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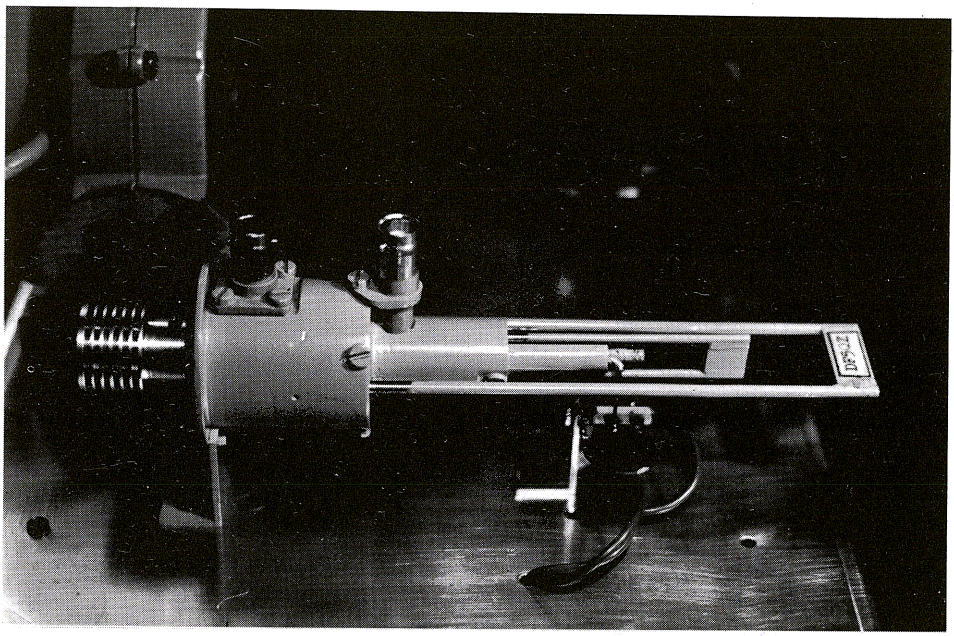

DF5QZ's 6 cm Amplifier

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COVERPICTURE: made by DL7QC from a photograph of Ulrich Weissenberg

CONTENTS:

6 cm LINEARAMPLIFIER

by Hans-Joachim Senckel, DF 5 QZ

E. : TWTs are very rare and expensive, so here is a describtion of a cavity resonator power amplifier with the tube YD 1060. The tube YD 1060 (Telefunken), RH 7 c (Siemens) ia a triode, (air blown cooling), metall ceramic type, useably up to 7 GHz. The anode voltage should not cross 450 V, and the cathode current 70mA.

The amplifier is a grounded-grid circuit, which is profitable for mechanical construction and it has better RF qualities at this frequencies. The anode- and cathode circuit are placed into another. The input power and the heat voltage supply line are coaxial in the cathode anchor. The anode is"RF cold" outside of the cavity. The grid has the output voltage and the cathode the input voltage. The output coupling is inductive, near the grid. Tuned is by two shorting plungers. The anode circuit is 3/4 λ and the 5/4 λ.

All mechanical pieces have to be very smoohh and are polished. This is very important to get a good tuning and contact. The Q of the circuits is dependent for the surface quality. The holes of the anchor of the shorting plungers must be very exact. Input and output jackets are mounted with a thread, so it can be tuned. Then cut a thread into the both shorting plungersplates (M3 anode M2,5 cathode). There you mount the tuning bar, later. The spring contacts (firm Feuerherd/Berlin) should soldered on the shorting plunger plates. Spring contacts should also soldered on the grid anchor. The shorting plungers are the most difficulty and very important, when the amplifier will work correct.

