32b	59	59
0746	F1DHS	CD57d	59	59
0746	F1AHQ	DG71h	59	57
0747	F1AQC	AF17h	59	59
0750	F1ETM	BE03f	59	59
0751	F1ACD	AF15j	59	59
0753	EA3ADW	BB22g	59	59
0754	F5VU	AG62c	59	59
0755	F1CXP	ZF29h	59	59
0755	F6ERQ	AF21e	59	59
0756	F6BSI	AF68j	59	56
0759	F1EBL	AF53h	59	59
0800	F6BAB	AF64j	59	59
0801	F3TJ	BF18c	59	59
0804	F1BKM	ZF08a	59	54
0805	F1HAE	AF31g	59	59
0806	F6DND	CF61j	59	59
0808	F6BZA/m	BF23j	59	59
0810	F6BMC	ZG30f	59	59
0811	F1EIC	AF22g	59	59
0813	F6FTN	CE55g	59	59
0815	F6CBK	BF17g	59	59
0815	F6CJ	AG13a	59	59
0816	F1DOK	ZF29c	59	59
0818	F3ZZ/p	AG32b	59	59
0819	F6CFT	CG55g	59	59
0820	F1DME	ZE80h	59	59
0821	F80P	CG36f	59	59
0822	F1DIS	CF15j	59	59
0824	HB9MMC	DG61a	59	59
0824	F1AIA	BF16d	58	59
0826	F1DYD	CF13f	59	59
0827	F6FEE/p	ZE74f	59	59
0831	F6EXK	AF15j	59	59
0832	F6CRA	BF18j	59	59

0832c

E_s-reports 1981 from Finland submitted by OH2CX

=====

o7o6.81

OH1AJ LU41c

1637	I6WJB	HC42g	599	599	2o71km
1643	YU2RG0	HF2oc	599	599	1675
1658	I6KLE	HC42h	599	599	2o66
1658	YU2CTF	HF2oc	599	599	1675
17oo	YU3HI	IG41b	599	599	16oo
171o	YU2IQ	HE77h	599	599	1873
1724	YU2BSF	GE2oe	599	599	1825
1823	I5HBQ	FD25g	599	599	2oo9
1833	I3YXQ	FF46b	559	559	1812km

OH1DY KV68e

17o2	YU3IQ	HE77h	59	59	1938km
1715	I6CTR	HC53h	55	59	2141
1719	I4JMY	FE25e	55	55	1961
1724	I5WBE	FD25h	59	57	2o6o
1727	I4BXN	FE38e	59	59	196o
1731	I5EI.	FD38c	52	52	2o62
1746	I AII		52	59	

OH1EQ LV12c

1626	I6WJB	HC42g	599	599	222o
1652	YU2HI	IG41b	599	599	1749km
17o5	YU2IQ	HE77h	59	59	2o22
1714	I6CTR	HC53h	57	55	2225
1719	I2FHW	EE17f	59	55	2o76
1815	I5WBE	FD25h	57	55	2146km

hrd OE,F and DL-stns

OH1IR KV78b

1648	I7HVP	IB74c	58	55	2251km
1714	I6KLE	HC42h	559	559	2127

OH2BAZ MU54h

1813	I2MUT	FF43e	57	54	19o5km
182o	I2FAT	EF77g	55	59	198o
1828	I2FHW	EE17f	55	55	2oo9
183o	IW2BHT/2	EEo7j	199o	59	55
1834	DB1RG		55	55	
1836	DJ5WM		55	56	
184o	I2SRR	EF35f	59	59+	1948km

OH2BEW MU64c

1649	YU3CAB	HG55f	599	599	1681km
1658	I6CTJ	GD38b	58	59	1993
17o5	I0DLP	GB03f	59	59	22o3
17o7	I0SSW	GB12h	59	59	22o7
17o9	I0CUT	GB03h	59	59	2194km
1718	IW2BHT/2	EEo7j	55	559	1984
1731	I1KCT	EF44g	55	59	1958
1744	I2FHW	EE17f	59	52	2oo3km

OH2BBX MU56a

1638	OE6BRG	HG18c	59	56	1627
1647	I0MNI	GC51e	55	55	2194
17o8I0CUT		GB03a	59	59	2214km
171o	I0DLP	GB03f	59	59	2224
1718	I4CIV	GE73c	55	55	1994
183o	I1KTC	EF44g	59	59	1979km

OH2BBF LT15b

163o	I6WJB	HC42g	599	599	2o25km
1634	YU3ES	GF39d	599	599	17o5
1635	OE3PUW	II72j	1379		579 599
1638	OE1RXA	II62b	599	599	136o
1639	YU3USB	HG38c	599	559	1555
1641	IW3EKZ3	HG3od	599	599	1541
1642	YU3ZV		599	599	
1644	OE6JLG	HH69e	579	559	1495
1648	YU2HW		579	569	
1653	YU2RPE	IG43f	579	599	1556
1656	I0YWK	GB03j	599	599	2116
1658	YU2HBC	HF19j	599	599	1633
17oo	YU3HI	IG41b	599		daded out
17o1	YU2TCF	HF2oc	579	579	1627km
17o3	YU2HBC	HF19j	599	599	1633km
17o4	I6KLE	HC42h	599	599	2o2o
17o8	YU3TJW3		579		faded out
1711	I0CUT	GB03a	59	59	2111
1712	I0EU		59		faded out
1713	I0SSW	GB13h	59	59	2126km
1715	I6CXD	GD38a	59	59	1915
1716	IW0AKA	GB22b	59	59	2141
1716	YU2NDV	GF79d	599	59	1758
1717	IV3AVZ	GF3of	59	59	1691
1718	OE8HSK	HG22d	59	59	1572
1719	IW3QIO	GF3of	59	59	1691
172o	IW0AKA	GB22b	59	59	2141km
1721	I0DLP		59+	59+	
1722	YU3UQA	GF39d	59	59	17o6
1723	OE8TPK	HG31f	59	59	1593km
1724	YU3ULM	GFo9j	59	59	1663
1725	YU3UTD	GF39d	59	59	17o6
1726	I4CIV		59	59	
1726	I0FHZ	GC21f	2o52km	59	59
1731	I6FTC	CG23g	59	59	1899
1731	DL8GP	DJ66h	59	59	
1735	F1CCC	CG22c	59	59	19o2
1738	HB9PPT	EH43e	59	55	1673
1742	HB9YB	EH54	59	56	167o
1742	DC1SV	EI	59		
1743	F1FAW	CH71	59	59	1874
1744	HB9MFL	DH69	58	59	1719
1744	IW1AJJ	DF79d	59	59	1933
1746	I1KTC	EF44g	59	59	1862
1747	F6BNY	CEo6b	59	56	2o32
1748	F0BJT	DG61g	59	52	1882
1751	I2TUG	EF43c	59	59	1845
1751	I1DMP	DF79j	59	59	1931
1817	I2MUT	FF43e	59	59	18o2
1819	DD0MF	FI78d	59	59	15o7
182o	DB1RG		59	59	
1825	I5HBQ	FD25j	599	599	1972
1829	I2FHW	EE17f	59	59	191o
183o	IW2BHF	EEo7j	59	59	1891
1835	DD7MH	GI53a	59	59	1445
1837	I2FAK	EF77g	59	59	188okm

+ + + + + + + + 147

07.06.81
=====

OH2CX MU65c

1619	I6KLE	HC42h	599	599	2098km
1620	YU2MM	IFo5f	599	599	1676
1624	YU3ES	GF39d	599	599	1789
1625	I6KLE	HC42h	2098	599	599
1627	I3EKZ		599	599	
1634	I3LDS	28c	599	599	
1634	YU3ES	GF39d	599	599	1789
1638	IW3EKZ	GFo3a	599	599	1778
1639	YU3ZV	HG30d	589	569	1615
1640	YU3TS		599	599	
1642	I6WJB	HC42g	599	559	2102
1646	YU3BH	HG73a	599	559	1709
1648	IØYWK	GB03j	599	559	2198
1649	YU3HI	IG41b	599	599	1628
1655	YU3TJW/3		599	599	
1656	YU3USB	HG38c	599	559	1634
1657	YU3 G		599	599	qrm!
1658	YU2RGO	HF20c	599	599	1703
1701	YU2HBC	HF19j	599	599	1710
1705	IØCUT	GB02a	59	59	2199
1710	DJ4EJ	EI73c	559	579	1709
1712	IØPGY	GB14d	44	56	2209
1714	I4VIV	GE73c	59	59	1974
1716	I4PPH	GE62f	59	59	1975
1717	OE3LFA/I2	GE63f	59	59	1969
1720	I3LGP	GF24g	599	599	1804
1745	F6CJG/p		559	559	
1745	HB90Q	EH45e	599	599	1760km
1747	DJ4EJ	EI73c	559	579	1710
1757	DF1CF	FH23j	59	59	1673
1808	I1DMP	DF79j	599	549	2031
1816	I1KTC	EF44g	59	51	1961
1821	I3ZVN	FF27b	59	59	1839
1824	DG6CAH	FI77a	54	55	1604
1830	I2FHW	EE17f	54	55	2006
1837	IW1A3J	DF79d	59	59	2033
1838	I2TUG	EF34c	59	59	1944
1839	I1AXE		59	59	