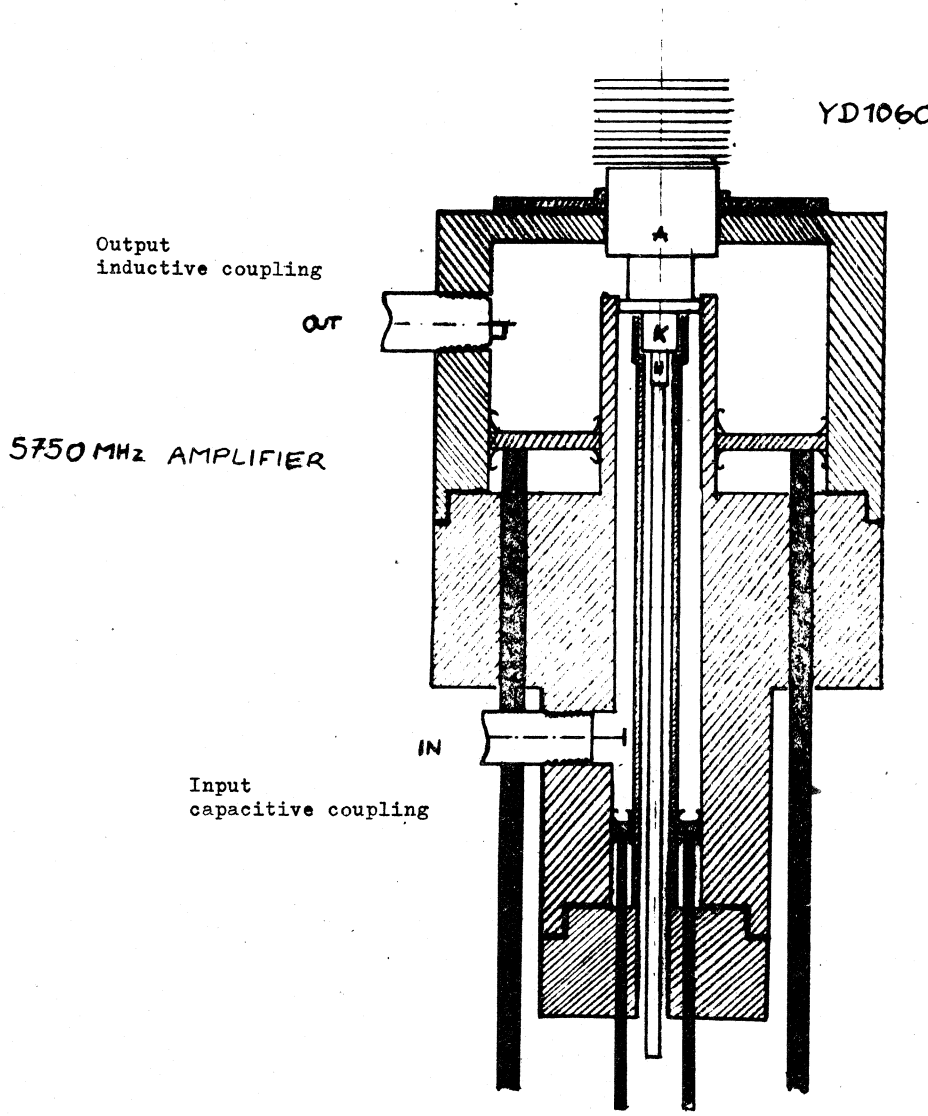
At the end of the cathode anchor is placed the ground capacitor. In the cathode jacket of the anchor is the cathode connection isolated with a teflon foil (0.2mm). This little anchor is glued with the foil into the cathode anchor. The anchor is a holder for the tube. Use an old tube for glueing as a pattern. This anchor tooks the cathode pin into and has an isolated wire to outside of the cavity. Before glueing the anchor is soldered with one end of the wire. The heater anchor is fixed with teflon jackets or glued into the cathode anchor. The rf input is capacitive with a lengthening of the BNC-jacket into the cathode anchor. The anode-ground capacitor is mounted with 0.5mm teflon foil and an isolated pin (450V !).

Pay attention ! Before soldering the cathode shorting plungers with the upper plate, mount the shorting plungers into the cavity, because the cathode anchor can take the shorting plunger only from one side into the cavity. It is very important, that you understand the drawings!

Adjust the cathode current to 35mA and tune with a 5760 MHz signal to maximum cathode current with the cathode shorting plunger. With a rf-meter tune to maximum output, it will be a very small dip. Also adjust the BNC-jackets to maximum power output. The anode output loop dip only a little into the anode cavity, because if it is to deep into it will give wild oscillation. Dont cross 80mA cathode current, only for a few seconds. The cavity is very stable if used a good blower. Block the cathode and heater wires at the outside end of the cathode anchor, with 1nF to ground, because some "hot" tubes had some wild oscillation.

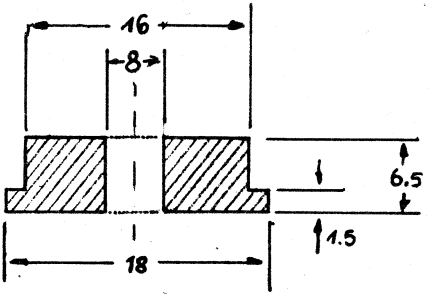
At an input of 18mW into the driver cavity we got 380mW output (13db gain), the following pa-cavity could not measured. But it has more than 8db gain.

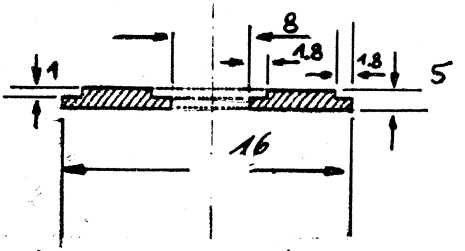
Thanks to DCØDA for measurement and Ulrich Weißenberg for fotos. The cavity is obtainable by Hans-Joachim Senckel/Borbergstraße27/ 4700 Hamm 1 (silvered for 280 german marks)