OH2HK MU66b

1627	I6WJB	HC42g	599	559	2112km
1629	YU3ES	GF39d	599	599	2074
1647	IØSSW	GB10a	59	59	2196
1652	I6CXD	GD38a	59	59	2006
1658	YU2IQ	HH77h	59	59	1984
1706	I4GOC	GE73c	59	59	1594
1707	I4GIV		57	59	
1708	IWØBHY	GB13b	59	59	2215
1710	IWØAKA	GB22b	59	59	2233
1715	OE3LFA/I3	GE63f	59	59	1979
1720	I4HWP	GE63f	59	59	1979
1725	I4PPH	GE62f	59	59	1984
1741	I1DMP	DF79j	599	559	2043
1751	HB99QQ	EH45e	559	539	1771
1812	I2FHW	EE17f	59	59	2016
1825	IW2BHT	EE07j	57	59	1997
1833	DF1CF	FH23j	55	57	1684
1838	I1CPN/1	DE59c	59	59	2114km

OH2BUW MU56b

1617	I6WJB	HC42g	559	559	2124km
1623	I4PPH	GE62f	59	59	1996
1624	IW3EKZ	GFo3a	59	59	1800
1629	IV3AVZ	GF3of	59	59	1796
1629	I4HWP	GE63f	59	59	1992
1629	OE6LOG/6	HG02f	59	59	1655
1631	YU3RDL	HG73j	55	59	1735
1632	OE6FNG	HG17g	59	59	1637
1634	OE6WIG	HH47j	59	59	1570
1634	I6CXD	GD38a	59	59	2018
1635	YU3ZAB	HG55f	59	59	1704
1636	YU3UVD	HG44b	59	59	1684
1637	I4BXN	FE38c	59	59	1973
1638	OE6HBD	HH68e	59	59	1596
1639	YU3TCW/3	HG44b	59	59	1684
1640	OE6WOG	HH78j	59	59	1605
1643	YU3TRC	HG64f	59	59	1722
1643	YU3DRJ	HG64f	59	59	1722
1644	YU3TRN	HG64f	59	59	1722
1645	OE6WEG/6	HH78d	59	59	1607
1645	IØFHZ	GC21f	59	59	2150
1646	IØAKP	GB13h	59	59	2231
1647	OE6MHG	HH78g	59	59	1606
1649	IWØAKA	GB22b	55	55	2245
1651	OE6BHG/6	HG26j	59	59	1654
1654	YU3IQ	HE77h	59	59	1923
1657	IØDLP	GB03f	59	59	2226
1659	IØEU	GB03f	55	55	2226
1700	YU2RHU	HF29g	59	59	1746
1701	YU2NDV	GF79d	59	59	1863
1702	YU3TTL		55	55	
1703	YU3DCW/3	HG44b	55	59	1684
1703	I4GOC	GE73c	59	59	1996
1707	IØSSW	GB13h	59	59	2231
1708	IØWWJ	GB22a	59	59	2247
1711	IØAKP	GB13h	59	59	2231
1718	I4GOC	GE73c	59	59	1995
1741	F1CCG	CG22c	59	59	2031
1748	HB9RO	DG	53	54	
1756	I1KTC		59	59	
1819	IW2BHT/2	EE07j	59	59	2008
1825	I2FHW	EE17f	55	55	2027
1831	DJ5ZH	FI68e	559	559	1614
1841	I2SRR	EF25f	59	59	1954km
	++ ++ ++	++ ++ ++	++ ++ ++	++ ++ ++	

OH2BNJ MU53f wkd with o,7W RF!!!

1655	I6TCR	HG53h	59	55	1574km
1657	OE6WIG	HG29b	59	59	1501
1659	YU2HW	HF20c	59	55	1699
1700	IØJKT	GB03e	59	59	2197
1710	I6CXD	GD38a	59	59	1991
1816	DB1RG	FI79h	55	51	1583
1818	I2FHW	EE17f	59	59	1996km

OH2BVO MU61h

1743	F1CTK	CG22d	59	59	1978km
1809	F6EOQ	YI58g	599	599	2151
1839	IW2B00	EF36g	55	55	1905km

o7.June 1981
=====

OH5IY NU03d cont'ed

I4G0C	I7o1	GE73c	59	59	2o87km
I7o2	I4LEI	GE73c	59	59	2o87
I7o7	I0MNI	GC51e	59	59	2287
I7o9	YU2NDV	GF79d	59	59	1967
I71o	I0FHZ	GC21f	59	59	225okm

OH5KE NU36b

1645	YU3BH	HG73a	599	599	1712km
1647	YU3ZV	HG3od	599	599	1712
1653	I6KLE	HC42h	599	599	2195
1654	YU3ES	GF39d	599	599	1892
1656	I0YWK	GB03j	599	599	23ookm
17o2	YU2AAX	GF69h	579	599	1924km

OH5KB NU14a (25W FT225RD 9ele Yagi)

165o	I6CXD	GD38a	59	59	21o8km
1655	YU3DRL	HG73j	57	59	1825
1658	I0AKP	GB13h	59	59	232o
17oo	IW0AKA	GB22b	59	59	2336
17o2	I0DLP	GB03f	59	59	2316
17o5	I4G0X	GE73c	59	59	2o87
171o	I0WWJ	GB22a	59+	59	2337
1714	YU2NDV	GE79d	45	58	2o57
1716	OE3LFA/I	GE63f	58	58	2o82
1725	I3LGP	GF24g	559	559	1918

OH5LK NU37g

1819	I1DMP	DF79j	599	599	2148km
------	-------	-------	-----	-----	--------

OH5LW NU36j

173o	IW3EKZ/3	GGo3a	549	559	1797km
------	----------	-------	-----	-----	--------

OH7PI NW6od (most northern stn wkd E_s)

1628	YU3ES	GF39d	599	559	2o7okm
1648	YU3CAB	HG55f	599	599	1963km

OH0RJ JU8ob

1818	I4BXN	FE38c	59	59	1816km
182o	IW5WBC	FC16e	59	59	2o18
1832	I5WBE	FD25h	59	59	1919
1834	I3UDX	GF31j	59	57	1698
1645	I5PXE	FD25c	59	59	1922km

o8.o6.81

=====

OH5IY NU03d

1647	I4CIL		59	55	
1711	I3LGP	GF24g	59	59	1918
1713	IW3QBC	GG76a	59	55	1861
1717	IW5AII	FD25j	55	55	2176
1721	I4PWL/4	FE6of	59	59	2o88
1723	IW4AHX	GE73f	59	59	2o95

o9.o6.81

=====

OH0RJ JU8ob

1543	I4BXN	FE38c	59	59	1816
1545	I50VW/3		59	53	

OH0JN JU7od

155o	I5LLW	4e	559	549	
------	-------	----	-----	-----	--

11.o6.81

OH0JN JU7od

1646	YU2RKK	ID	59	59	
1648	YU2CCB	IF35c	59	59	1636km
165o	YU2RG0	HF2oc	599	599	1618
1653	HG1KZP	IG17j	59	51	1496
1655	YU2HD	IF37a	59	59	163o
1657	YU3OV	HG39g	599	599	154o
1659	YU3MM	IFo5f	599	599	16oo
17oo	YU2HBC	IH19g	559	599	
17o2	I7HVP	IB74c	59	59	2136
17o3	YU2IQ	HE71c	59	59	1832
17o8	IC8TDN	HA	57n	57	
171o	I7ECT		57		
1713	I2CVC/7	HB18b	59	59	2o58
1717	YU2RYX	HE77h	59	59	1814
1718	YU3USB	HG38c	599	599	154o
1719	I6CTR	HC53h	59	59	2o16
1719	IW2BHT/2	EEo7e	59	55	1837
1728	I1CPN/1		59	57	
173o	F0BJT	DG51g	59	59	1786
1743	F1JG	CD24h	59	59	2o89
1743	F1AHQ	DG71h	59	59	18o7
1747	IV1HJJ	DF79d	57	57	1975
175o	F1FEN	CF71c	59	59	197o
1751	I1TUB		59	56	
1757	I1FHW	EE16f	59	54	1857
18o1	I4AYP	GE73d	59	57	1861
18o2	IW4AHX/6	GD13a	59	59	188o
18o8	I4BWE	FD25h	59	59	1926
1812	I4GOC	GE73c	59	59	1857
1814	I0WWJ	GB22a	59	59	2115km
1816	I4BXN	FE38c	59	59	1822
1817	I5WBE	FD25h	59	59	1926
1818	I5FDL	FD24h	59	55	1929
182o	I0JX		55		
1823	I0MYE	FC48e	59	59	2o57
1824	I4JED	FE47b	59	59	1835
1825	I4TUD	FE1of	59	59	178o
1828	IW5AVM	EC16e	59	59	2o24
1829	I4JMY	FE25e	59	59	1827
183o	I4XCC	GD3od	59	59	188o
1843	I5PXE	FD25c	59	59	1928km

11.o6.81

=====

OH4UC NV17a

1722	I4XCC	GD3od	599	599	
------	-------	-------	-----	-----	--

OH2BBX MU56a

1724	I1KTC	GE73g	56	56	1998km
------	-------	-------	----	----	--------

OH2CX MU65c

1715	I3LGP	GF24g	599	599	18o4
172o	I4XCC	GDo3d	559	559	1991

OH3MF MU23j

1717	I3LGP	GF24g	599	599	1839km
hrd:	I3N00	OE6KL	I4XCK		

OH5LK NU37g

1711	I4JED	FE47b	59	59	2o72 FM
1712	IW5AII	FD25j	59	59	2168 FM
1721	I3LGP	GF24g	599	599	19o9
OH5KE	NU36b				149
1723	I3LGP	GF24g	599	599	191okm

07.06.81

OH2BDF MU65d

1626	I4PPH	GE62f	59	59	1971km
1628	I4LMI		58	58	
1628	YU3cAB	HG55f	59	59	1679
1630	YU3NQA	GF39d	59	59	1785
1635	OE8HSK	HG22d	59	59	1652
1636	OE6WIG	HH47j	59	59	1545
1637	OE6FNG	HG17g	59	59	1611
1639	YU2NDV	GF79d	59	59	1837
1642	OE6BRG	HG18c	59	56	1603
1646	I6CXD	GD38a	59	59	1993
1648	I0MNI	GC51b	59	58	2160
1654	I0DLP	GB03f	59	59	2201
1656	I0SSW	GB13h	59	59	1709
1658	YU3RDL	HG73j	55	58	1898
1700	YU2IQ	HE77h	59	59	1898
1704	I0SNY		44	59	
1706	YU3ES	GF39d	59	59	1785
1708	I0CUT	GB03a	59	59	2190
1712	I0JKT	GB03e	59	58	2199
1720	I4CIV	GE73c	59	59	1970
1812	I2FHW	EE17f	59	59	2002
1815	I1KTC	EF44g	59	59	1957
1821	IW2BHT	EE07j	59	59	1983
1830	IW2BOC	EF36g	57	55	1930
1838	I2SRR	EF35f	59	59	1942km

OH2BWL MU56e

1643	I6CXD	GB38a	59	59	
1645	I0SSW	GB13h	59	59	
1646	I0MNI	GC31	59	59	
1648	OE6BRG	HG18c	59	56	1619km
1650	I0DLP	GB03f	59	59	
1654	IW0AKA	GB22	59	55	2238
1656	I0JKT	GB03	59	59	2206
1700	I0DLP	GB03f	59	59	
1701	I6CTR	HC53	59	58	2117
1758	G3DSS	YK09j	599	599	1843
1805	I1DMP	DF79j	599	599	2043km

between 1640-1800 hrd OE6BTJ
I0YWH I4HWP I3AKP I6WJB
between 1806-1845 hrd I2SVA F6BNY
DL5MA F6CJG/p HB9PPT F1JG HB9QQ
F1CTK

OH2KX MU65d

1819	I1KTC	EF44g	59	59+	2035km
1824	I2FHW	EE17f	59	59	2081

OH2TI MU65g

1825	I5BQD	FD25j	559	559	2058km
1839	I2SVA	EF16j	559	559	1902km

OH3MF MU23j

1712	I0YWK	GB03j	599	599	2236km
1715	YU3ES	GF39d	599	599	1826
1717	I2DMP	DF79j	599	599	2057
1721	I0YWH	GC25g	559	559	2203
1731	F1EXI	CG05e	59	59	1985
1734	F1CCC	CG22c	59	55	2027
1741	DK5SO	FI01f	599	599	1597
1742	DL6SN		599		

OH3MF MU23c Cont'ed

1744	HB9QQ	EH45e	599	539	1784km
1751	I1KTC	EF44g	59	59	1987
1752	I6WJB	HC42c	59	57	2140
1815	I2MUT	FF43e	57	51	1931
1820	I2FHW	EE17f	57	52	2034
1831	IW2BHT/2	EE07j	57	55	2015km

OH3MS MV79e

1708	I0AKP	GB13h	59	59	2309km
1710	I6CXD	GD38a	59	59	2097
1720	I4CIV	GE73c	59	59	2074
1721	I4PPH	GE62b	57	59	2062
1833	I2FHW	EE17f	55	53	2103

hrd: YU OE HB F PA ON DL OK EA! +

OH3TH LV50a

1740	F80P	CG36f	559	529	2044km
------	------	-------	-----	-----	--------

OH3YW MU09g

1702	I6WJB	HC42g	559	559	
1705	I0DLP	GB03f	59	59	2295
1707	I0WWJ	GB22a	59	59	2316
1715	I4CIV	GE73c	59	59	2064km

OH3YY MU24b {IC-245E, loW 9ele}

1635	YU3ZV	HG30d	599	599	1665km
1640	I6KLE	HC42h	599	559	2149
1645	I6WJB	HC42g	599	559	2149
1650	YU3USB	HG38c	599	599	1683
1655	YU3HI	IG41b	599	579	1679
1700	YU2RPE	IG	579	599	
1701	YU2RCO		599	599	
1715	I1DMP	0F79j	599	559	2130
1718	YU3ES	GF39d	599	599	1837
1738	HB9QQ	EH45e	599	539	1797
1745	I2FHW	EE19f	59	52	2025

OH5IY NU03d

1636	I0SSW	GB13h	59	59	2321km
1638	YU3CAB	HC55f	59	59	1794
1639	I6CXD	GD38a	59	59	2109
1640	I4CIV	GE73c	59	59	2087
1641	I4GOC	GE73c	59	59	2087
1641	OE6IWG	HH47j	59	59	1660
1644	I6CTJ	GD38b	59	57	2106
1647	IW0AKA	GB22b	59	59	2336
1647	OE6FNG	HG17g	59	59	1727
1647	OE3LFA/I4	GE63f	59	59	2082
1649	YU2NDV	GF79d	59	59	1953
1649	I4PPH	GE62f	59	59	2088
1650	I4PAI	GE73c	59	59	2087
1650	I0CUT	GB03a	59	59	2306
1653	YU2HBC	HF19j	59	59	1819
1653	IW0BHY	GB13b	59	59	2317
1654	I0WWJ	GB22a	59	59	2338
1844	I0SSW	GB13h	59	59	2321
1656	YU3DRJ	HG64f	59	59	1812
1657	YU3TTL	HG74f	59	59	1825

Es INFORMATIONs 1981

11.June 1981
=====I3 LDS FF28B

7 June 1981

1620 4X4MH RS15C 55 56
 1636 OH2G1Q MU65C 599 599
 1648 UQ2GFZ NR57A 599 599
 1658 UQ2GFZ NR57A 59 59
 1741 SM3AKW 559 559
 1743 SM4IVE HT68D 59 59
 1745 SM5FRH HT80F 59 59
 1753 SM4KWZ HT58C 59 59
 1754 SM4XVV HT56C 59 59
 1816 OH3A2W 559 559
 1820 OH1DP LU42J 559 559
 1830 SMOBYC IT70B 59 59
 1835 SMOLRN JT71H 59 59
 1837 OH14Y LU52C 59 59
 1840 SK7NM/LJ401C 59 59
 1841 SK5ID IT66J 59 59
 1842 SMOKCR JT41J 59 55
 1845 SMONR IT70J 59 57
 1845 SMOFZH JT54H 59 53

11 June 1981

1530 UC2AAB NN18C 599 579
 1625 4X4IX RS65F 59 59
 1628 4X4AS RR04D 59 59
 1645 4X4MH RS15C 59 57
 1650 4Z4UW RS64 55
 1654 OD5MR RT08E 59
 1736 LZ2FA ND40B 559 559

73 de

I3 LDS L105

CT4S0 VB (IC-240 Vert.dipol)

all 10.July 81 wkd in F3!
 1456 PA0FTF CK10 55
 1504 PA0HWM DM 57
 1510 DJ8PB DL 59+
 1512 DK2ZF FNo4 58
 1520 PA3AQM 59
 1530 PA1AAC 59
 1539 PE1GHM 59
 1542 PE1GXU 59
 1550 PE1GYE 55
 1554 PE1GHW 59
 1559 PE1FJE 59+
 1604 PA0CIC 58

OH7PI NW6od

1722 I4XCC GDo3d 599 599 2273km
 1724 YU3TWS GF 559 559

OH0JN JU7od

1635 9H1BT HV12 hrd "59 qrz"

OH0NC JU8ob (2oW+dipole!)

1706 I0EIO GB14c 59 59 2o98
 1707 I6CXD 1887 GD38a 59 59
 1717 YU2IQ HE77h 59 59 18o7km
 1635 9H1BL hrd "CQ CQ CQ"

24.o6.81
=====OH5LK&OH4UC hrd:

0711 ON6AT ON6GF (MS?)

o8.o7.81
=====OH2BBF LT15b

1411 LZ2... hrd in CW vy weak
 1417 LZ2KA. MC49 hrd weak 194okm
 1426 LZ1DV hrd weak
 1451 YU1EV KE32g 599 599 17o9km

OH2BDF MU65d

1753 RB5QGI SG15f 58 58 168okm

OH2BWL MU56e

1753 RB5QGI SG15f hrd 1683km
 1937 U050GF OG18f 579 hrd 1527km

OH3CU MV33c (25W 4x7 ele)

1735 UB5EDS RI56a 579 599 161okm
 1738 UB5QCD RH 559 599
 1744 UK5EDT RI58c 579 599 1626km
 1746 UB5HDM RJ32f 589 589 1466km

OH3MF MU23j

1732 UB5HDM RJ32a 599 599 1377km
 1734 UK5EDT RI58c 599 599 1542km
 1741 UB5EDS RI56a 569 559 1527km
 1746 RB5QGI SG15f 55 53 174okm

OH5KB NU14a (25W 9ele)

1744 UB5HDM RJ32 559 599 qsb daded out

o7.June 81
=====PA2REH CM45h

UB5EAG QI77f 599 559 1655UTC

11.June 81

1626 U050GX OH74d 599 559

10.July 81

1509 EA4ZU WZo8a 59 59 F3
 1520 EC7AKD WX 59 59 F3
 1609 CT4IB VB67c 59 59 F3
 1615 CT1ASM/m VX 52 59 F3

MOON BOUNCE

conducted by DL9KR

Newsletters: One really cannot call it a newsletter anymore! "The Lunar Letter" is a fully rated magazine carrying a wealth of information about EME on all VHF/UHF and SHF bands. Printing and reproduction quality is excellent. The 432 and up newsletter compiled by K2UYH is from now on included in "The Lunar Letter". DX airmail subscription rate is presently 18 US Dollars per year. The Lunar Letter Magazine, 312 12th Ave. So., Nampa, Idaho 83651, USA.