KATHODENABSCHLUßRING

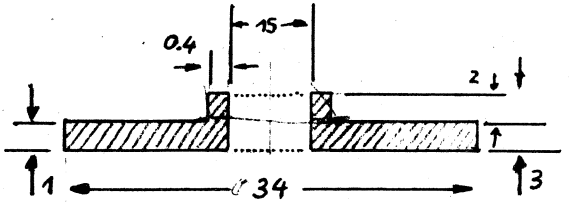
MS CATHODE RING





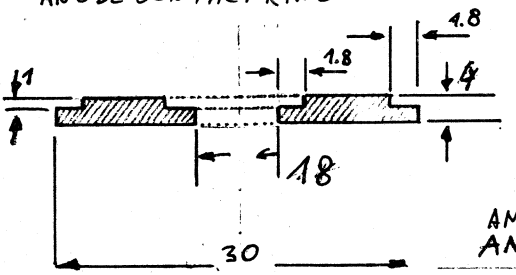
KATHODENSCHIEBER MS

CATHODE ADJUSTING SLIDER



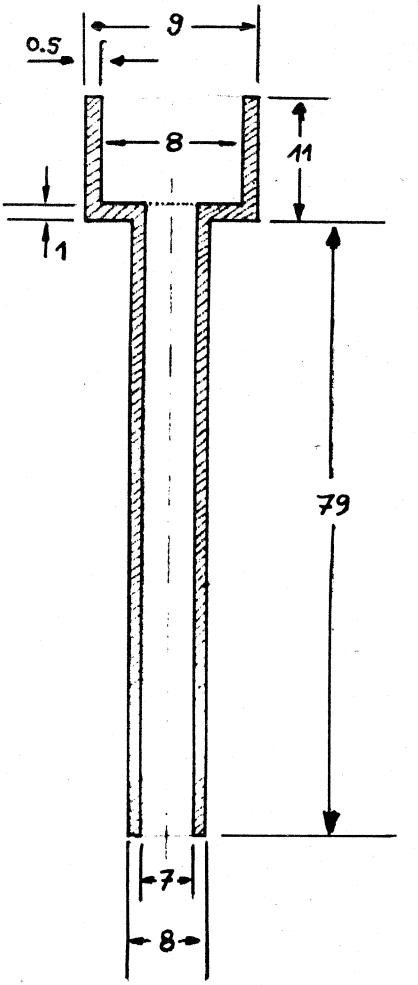
ANODENKONTAKTRING MS

ANODE CONTACT RING



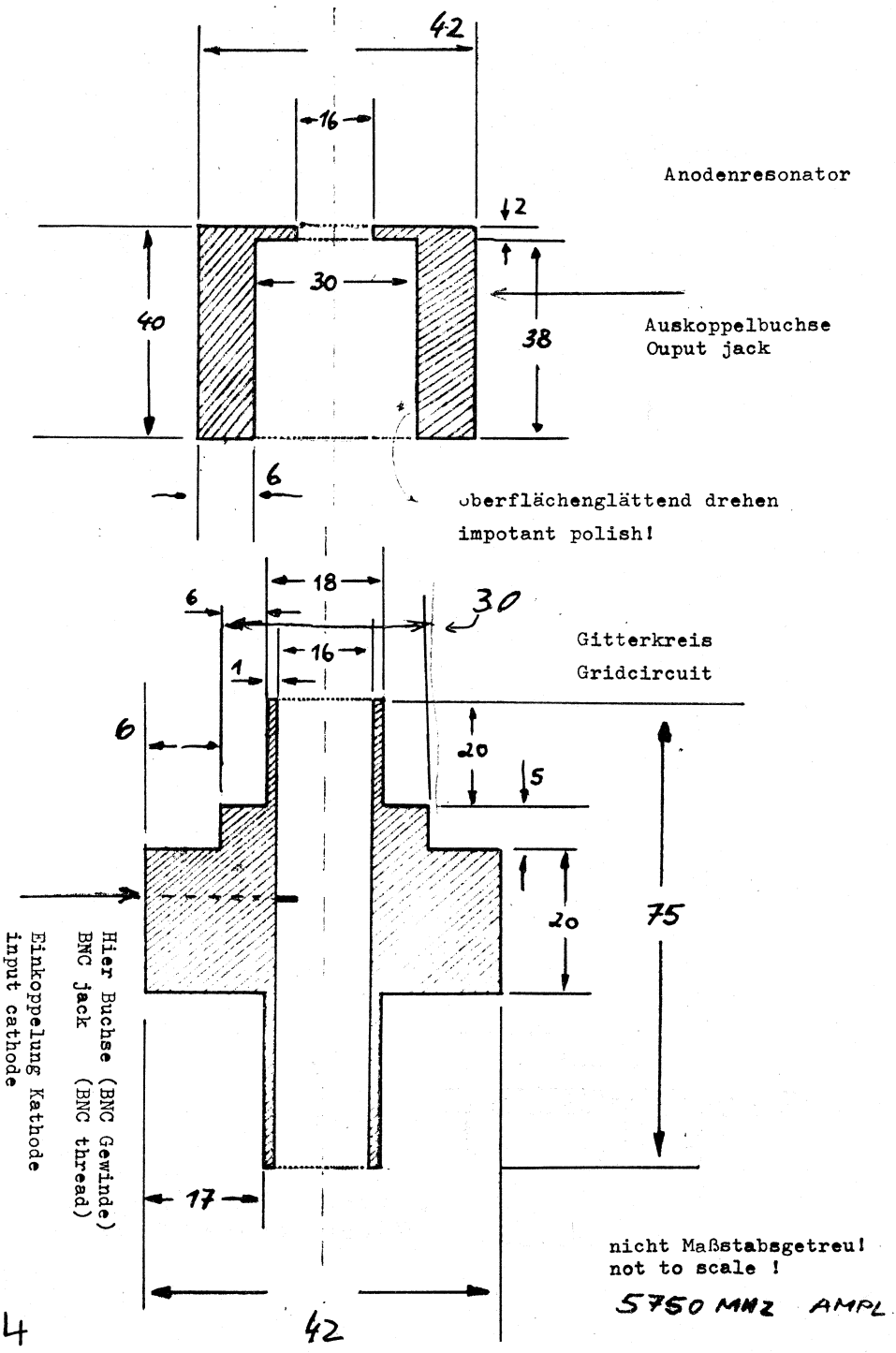
KATHODENROHR

MS CATHOD ANCHOR



ANODE ADJUSTING SLIDER

ANODENSCHIEBER MS


42
16
Anodenresonator
2
30
40
38
Auskoppelbuchse
Ouput jack
6
oberflächenglättend drehen
impotant polish!
18
6
30
Gitterkreis
Gridcircuit
16
1
6
20
5
20
75
Hier Buchse (BNC Gewinde)
BNC jack (BNC thread)
Einkoppelung Kathode
input cathode
17
nicht Maßstabsgetreu!
not to scale !
42
5750 MHz AMPL

D.: Da TWT-Verstärker nur wenigen Amateuren zugänglich sind, wird eine Topfkreisstufe mit der Röhre YD 1060 beschrieben.

Die Röhre YD 1060 (Telefunken); RH 7 C (Siemens) ist eine luftgekühlte Scheibentriode in Metall-Keramik-Ausführung und eignet sich zur HF-Leistungsverstärkung bis ca. 7 GHz. Die Anodenspannung sollte nicht mehr als 450V betragen, der Kathodenstrom 70mA nicht überschreiten. Die Röhre arbeitet in Gitterbasisschaltung, welche nicht nur elektrisch die besten Eigenschaften für kürzere Wellen hat, sondern auch konstruktiv der Topfkreiskonstruktion entgegenkommt. Der Anoden- und Kathodenkreis sind konzentrisch ineinander angeordnet. Steuer- und Heizleistung werden durch Koaxialleitungen