Technical: I am sorry about several delays which have occurred in mailing copies of Reduction Tables. Requests will be satisfied shortly. In the next DUBUS I shall have an up-dated bibliography of EME articles and literature.

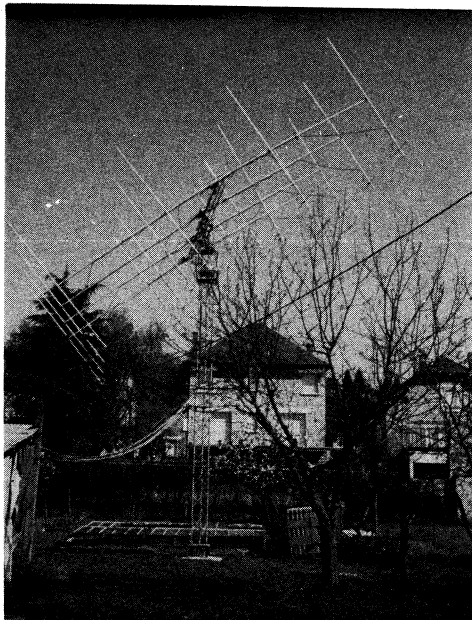
144 MHz:

F6CJG is now going full swing with a new array of 16 x 9el yagis covering a surface of about 100 square meters.

See picture below

Guy reports working 42 different stations during both contest periods including UA1ZCL, Y22ME (first F/Y 144 EME) and YV5ZZ (first F/YV 144 EME). Strongest station heard throughout the contest was SM2GGF. Furthermore worked were on 19.5. VK5MC 559/559 for completion of 144 WAC, 21.5. UA3MBJ O/O, 28.5. K1WHS 52/52 first F/USA on 144 SSB, DK1FGA M/O, 30.5. KY4Z O/O. Heard on 30.5. DK1BM, OH7PI, YU3 USB, KI7D, WB6ESQ, K1WHS, WA1JXN, WA1AGJ and W7FU during a heavy storm with high static level.

F6DRO with cooperator F1HI made his first EME contact with K1WHS on 3.4.82 close to moonset as the 4 x 16el array is not EL steerable yet. Power will be increased from the present 450w to 1 KW. Front end is a BF960. Also heard were WA1JXN/7, KI7D and F6BSJ, all O. For skeds write Dom Dehays, 9 rue C. Nodier, 31500 Toulouse, France.



F6DTE helped by F6EMT participated very successfully in the ARRL contest. The rig at F6DTE consisted of 4 x 16el F9FT at a 4m spacing, center 4m above ground, K1AGB PA with an 8877 at 1,6 KW out, BF981 preamp. 47 stns were heard and 22 of them worked (6 on sked, 16 random): 3.4.82 K1WHS, SM2GGF, DK4XI, SM7BAE, VE2DFO, 4.4.82 WA1JXN/7, WB6ESQ, 1.5.82 OH7PI, K1MNS, WA8ONQ, K9XY, 2.5.82 VE7BQH, DK1BM, KR5F, N7NW, Y22ME, F6BSJ, YU3USB, DK1PZ, UA1ZCL, OH7RJ, N4PZ, all O/O or better!

LA9FY tried his luck during the May part of the contest and heard K1WHS, WA8? and SM2GGF. Steinar feels that his low output power of 230 watts prevented him from making a contact. But on 29.5.82 things went better when he put 600w into his 4 x 16el AZ/EL array listening with a 0.5dB preamp: Worked were YU3USB O/O and K1WHS 539/539. Due to a strong aurora several skeds did not work out as planned. Heard on 28.5. UA1ZCL, YU3USB and W7FU. LA9BM was lending a helping hand.

UA3LBO, 3 x 13el, 1KW, BF981, BW 600 Hz, has heard 25 stations and worked 7 (K1MNS, WA1JXN, VE7BQH, VE2DFO, K1WHS, SM7BAE, KI7D) so far. Heard on 6.2.82 WB5ERD O, 7.2.82 WB5LBT O, 8.2.82 WA9KRT O and WA1JXN O 10 dB. Contacts with W5UN partial, WA1JXN O/O 529, N7NW partial, K1MNS O/O 529 ufb on 7.2.82. Valery's problem is a high (6 to 24 dB) noise level at an azimuth of 240°.

UA3TCF again sends a long list of stations heard and worked, reflecting his high level of activity.

5.2.82 worked SM2GGF, partial WA3USC. 6.2.82 worked WØRWH and OK1MBS, heard WA1JXN, WA9KRT, DK4XI, VE2DFO, WB5ERD, K1WHS, WB6ESQ, W7FU, I1RSQ. 7.2.82 worked partial WBØVYV, W7FU, KØKE, heard WB5ERD, W5LUU. 13.2.82 heard I1RSQ. 27.2.82 worked F6AMQ, heard SM7BAE, DK4TG, OH7PI. 5.3.82 worked KR5F partial, N4PZ, heard F6AMQ, YU1AW, VE2DFO, SM2GGF. 6.3.82 worked WA2GSX partial, LA1TN, WA4NJP, heard YV5ZZ, WBØVYV, WB8PAT, KR5F, I1RSQ, SM7BAE, Y22ME, WA4LYS, WB5ERD 6dB, WA9KRT, W5HM, VE2DFO. 7.3.82 worked WD4IIS partial, VE7EAA partial, heard N7NW, SM2GGF 6dB, KR5F, K1WHS 10dB, KI7D, WA1JXN, G3POI, OZ1EME, K1MNS. Fully wkd Y22ME, G3POI. 8.3.82 worked WAØLSH, hrd WA9KRT, SM2GGF, WA1JXN, KR5F, WB6ESQ, VE2DFO, WD4IIS. 3.4.82 worked N4GJV and N6ANG partial, hrd K1WHS, DK4XI and W5LUU. 4.4.82 worked KY4Z, UA1ZCL, YU2RGO partial, UA3LBO partial, KB7Q, hrd WB6ESQ, SM7BAE, F6CJG, YU3USB, WA8ONQ, K1WHS, G4DZU. 27.3.82 (sorry, got the log pages mixed up, ed.) worked UA1ZCL, WA2GSX partial, YV5ZZ, hrd WA4LYS, KI7D, F6AMQ, YU1AW. 28.3.82 worked YU1AW, hrd Y22ME and UA1ZCL. 2.4.82 hrd I1RSQ. Also on 3.4.82 worked KR5F, SM7BAE, G4DZU partial, OH7PI, heard WA1JXN, K1MNS, G3POI, VE2DFO, UA1ZCL, SM7BAE, SM2GGF, SM4GGC, DL6BAG/P, LA1TN.

UB5JIN: 5.2.82 worked WA4LYS, hrd SM2GGF working UA3TCF. 6.2.82 worked YU7AR, heard K1WHS, WA9KRT, N6ANG, F8ZW, W8WN, VE2DFO, DK4XI, WØRWH, W7FU, WB6ESQ. 7.2.82 worked WB5ERD, WD5CRK, SM2GGF max. 4dB, heard W5LUU, WA2GSX, WA1JXN, K1WHS, F8ZW, WA8ONQ, WA9KRT, G3YOW?. 5.3.82 heard YU1AW, G3POI, KR5F, OH7PI, K1WHS, SM2GGF. 6.3.82 worked W5UN, WB8PAT, G3POI first UB5/G, heard I1RSQ, WA4NJP, VE2DFO, SM7BAE, N4PZ, WB5ERD, LA1TN, Y22ME, WA1JXN. 7.3.82 worked KB8RQ, WA9KRT, heard W5HM, SM2GGF, WA1JXN 15 - 20 dB!, K1WHS 18 - 22 dB!, WB5ERD, OK1MBS, N7NW. 8.3.82 heard VE2DFO, WA1JXN, W5UN, WA9 KRT, N7NW. 2.4.82 worked DK1PZ, heard UA1ZCL, UA3LBO, SM2GGF, LA1TN. 3.4.82 worked Y22ME first UB5/Y2 EME, WA1JXN, heard G3POI, K1WHS, F8ZW, DK4XI, SM4GGC, DL8GP, F6CJG, KR5F, I1RSQ, F6BSJ, G2SGT?, VE7BQH, UA1ZCL. 4.4.82 worked K1WHS, SM2GGF, SM7BAE, VE7BQH with lots of QRM and QSB during the April part of the contest. Wasil received help by Wlad UB5JMR and UB5JFR Alex.

YU1AW: 27.3.82 worked Y22ME first YU/Y2 EME, WA4LYS, UA1ZCL, WB5ERD, F6AMQ, KI7D, heard OH7PI, VE7BQH, WA1JXN, YV5ZZ, YU7AR. 28.3.82 worked PAØOOM first YU/PA EME on 144, UA3TCF, VE2DFO, W5HM. 4.4.82 worked HG1W first YU/HG EME, DK1PZ, SM2GGF, LA1TN first YU/LA EME, SM7BAE, YU7AR, F6BSJ, YU3USB, Oh)PI, UA1ZCL, G4DZU, Y22ME, K1WHS 569/549, N4GJV, F6CJG. 5.4.82 worked UA3LBO and WA1JXN. Heard were WA8ONQ, N7NW, KR5F, VE1AG?, DK4XI, OE3XUA, SM5CNQ, ZS5IE, KØUDZ.