im Innern des Kathodenrohrs zugeführt. Die Anode ist außen "Kalt"; das Gitter führt die Ausgangswechselspannung und die Kathode die Steuerspannung. Die Leistungsauskopplung erfolgt induktiv in der Höhe des Gitters. Zur Abstimmung dienen Kurzschlußschieber. Der Anodenkreis wird im 3/4 Modus erregt, der Kathodenkreis im 5/4 Modus.

Die Innenflächen der Drehteile müssen möglichst glatt abgedreht und nachträglich poliert werden. Diese Maßnahme ist wichtig, um eine ruckfreie und feinfühlige Abstimmung durch die Kurzschlußschieber zu erreichen. Außerdem wird eine einwandfreie Kontaktnahme zwischen Topfwand und Federkontaktmaterial hergestellt. Der Einfluß der Oberflächenbeschaffenheit im Innern des Topfkreises und die Abstimmschieberfunktion bestimmen im wesentlichen die Güte des Topfkreises! Es ist besonders auf die genaue Bohrung für die Führungsrohre der Schieber zuachten. Die BNC Ein- und Auskoppelbuchsen werden schraubbar montiert, um die günstigsten Ein- und Auskoppelgrade herstellen zu können. In die beiden Kontaktschiebergrundplatten werden M3 (Anodenschieber) und M 2,5 (Kathodenschieber) geschnitten. Hier werden später die Schieberstangen hineingeschraubt. Auf die Schiebergrundplatten wird das vorgefertigte Kontaktfedermaterial (Fa. Feuerherd-Berlin) aufgelötet. Weiterhin wird Kontaktfedermaterial in das Gitterrohr zur Aufnahme des Gitterkontaktes gelötet.

Die Anfertigung der Schieber bedeutet den schwierigsten Teil und ist für die optimale Funktion der Stufe entscheidend. Deshalb sollte an dieser Stelle äußerst sorgfältig gearbeitet werden. Am röhrenseitigen Ende des Kathodenrohres ist der Kathodenabklatschkondensator angebracht. In die Kathodenerweiterung dieses Rohres wird mit Hilfe von Teflonfolie (0,2mm) ein dem Kathodenanschluß der Röhre angepaßtes Röhrchen isoliert gegen Masse mit 2-Komponentenkleber eingeklebt. Das so befestigte Röhrchen nimmt anschließend den Kathodenstift der Röhre auf. Um eine maßgerechte Halterung der Röhre herzustellen, sollte die Röhre während des Härtevorganges am Kathodenkondensator im zusammengeschraubten Topf als Richtmaß stecken. Das eingeklebte Röhrchen nimmt den Kathodenanschlußstift der Röhre auf und ist nach außen mit einem isolierten Draht (0,5mm) verbunden. Vor dem Einkleben wird das Röhrchen mit einem Ende des isolierten Drahtes platzsparend verlötet. Das Heizspannungszuführungsrohr wird durch Teflonbuchsen oder 2-Komponentenkleber im Innern des Kathodenrohres befestigt. Die Einkopplung der HF-Steuerspannung ist kapazitiv durch die Verlängerung des BNC-Stiftes im Kathodenrohr. Der Anodenabklatschkondensator wird mit 0,5mm Teflonfolie und Isoliernippel (450V) montiert. Weiterhin ist zu beachten, daß der Kathodenschieber vor dem Verlöten des Kathodenrohres mit der Kathodenabdeckplatte montiert werden muß, da die Erweiterung des Kathodenrohres das Einfügen des Abstimmschiebers nur vom unteren Ende des Rohres zuläßt! Überhaupt ist das genaue Verständnis der Zeichnung Voraussetzung für den erfolgreichen Aufbau der Stufe.

Mit Hilfe eines mA-Meters in der Kathodenzuführung den Kathodenstrom auf ca. 35mA einstellen, Steuerspannung (5760 MHz) der Kathode zuführen und mit dem Kathodenabstimmschieber max. Kathodenstrom einstellen.

Mit einem geeignetem Wattmeter oder Diodenmeßkopf und Dämpfungsglied die HF-Ausgangsleistung anzeigen. Durch Abstimmen des Anodenschiebers wird ein scharfer Ausgangsdip erreicht. Das wechselseitige Abstimmen von Anode und Kathode führt zur optimalen Leistungsabgabe. Außerdem wird durch die Ein- und Auskoppeleintauchtiefe der Buchsen eine zusätzliche Optimierung erreicht. Die Auskoppelschleife des Anodentopfes taucht dabei so eben in den Resonator hinein. Zu geringe Eintauchtiefe führt zur Entdämpfung des Kreises und verursacht wildes Schwingen. Während der Abstimmung ist dafür zu sorgen, daß der Kathodenstrom nur kurzzeitig den max. Kathodenstrom von ca. 80mA überschreitet. Bei ausreichender Kühlung ist kein Nachstimmen, auch über längere Betriebszeiten notwendig. Die Kathoden- bzw. Heizleitung sollte am Austritt aus dem Kathodenrohr unmittelbar mit ca. 1nF abgeblockt werden, da einige "heiße" Röhrenexemplare ohne Abblockung bei offenem Eingang Schwingneigungen zeigten.

Bei einer Ansteuerung von 18mW wurden nach der Treiberstufe 380mW= 13db Verstärkung gemessen. Die Verstärkung der folgenden Stufe konnte nicht mehr genau ermittelt werden, aber mit Sicherheit können 8db angegeben werden. Meinen Dank gilt DCØDA für die meßtechnische Unterstützung und Ulrich Weißenberg für die Fotos. Die Stufe ist bei mir in erstklassiger feinmechanischer und versilberter Ausführung erhältlich (280DM). Hans-Joachim Senckel/Borbergstr.27/4700 Hamm 1

COMMENTS to a 70 cm long YAGI ARRAY

by Karl, SP 1 DSU

E. : This 432 MHz EME antenna, which is believed to be the first one in Poland, was finally assembled on July 1982 after about one and a half year of preparations and it is a teamwork of SP1IYZ,Andrzej, SP1HKC,Mirek and myself. I wish, at once, to express my sincere thanks to my two young collegues, who have made a tremendous job especially on the mechanical side. My thanks are also extended to individual members of our radio club in Szczecin and to SP 6 LB.