YU3USB put his gigantic 24 x 10 over 10el array to work and had the following contacts on 4.4.82: K1WHS, WA1JXN, N4PZ, SM2GGF, SM7BAE 559/539, OH7PI, OE3XUA first YU/OE on 144 EME, LA1TN, DJ5DT, DK4XI, SM5CNQ, UA1ZCL first YU/UA1 EME?, Y22ME, YU1AW, F6BSJ, F6CJG, DK1PZ, WBØTEM, N7NW. 5.4.82 worked KI7D, WA1JXN.

YU7AR: 3.4.82 worked KR5F, W7FU, K1WHS, WA1JXN. 4.4.82 worked YU1AW, SM7BAE, heard DKØTU, DJ5MS, HG1W, SM2GGF, N4PZ, DK1PZ, YU3USB.

432 MHz:

DF7VX is now making regular appearances on 70 EME with only 4 x 21el, a KW out of an YL1050 PA and MGF1402 front end. Hellmuth produces an excellent signal! 27.3.82 worked I5MSH, 28.3.82 worked DL9KR, 2.4.82 worked OK1KIR, 3.4.82 worked YU1AW and I5MSH, heard W5FF, OK1KIR, I5MSH, DL9KR, K3NSS, KM4Q, JA6CZD, G3LTF. 4.4.82 worked W1JR and I5MSH, heard YU1AW, KM4Q, DL9KR, G4EZN, DL7QY, F9FT, JA6CZD, 1.5.82 worked JA6CZD, DL9KR, DFØEME, DL7YC, I5MSH, hrd SM3AKW. 2.5.82 worked VE4MA, KAØY, F9FT, JA6CZD, YU2RGC, heard OE3XUA and OE9XXI. 3.5.83 worked G3WDG. 29.5.82 worked KAØY, hrd Z25JJ. 30.5.82 worked W5FF, partial G3LTF, SM3AKW, K2UYH, hrd JA9BOH. 24.5.82 worked OH6NU.

DFØEME (DJ8QL opr., DL5FAU, DJ4UR), the call used by the DJ4AU group was on 70 EME for the first time with an exceptional signal, however the final amp. broke down just before the moon window opened to the USA on May-01. Anyway, 14 contacts were made in quick sequence.

DK5AI is another new one on 432 EME. Wolf uses 8 x 21el F9FT, a single 4CX250R at 300w out and an MGF1400 preamp. He has worked I5MSH and DL9KR with good signals both ways and should really be in business once his power is increased a bit.

OE5JFL made his debut with a 5,1 m dish, K2RIW PA and MGF1402 front end. On 1.5.82 Hannes worked YU1AW, 2.5.82 JA6CZD, DL9KR, K2UYH, SMØERR. Hrd I5MSH, DFØEME, K3NSS, W6ABN, G4EZN, OE3XUA, Z25JJ, YU2RGC, KAØY, HB9SV and N9AB.

OH6NM (father) and OH6NU (son Timo) of 2m fame came on 432 with a big signal produced with only 360w of RF. Naturally, the 16 x 21el array is a performer. So far they have worked I5MSH, DL9KR, DF7VX, DL7YC and others. Even an excellent two-way SSB contact was made with DL9KR.

OK1KIR: After nearly one year of EME activity the group has worked 37 different stations on 432 and 11 on 1296. Their list of EU stations hrd but not worked yet includes SMØDJW, I2COR, HB9BPQ, HB9SV and G3WDG. Recently they worked on 5.-6.2.82 F2EU, VE4MA, LX1DB, K2UYH, K4QIF, YV5ZZ, VK6ZT, YU1AW. 5.-6.3.82 W6ABN, W1JR, K2UYH, JA6CZD, YU1AW, G3LTF. 2.-4.4. DL7QY, DF7VX, G3LTF, K3NSS, DL9KR, F9FT, YU1AW, JA9BOH, SM3AKW, DJ9DL, G4EZN, OK3CTP, YU2RGC, SMØERR, N9AB, W1JR, WB5LUA, partials with HB9SV and OE9XXI. Poor conditions prevailed during the April part of the contest.

YU1AW worked on 2.4.82 OK3CTP, G4EZN, G4EZN 55/54 SSB, SMØERR, SMØDJW, YU1EV, DL7QY, F9FT, WA4ZTK. 3.4.82 YU1EV, K4QIF, OK3CTP, F9FT, DF7VX, JA9BOH, I5MSH, DL9KR, OK1KIR, SM3AKW, JA6CZD, G4EZN, I2COR, G3LTF, DL7YC, DJ9DL, YU2RGC, OE9XXI, SMØDJW, LX1DB, GW3XYW, WBØTEM, HB9SV, W1JR, YV5ZZ, SMØERR, N9AB, ON4DY, DL7QY, DF3RU, W6ABN. Hrd G3HUL, K2UYH.

YU1OFQ was listening with his 128el collinear array and heard on 3.-4.4. 82: F9FT O, YU1AW 339, YU1EV O, LX1DB O, DL9KR 439, SMØERR M, I5MSH 339,

DJ9DL M, Again YU1AW 439, G4EZN 339, VE7BBG M, N9AB O, DL7YC M, YU2RGC O.

1296 MHz:

OE5JFL is in the planning stage of 1296 EME. The same is valid for SP5CIC/S

OK1KIR worked on 6.-7.2.82 PA0SSB M/M and K4QIF M/M. 6.-7.3.82 DJ4AU O/O, WB5LUA O/O, VE7BBG O/O. 3.-4.4.82 G3WDG M/M, SM6CKU M/O, G3LTF O/M, VE7BBG O/O, WB5LUA O/O, W6YFK O/O. Petr says the last QSO was a new record because they were able to work all stations heard during the week-end. The rig is greatly improved now featuring automatic moon tracking, 300w output and MGF1412 front end plus circular polarisation on the 5,5m dish. Sun noise is 16 dB.

ON5GF is already listening to 1296 EME signals with his EL/AZ mounted 5m dish using circular polarisation, an MGF1412 preamp is installed at the feed. An OZ9CR ring amp is under construction and will hopefully deliver its RF output via 8m of 7/8 inch Heliac shortly.

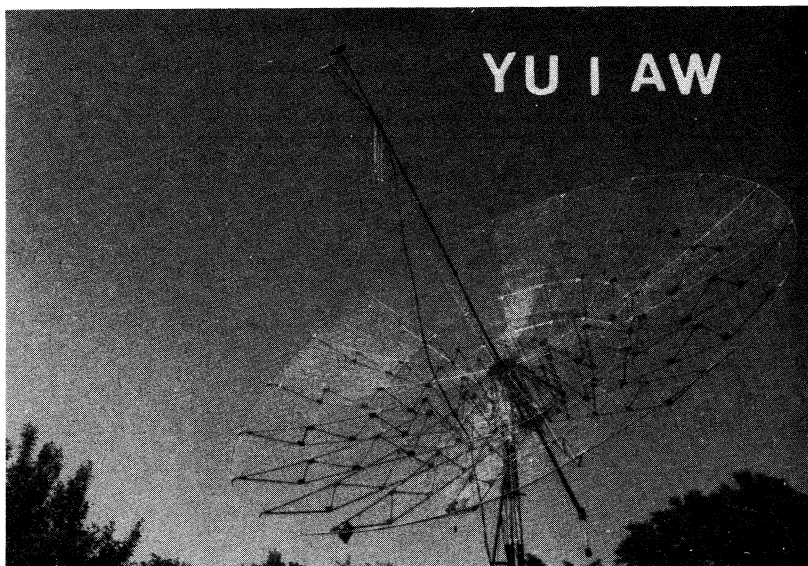
2320 MHz:

DF0EME again put their Klystron on 13cm. Their 500w to the 10m dish were heard by G3WDG "O" grade on a 4m dish. G3WDG was enthused about the signal quality (so was I when I heard the recording on a 7 MHz link, ed.) Charlie said he could have copied the signals on his 1,2m dish because it was producing about the same sun noise as the 4m one at the time the test was performed.

Hope that all of you will have (had) nice vacations with lots of time for antenna work!!!

73,

Jan, DL9KR



VHF + NEWS + SKEDS + COMMENTS + SUPPLEMENTS

by DL 7 RU

EXPEDITION NACH OJØ MARKET REEF

OHØNC/OJØ wird vom 3-12 August aus JU 56c qrv sein. 2m 150W
70 cm 50W, 23 cm 50W. Propagation Mode: Tropo, Aurora und MS.
INFO DL7QY

EXPEDITION to YN and XN square

G4FRE, G4AJW, G4BRK and G4BRT will be qrv from YN75f and also
XN square from 8.8.82 - 14.8.82.
QRV on 144, 432, 1296 and 2320 MHz. 144MHz for meteorscatter
400 W and 2x9 el. Yagi. (Also tropo if good condx) 144.020 C.W.
skeds, 144.420 ssb random working and C.W. skeds and sekond
frequency. Skeds via G4FRE or on M.S. net on 20 meters.
432MHz tropo 400W 2x19 el. Yagi
1296MHz tropo 50W 4x26 el. Q.L.Yagi
2320MHz tropo 3W 4x23 el. Q.L.Yagi
It is also possible on m.s. to run two 144MHz stations simultane-
ously, if demand for qso's needs it.
INFO G4FRE

SHORT INFO's

OZ3GW will be qrv from square GO on 70 and 23 cm in July
G3ULP will be qrv from square YS and YT on 2m, 70cm and 23cm
Date: 1 - 3.8.82
G8KDU will be qrv from square XM on 432.230MHz (400W) and
1296.330MHz (50W). Date: 8 - 15.8.82
PA3BPI/LX will be qrv from square CJ1Øa on 2m 70cm and 23cm
Date: 1 - 6.7.82
GM4CXP will be qrv from square YQ on 23cm (50 W). Date unknown.
INFO DB6BX

S_O_R_R_Y

There was a mistake in DUBUS 1/82 Page 87. LA9FY is qrv from
square EU36j and not from EV-square. Sorry Steinar...