16x12 el. yagies (SP6LB design) mounted in a conventional quadrature configuration. Stacking distance hor. and vert. 117cm. 50 ohm distribution harness with five 50 ohm power dividers (SM6CKU produktion), 3KW at 432. Az-El mount manually controlled ("armstrong" system). Coax relay 1: Transco 50 ohm, 10KW peak at 1GHz, isolation between tx- and rx-ports at 432 MHz 60db. Coax relay 11: Magnecraft 50 ohm, 100W at 1GHz, isolation 35db, used as extra protection for the preamplifier. Preamp. 1 GASFET , Preamp. 11 NEC 645. Coaxial cable H 100 . The short coax cables within the harness is RG-213, all connectors are N-type.

The mast is a former pole for street lights cut to 7.5m length. The mast is mounted adjacent to our sun terrace, 5m asl. , so all antenna movements can be controlled from that place.

A small xtal beacon on 432.050 MHz was placed app. 900m from the antenna. The miniature receiver taken from IC 402 was used as a field strength meter in connection with a 100 Mohm FET voltmeter. No preamp. was used. A precision step attenuator for coaxial lines, useful up to 1 GHz, was inserted in the feed line. First, the instrument reading for one yagi was noted. Then, with all 16 yagies engaged, the step attenuator was adjusted to get the same reading. We hoped that it would be 10-11db, but we got exactly 12db. Needless to say, all three of us felt very happy.

Results: headlobe at -3db, hor. 9° vert. 9° . This measurement is to be repeated when we have more accurate scales for the Az and El axis. The sun noice, measured at 30° El. indicated around 11db. We estimate the gain of this EME array to be around 24dbd.

At the present time I must have visible moon for listening. Neverless within the period 23.7 to 22.8 the first statio to be heard over the moon was YU1AW. He was rather strong, RST 419. Next was K2UYH (also419) JA ? (maybe JA9BOH) and a lot of single letters and figures. 2.4 kHz bandwith has been used. I have a 4-pole active AF-filter with selectable bandwith. It is good for weak tropo signals but not good enough for extremly weak EME signals so I prefer not to use it.

One negative thing must be mentioned, a high gain array with a big ca capture area picks up a lot of man-made noice in the vicinity. The worst noice sources are small cars with two-stroke engines (Syrena,Wartburg Tranbant). A Syrena within a few hundred meters from the antenna can produce a kind of rapid woodpecker noice up to S9+20db! Even the best noiceblanker is of no value in such a case. On the other hand, at late evenings and night houres when the Syrenas have gone sleep and the antenna is elevated towards the moon, it is a wonderful relex to hear, how low the noice niveau is.

After installating a precision Az scale permitting readings down to 0.25 degree we spent almost a whole sunday making measurements for the polar diagram. The main lobe at -3db is 9°, not 12 as we first thought. The two secondary lobes at +/- 41° are usual "outgrowth" from the main lobe. From my experience, these two secondary lobes are always present in a stacked longyagi array. They are only, in this case, 11db down, but beeing close to the main lobe, they will do no harm.