LINEAR-TRANSPONDER

Rufzeichen: DBØRR, Eingabe: 1296.550MHz $\pm$ 10kHz, Ausgabe: 432.550
MHz $\pm$ 10kHz (LT7). QTH: Bad Sachsa/Harz FL33b. A.s.l. 700m.
Ant.Rx: 4x10 el. Feldgruppe 180° - 330°, polar. horizontal.
Ant.Tx: 4x10 el. Yagi " " " " " " " "
Tx max.: 10W, Rx NF: ca.1 dB (GAASFET). Dynamikber.: 40dB
Kennung: z.Zt. in A1. Verantwortlich: DK 5 AI.
Der Transponder wurde gebaut von: DK1PZ, DK1QC, DK5AI und DC7WF
INFO DK5AI

FIELD ALIGNED IRREGULARITIES (FAI) ON 144 MHz

Since beeing in Geneva I have concentrated on improving the VHF - station at 4U1ITU, so that we now have EME and MS capability. I think it would be very interesting to investigate further the use of field aligned irregularities on 144 MHz, as reported by K4GFG in the January 1982 issue of "QST" pp 30-32. A path to the UK would appear to be suitable, and I would be interested to find a station willing to cooperate in tests during the coming summer months, when FAI is most observed. The station should have proven EME capability for the tests to produce useful results. If somebody is interested write to : GEOFF GRAYER G3NAQ International Radio Club, 1211 GENEVA 20, SWITZERLAND TELEPHONE: 34 70 00 INFO: G3BYW

BEACON NEWS

by DL 7 RU

Die Bake DLØNF in FJ47a auf 432.966, 1296.966 und 2304.966 hat jetzt das Call: DFØANN Die Bake auf 2304.966 ist z.Zt. nicht grv und wird in Zukuft auf 2320.965 MHz zu finden sein.

Neue 23cm Bake Call: D8ØJB, QTH: EIØ3a, QRG: 1296.910 MHz,
Ant: Big wheel, QTF: omni, Output: 1 Watt.
INFO: DF9IC

Dutch VHF UHF SHF Beacons

PAØDSW	CM35	433.040	0.5W	0dB/omni	10m a.s.l.	A1
PAØEHG/ACL48		1296.875	4W	6dB/omni	61m a.s.l.	F1
PAØQHN	CM53	1296.920	4W	6dB/omni	20m a.s.l.	F1
PAØZM/A	DM65	1296.975	5W	20dB/NE	34m a.s.l.	F1
PAØQHN	CM53	2320.920	2W	6dB/omni	20m a.s.l.	F1
PAØMS/A	CL48	10368.045	0.050W	21dBi/NW	56m a.s.l.	F1
PAØDBQ	CM72	10368.100	0.040W	20dB/W	75m a.s.l.	F1
PE1BLE	CM55	10368.200	0.010W	14dB/SSW	35m a.s.l.	F1

INFO: PAØEZ

EUROPEAN VHF TOP LIST

144 MHz

NR	CALL	QTH	WVD	TROPO	FREQ	MS	IS
301	SM7AET	300	411	1383	1383	1383	1383
302	SM7AET	300	411	1383	1383	1383	1383
303	Y2CME	300	411	1383	1383	1383	1383
304	DK6RS	300	411	1383	1383	1383	1383
305	PA0RDY	300	411	1383	1383	1383	1383
306	DK5AI	300	411	1383	1383	1383	1383
307	DF3MU	300	411	1383	1383	1383	1383
308	SM0FFS	300	411	1383	1383	1383	1383
309	SM4IVE	300	411	1383	1383	1383	1383
310	SC0JG-F	300	411	1383	1383	1383	1383
311	PA3LBO	300	411	1383	1383	1383	1383
312	DK1KC	300	411	1383	1383	1383	1383
313	SM5CHK	300	411	1383	1383	1383	1383
314	SP0DK	300	411	1383	1383	1383	1383
315	SM5SEI	300	411	1383	1383	1383	1383
316	DK4TG	300	411	1383	1383	1383	1383
317	DL70Y	300	411	1383	1383	1383	1383
318	DK3UZ	300	411	1383	1383	1383	1383
319	TA8BN	300	411	1383	1383	1383	1383
320	GF3OI	300	411	1383	1383	1383	1383
321	PA0OOM	300	411	1383	1383	1383	1383
322	CE3FW	300	411	1383	1383	1383	1383
323	UR3COT	300	411	1383	1383	1383	1383
324	SM5CUI	300	411	1383	1383	1383	1383
325	DL1MF	300	411	1383	1383	1383	1383
326	PA0VST	300	411	1383	1383	1383	1383
327	SM5OU	300	411	1383	1383	1383	1383
328	DI7MS	300	411	1383	1383	1383	1383
329	Y2COT	300	411	1383	1383	1383	1383
330	SM5BIU	300	411	1383	1383	1383	1383
331	HO1VA	300	411	1383	1383	1383	1383
332	YU2IO	300	411	1383	1383	1383	1383
333	Y1FL	300	411	1383	1383	1383	1383
334	SP5JC	300	411	1383	1383	1383	1383
335	Y2EYK	300	411	1383	1383	1383	1383
336	OH3TH	300	411	1383	1383	1383	1383
337	SM7OMU	300	411	1383	1383	1383	1383
338	UR3EO	300	411	1383	1383	1383	1383
339	OK3RU	300	411	1383	1383	1383	1383
340	SM4OC	300	411	1383	1383	1383	1383
341	SM7UT	300	411	1383	1383	1383	1383
342	LAERT	300	411	1383	1383	1383	1383
343	CE3FCH	300	411	1383	1383	1383	1383
344	DK1PZ	300	411	1383	1383	1383	1383
345	OH3BEP	300	411	1383	1383	1383	1383
346	YU2CZ	300	411	1383	1383	1383	1383
347	SM5CKR	300	411	1383	1383	1383	1383
348	LAERT	300	411	1383	1383	1383	1383
349	PA0NMH	300	411	1383	1383	1383	1383
350	DL4ER	300	411	1383	1383	1383	1383
351	YU2ES	300	411	1383	1383	1383	1383
352	YU2EU	300	411	1383	1383	1383	1383
353	OK1KKH	300	411	1383	1383	1383	1383
354	DF1JC	300	411	1383	1383	1383	1383
355	CE3MUA	300	411	1383	1383	1383	1383
356	YU2IS	300	411	1383	1383	1383	1383
357	SM5DRY	300	411	1383	1383	1383	1383
358	DL5OP	300	411	1383	1383	1383	1383
359	SM5DJW	300	411	1383	1383	1383	1383
360	DL4ER	300	411	1383	1383	1383	1383
361	YU2PL	300	411	1383	1383	1383	1383
362	PA0FTL	300	411	1383	1383	1383	1383
363	PA6ND	300	411	1383	1383	1383	1383
364	CE3EKI	300	411	1383	1383	1383	1383
365	PA3ROU	300	411	1383	1383	1383	1383
366	CE3UG	300	411	1383	1383	1383	1383
367	PA0KDV	300	411	1383	1383	1383	1383
368	CE3OL	300	411	1383	1383	1383	1383
369	SM4AWY	300	411	1383	1383	1383	1383
370	EA3LL	300	411	1383	1383	1383	1383
371	OH3JN	300	411	1383	1383	1383	1383
372	EA3LL	300	411	1383	1383	1383	1383
373	SM5BZC	300	411	1383	1383	1383	1383
374	PA3BIY	300	411	1383	1383	1383	1383
375	PA3ENA	300	411	1383	1383	1383	1383

376	SM5FFH	300	411	1383	1383	1383	1383
377	PA3BET	300	411	1383	1383	1383	1383
378	SM4GOC	300	411	1383	1383	1383	1383
379	CE3ICLL	300	411	1383	1383	1383	1383
380	YU2EN	300	411	1383	1383	1383	1383
381	SM5CNO	300	411	1383	1383	1383	1383
382	QJ4DC	300	411	1383	1383	1383	1383
383	CE3FTU	300	411	1383	1383	1383	1383
384	SM3COL	300	411	1383	1383	1383	1383
385	SM3ARN	300	411	1383	1383	1383	1383
386	PA3ZBA	300	411	1383	1383	1383	1383
387	YU2CAF	300	411	1383	1383	1383	1383
388	CE3FUF	300	411	1383	1383	1383	1383
389	YU2FG	300	411	1383	1383	1383	1383
390	DK6VS	300	411	1383	1383	1383	1383
391	YU7BCN	300	411	1383	1383	1383	1383
392	SM5IOT	300	411	1383	1383	1383	1383
393	DF2ZC	300	411	1383	1383	1383	1383
394	UG3ARB	300	411	1383	1383	1383	1383
395	UE5JIN	300	411	1383	1383	1383	1383
396	SM5HAX	300	411	1383	1383	1383	1383
397	CH4VE	300	411	1383	1383	1383	1383
398	UR2GC	300	411	1383	1383	1383	1383
399	GC3CH	300	411	1383	1383	1383	1383
400	SM5EJN	300	411	1383	1383	1383	1383
401	SM6CKU	300	411	1383	1383	1383	1383
402	SM5ROJ	300	411	1383	1383	1383	1383
403	DK2PR	300	411	1383	1383	1383	1383
404	DK3WT	300	411	1383	1383	1383	1383
405	QJ4ICD	300	411	1383	1383	1383	1383
406	SM5CNF	300	411	1383	1383	1383	1383
407	F1FHT	300	411	1383	1383	1383	1383
408	DF5DL	300	411	1383	1383	1383	1383
409	SM5BYC	300	411	1383	1383	1383	1383
410	YU1EV	300	411	1383	1383	1383	1383
411	QJ4IG	300	411	1383	1383	1383	1383
412	DF6OR	300	411	1383	1383	1383	1383
413	SM4RRQ	300	411	1383	1383	1383	1383
414	F30P	300	411	1383	1383	1383	1383
415	YU3PA	300	411	1383	1383	1383	1383
416	PA3OER	300	411	1383	1383	1383	1383
417	SM3DCH	300	411	1383	1383	1383	1383
418	H68ET	300	411	1383	1383	1383	1383
419	SM3PLF	300	411	1383	1383	1383	1383
420	UR3MEJ	300	411	1383	1383	1383	1383
421	CE3NTH	300	411	1383	1383	1383	1383
422	YU4GD	300	411	1383	1383	1383	1383
423	YU4TI	300	411	1383	1383	1383	1383
424	LA8AK	300	411	1383	1383	1383	1383
425	CE3JFL	300	411	1383	1383	1383	1383
426	HQ3KID	300	411	1383	1383	1383	1383
427	SM5GDM	300	411	1383	1383	1383	1383
428	OK1KHI	300	411	1383	1383	1383	1383
429	PA3BAT	300	411	1383	1383	1383	1383
430	UR2RDR	300	411	1383	1383	1383	1383
431	DL1DF	300	411	1383	1383	1383	1383
432	DL7FH	300	411	1383	1383	1383	1383
433	PA3GHD	300	411	1383	1383	1383	1383
434	DK3LL	300	411	1383	1383	1383	1383
435	SM7DEP	300	411	1383	1383	1383	1383
436	SM4FVR	300	411	1383	1383	1383	1383
437	CE3SVL	300	411	1383	1383	1383	1383
438	SM5FMD	300	411	1383	1383	1383	1383
439	SM3LL	300	411	1383	1383	1383	1383
440	CE3SEF	300	411	1383	1383	1383	1383
441	SM5DFP	300	411	1383	1383	1383	1383
442	YU2UN	300	411	1383	1383	1383	1383
443	SM5LE	300	411	1383	1383	1383	1383
444	YU2UN	300	411	1383	1383	1383	1383
445	CE3VSL	300	411	1383	1383	1383	1383
446	PA3VSL	300	411	1383	1383	1383	1383
447	PA3VSL	300	411	1383	1383	1383	1383
448	UR3VSL	300	411	1383	1383	1383	1383
449	UR3VSL	300	411	1383	1383	1383	1383
450	UR3VSL	300	411	1383	1383	1383	1383

EUROPEAN UHF TOP LIST

432 MHz

HF CALL CTH WKD TROF0 AJFO MS ES

001	DL7YC	GM	110	1220	---	---	---
002	DF3WD	FM	100	1220	---	---	---
003	DL7GY	FM	100	1356	356	---	---
004	00718	GP	124	1273	328	---	---
005	SH3AHN	1W	117	1190	---	---	---
006	DBEEN	DM	110	1398	---	---	---
007	GBLOR	AM	110	1343	373	---	---
008	PABFRE	CL	110	1357	315	---	---
009	OK1A15/P	HK	110	1267	---	---	---
010	SM7BRE	GP	110	1220	350	---	---
011	0M3TH	CV	110	1199	343	---	---
012	SM5CPD	IT	110	1230	340	---	---
013	0M5FF	EL	110	1170	736	---	---
014	SM5DWC	IT	100	1400	310	---	---
015	PABRE	CM	100	1398	1028	---	---
016	SM5FFS	UT	100	1350	740	---	---
017	DJ3DL	DL	100	1274	315	---	---
018	SM6CKU	GR	100	1170	660	---	---
019	009FW	GP	100	1305	1335	---	---
020	F1FHI	PH	100	1327	---	---	---
021	DK5A1	FL	100	1162	---	---	---
022	SM5BE1	CU	104	1333	1016	---	---
023	PABWHM	CM	100	1290	726	---	---
024	OK1KH1/P	HK	100	1424	---	---	---
025	DK2NH	FM	101	1607	305	---	---
026	SM5DFF	IT	101	1410	330	---	---
027	OK1K1R/P	OK	101	1331	---	---	---
028	FE8AGC	DM	100	1362	---	---	---
029	Y2AME	GM	100	1437	374	---	---
030	DL7AH	GM	100	1240	---	---	---
031	0J41CD	GM	99	1300	300	---	---
032	IBENT	FM	99	1505	---	---	---
033	DK3CSA	GM	99	1171	---	---	---
034	004LE0	FM	99	1426	1203	---	---
035	004LE0	FM	99	1426	1203	---	---
036	DK1FJA	FM	99	1310	720	---	---
037	DK6A8E	FM	99	1360	620	---	---
038	Y2FTG	GM	99	1410	---	---	---
039	Y2FT	GM	99	1360	---	---	---
040	PABJ02	FM	99	1150	536	---	---
041	3200J	FM	99	1460	---	---	---
042	PABJ01	FM	99	1300	---	---	---
043	SM5HY0	FM	99	1410	600	---	---
044	SM5FYU	FM	99	1421	706	---	---
045	DL4EA	DL	99	1260	640	---	---
046	SM5DYE	FM	99	1204	---	---	---
047	Y23PA	GM	99	1100	---	---	---
048	004HC	FM	99	1330	630	---	---
049	F1ZUU	FM	99	1250	---	---	---
050	Y23PA	GM	99	1410	---	---	---
051	0M5GF	FM	99	1300	---	---	---
052	0M7HB	FM	99	1300	---	---	---
053	DF5EE	FM	99	1300	---	---	---
054	0M5GF	FM	99	1300	---	---	---
055	0M7HB	FM	99	1300	---	---	---
056	0M5GF	FM	99	1300	---	---	---
057	0M7HB	FM	99	1300	---	---	---
058	0M5GF	FM	99	1300	---	---	---
059	0M7HB	FM	99	1300	---	---	---
060	0M5GF	FM	99	1300	---	---	---
061	PABJ01	FM	99	1300	---	---	---
062	0M5GF	FM	99	1300	---	---	---
063	0M7HB	FM	99	1300	---	---	---
064	0M5GF	FM	99	1300	---	---	---
065	0M7HB	FM	99	1300	---	---	---
066	0M5GF	FM	99	1300	---	---	---
067	0M7HB	FM	99	1300	---	---	---
068	0M5GF	FM	99	1300	---	---	---
069	0M7HB	FM	99	1300	---	---	---
070	0M5GF	FM	99	1300	---	---	---
071	0M7HB	FM	99	1300	---	---	---
072	0M5GF	FM	99	1300	---	---	---
073	0M7HB	FM	99	1300	---	---	---
074	0M5GF	FM	99	1300	---	---	---
075	0M7HB	FM	99	1300	---	---	---
076	0M5GF	FM	99	1300	---	---	---
077	0M7HB	FM	99	1300	---	---	---
078	0M5GF	FM	99	1300	---	---	---
079	0M7HB	FM	99	1300	---	---	---
080	0M5GF	FM	99	1300	---	---	---
081	0M7HB	FM	99	1300	---	---	---
082	0M5GF	FM	99	1300	---	---	---
083	0M7HB	FM	99	1300	---	---	---
084	0M5GF	FM	99	1300	---	---	---
085	0M7HB	FM	99	1300	---	---	---
086	0M5GF	FM	99	1300	---	---	---
087	0M7HB	FM	99	1300	---	---	---
088	0M5GF	FM	99	1300	---	---	---
089	0M7HB	FM	99	1300	---	---	---
090	0M5GF	FM	99	1300	---	---	---
091	0M7HB	FM	99	1300	---	---	---
092	0M5GF	FM	99	1300	---	---	---
093	0M7HB	FM	99	1300	---	---	---
094	0M5GF	FM	99	1300	---	---	---
095	0M7HB	FM	99	1300	---	---	---
096	0M5GF	FM	99	1300	---	---	---
097	0M7HB	FM	99	1300	---	---	---
098	0M5GF	FM	99	1300	---	---	---
099	0M7HB	FM	99	1300	---	---	---
100	0M5GF	FM	99	1300	---	---	---
101	0M7HB	FM	99	1300	---	---	---
102	0M5GF	FM	99	1300	---	---	---
103	0M7HB	FM	99	1300	---	---	---
104	0M5GF	FM	99	1300	---	---	---
105	0M7HB	FM	99	1300	---	---	---
106	0M5GF	FM	99	1300	---	---	---
107	0M7HB	FM	99	1300	---	---	---
108	0M5GF	FM	99	1300	---	---	---
109	0M7HB	FM	99	1300	---	---	---
110	0M5GF	FM	99	1300	---	---	---
111	0M7HB	FM	99	1300	---	---	---
112	0M5GF	FM	99	1300	---	---	---
113	0M7HB	FM	99	1300	---	---	---
114	0M5GF	FM	99	1300	---	---	---
115	0M7HB	FM	99	1300	---	---	---
116	0M5GF	FM	99	1300	---	---	---
117	0M7HB	FM	99	1300	---	---	---
118	0M5GF	FM	99	1300	---	---	---
119	0M7HB	FM	99	1300	---	---	---
120	0M5GF	FM	99	1300	---	---	---
121	0M7HB	FM	99	1300	---	---	---
122	0M5GF	FM	99	1300	---	---	---
123	0M7HB	FM	99	1300	---	---	---
124	0M5GF	FM	99	1300	---	---	---
125	0M7HB	FM	99	1300	---	---	---
126	0M5GF	FM	99	1300	---	---	---
127	0M7HB	FM	99	1300	---	---	---
128	0M5GF	FM	99	1300	---	---	---
129	0M7HB	FM	99	1300	---	---	---
130	0M5GF	FM	99	1300	---	---	---

076	SM5CPA	IT	71	1660	300	---	---
077	DC7GH	GM	71	0950	509	---	---
078	SM7CFE	HR	70	1420	---	---	---
079	DF5JJ	DL	70	0900	---	---	---
080	SM5CUL	DL	69	1150	1250	---	---
081	003ZW	FM	69	1123	---	---	---
082	DL5FAU	DL	69	1120	---	---	---
083	003ZW	FM	69	1050	---	---	---
084	DJ3WV	DL	69	0927	508	---	---
085	DG4BE	DL	69	1124	---	---	---
086	03W5N	DL	69	1130	---	---	---
087	UF5BBC	DL	69	1125	307	---	---
088	SP5FG	DL	69	1127	---	---	---
089	F5CJG/P	FM	69	1170	---	---	---
090	SM5DSN	IT	69	1470	370	---	---
091	OK1KTL/P	OK	69	0993	---	---	---
092	0N6UG	DL	69	0970	420	---	---
093	DK5VS	DL	69	0920	---	---	---
094	SM5LE	DL	69	1560	710	---	---
095	DL7PU	GM	69	1231	---	---	---
096	UR5G	FM	69	1150	307	---	---
097	DF5CK	DL	69	1144	307	---	---
098	SM7GEP	DL	69	1106	533	---	---
099	FE8DOL	DL	69	1033	---	---	---
100	HE8APF	DL	69	0820	---	---	---
101	DK5JC	DL	69	1350	600	---	---
102	PABJMS	FM	69	1346	---	---	---
103	PABJMS	FM	69	0932	---	---	---
104	DF4EO	DL	69	0811	---	---	---
105	Y2400	GM	69	1100	---	---	---
106	DK1KO	DL	69	0920	---	---	---
107	DF4CH	DL	69	1113	---	---	---
108	PABJTA	FM	69	0923	375	---	---
109	DL500/P	DL	69	0828	---	---	---
110	SM4AMV	DL	69	1330	---	---	---
111	SM5FHZ	DL	69	1010	100	---	---
112	SM5IVE	DL	69	1030	703	---	---
113	HE500	DL	69	1030	---	---	---
114	PABJEA	FM	69	1023	---	---	---
115	Y21FL	GM	69	0828	---	---	---
116	YUSCAR	FM	69	0634	---	---	---
117	SP4ISU	DL	69	1340	730	---	---
118	UR5NC	DL	69	1120	---	---	---
119	SP5TC	DL	69	1120	---	---	---
120	UR5ROT	DL	69	1053	---	---	---
121	SM5CUL	DL	69	0621	450	---	---
122	SM7GUL	DL	69	1132	---	---	---
123	001FDH	DL	69	1033	---	---	---
124	F5ECT	DL	69	0850	---	---	---
125	SM5CKR	DL	69	1215	320	---	---
126	DG4SAN	DL	69	1151	---	---	---
127	DC5VA	DL	69	0920	---	---	---
128	SM7FMD	HR	69	1106	---	---	---
129	SM5AGP	IT	69	0740	410	---	---
130	SM4DHN	DL	69	1240	1030	---	---

VHF-listener:G15556 ZN13g hrd:
2m:270 1596 1758 2601 2711
70: 54 1179

SWL NL-213 :DL14J
2m:328 3000 3250 4000 2600
70: 96 1500 1200
23: 55 1220

wkd=Number of squares worked. The List is published continuously. Data compiled above based on unconfirmed claims by the operators.

EUROPEAN SHF TOP LIST

1296 MHZ

NR	CALL	QTH	WKD	TROPO
001	DF3WU	FN	74	1277
002	PA8ET	DM	0	0930
003	PA8FRE	DM	0	1027
004	DK3UC	FN	0	1223
005	33LOR	DM	0	1057
006	FE1CHO	DM	0	0730
007	FE8AG0	DM	0	1061
008	OK1KIR/P	OK	0	1208
009	PA0UUM	DM	0	0550
010	DL7GY	DM	0	1013
011	HB9AMH/P	HB	0	1130
012	DB8NT	FK	0	1023
013	PA2DOL	CL	0	1027
014	OK1RIY/P	OK	0	1350
015	SM8DF	IT	0	1057
016	G4BYV	AM	0	0903
017	DL7YC	DM	0	1040
018	DK2NH	FN	0	0805
019	02713	GP	41	0810
020	DK8NA	FK	40	1032
021	DK5AI	FL	40	0803
022	0220E	EP	00	0941
023	SM5DNC	IT	0	1060
024	SM5E80	GR	00	0900
025	DB6SW	DM	0	0739
026	SM8FF8	IT	0	1040
027	ON5CF	OK	0	0925
028	DL5FAU	DM	0	0745
029	DK1FT	FL	0	0830
030	DK6AS	FM	0	0857
031	DF1E0	DL	0	0601
032	DL800V	DL	0	0642
033	HB9RG	HB	0	0820
034	LN1DU	DM	0	0600
035	G4DEL	AM	0	1025
036	SM6HY8	GR	01	1013
037	PA2HJ3	OK	01	0630
038	0232N	PO	00	0736
039	DL4ER	DL	0	0500
040	SM5REI	DM	0	0877
041	D64EE	DM	0	0741
042	3300J	DM	0	0963
043	IF3CK	FR	0	0095
044	DC0DA	DL	0	0620

3456 MHZ

NR	CALL	QTH	WKD	TROPO
001	G3LGR	AM	7	0427
002	DC308	DM	7	0419
003	DC0DA	DL	6	0429
004	DL7GY	FJ	6	0329
005	PA2DOL	CL	6	0217
006	DB8NT	FK	6	0208
007	PA0JME	CL	4	0220
008	PA2HJ3	OK	4	0308
009	PA0JGF	DM	4	0376
010	DK8NA	FK	4	0208
011	DF1E0	DL	4	0113
012	G4AGN/P	ZN	4	0115
013	DF5GZ	DL	0	0063
014	G4BYV	AM	0	0304
015	FE8AG0	DM	0	0134
016	DF5JJ/P	DK	0	0000
017	DK3UC	FN	0	0003
018	DB8NC	FK	0	0000
019	DL7TA	DK	0	0042
020	DD2EK	DL	0	0010
021	DD0GT	DL	0	0007
022	DL7YC	DM	0	0005

5760 MHZ

NR	CALL	QTH	WKD	TROPO
001	DL7GY	FJ	0	0030
002	HB9AJF	HB	0	0217
003	DB8NT	FK	0	0000
004	DB8NT	FK	0	0000
005	DB8NT	FK	0	0000
006	DC0DA	DL	0	0003
007	PA2DOL	CL	0	0014
008	HB9MDF/P	HB	0	0004
009	DF5GZ	DL	0	0003
010	PA0MGA	DM	0	0000
011	G4KGC/P	DL	0	0003
012	DK3UC	FN	0	0015
013	SM5DJH	HS	1	0010

2320 MHZ

NR	CALL	QTH	WKD	TROPO
001	PA8EZ	DM	26	0779
002	DL7GY	FJ	22	1018
003	FE8AG0	DM	22	0730
004	DB8NT	FK	22	0528
005	OK1KIR/P	OK	21	0866
006	DK8NA	FK	21	0528
007	33LOR	DM	18	0800
008	G4BYV	AM	17	0803
009	PA8FRE	DM	16	0804
010	DK3UC	FN	16	0601
011	DL5FAU	DM	16	0502
012	PA2DOL	CL	16	0528
013	DC308	DM	13	0419
014	DL7YC	DM	13	0634
015	DF1E0	DL	11	0401
016	PA0JGF	DM	11	0444
017	PA0UUM	DM	11	0070
018	DC0DA	DL	0	0420
019	DF3CK	FR	0	0410
020	PA0JME	CL	0	0330
021	SM8JME	GR	0	0300
022	SM6HY8	GR	0	0100
023	SM5E80	GR	0	0030
024	DL30L	DM	0	0033
025	OK1RIY/P	OK	0	0430
026	G4LFT	DM	0	0400
027	LN1DU	DM	0	0300
028	DF5GZ	DL	0	0400
029	DF3WU	FN	0	0416

10368 MHZ

NR	CALL	QTH	WKD	TROPO
001	I6ZAU	GI	14	0832
002	I3CLZ/3	FR	10	0571
003	YU3JN/3	GR	10	0563
004	I4CHV/4	FR	11	0633
005	I33LZ/3	FR	11	0572
006	I4AKV	FR	11	0570
007	I40T6/4	FR	11	0440
008	YU3UR1	GR	10	0344
009	I4BER	FR	0	0340
010	YU3TAL	GR	0	0322
011	I2BBH/2	FR	0	0237
012	I4AOR	FR	0	0320
013	I4XCC	FR	0	0232
014	I47T0/4	FR	0	0230
015	HB9AJF	HB	0	0204
016	HB9MIN/P	HB	0	0310
017	I4FKD/4	FR	0	0200
018	I4FKD/4	FR	0	0200
019	PA2DOL	CL	0	0217
020	HB9MDF/P	HB	0	0205
021	DL7GY	DM	0	0171
022	I430CV	GR	0	0200
023	G3LGR	AM	0	0200
024	HB9MIO/P	HB	0	0217
025	DL3NG	DL	0	0113