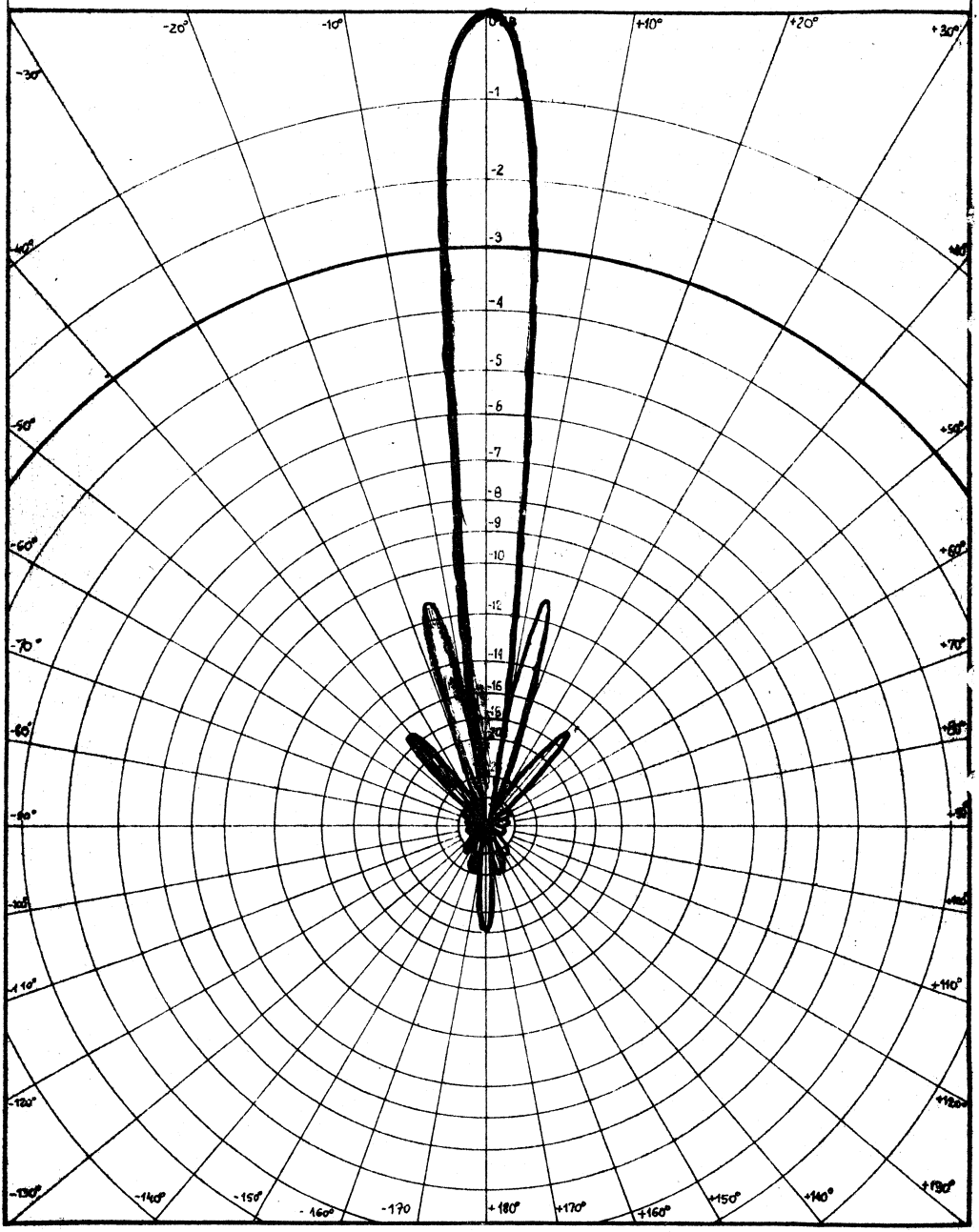
Both sidelobes at +/-41° are very narrow and 17db down which is more than satisfactory. The backlobe is also very narrow and 18db down compared with the main lobe.

The conventional procedure by stacking two longyagis is to keep them apart at a distance where their apertures just touch each other which usually occurs at a distance of two lambda. This would give, theoretically, an additional forward gain of 3db. In practice, however, an amateur can usually not achieve more than 2.2-2.5db. In case very short yagis, the additional gain can be substantially higher (e.g. two 3-element yagis could give increased gain of 4.2db at a stacking distance somewhere between a half and one lambda).
In his comments to the Swedish antenna measuring convention at Annaboda June 1979, Leif, SM5BSZ, pointed out that several types of longyagis have an optimal stacking distance around 1.7 lambda where they may give over 3db stacking gain.

The explanation is believed to be the following: when the apertures of two such yagis(preferably of medium size) are allowed to intersect slightly in other words, the two yagis are more tightly coupled, one can usually find a critical point where the sidelobes tend to cancel out, resulting in increased gain in the combined headlobe.

The 12 el. -6lb longyagi is of moderate size (2.9 lambda boom length) so we decided to try the tip from SM5BSZ . It worked out. A square group of four SP6LB yagis stacked 1.7 lambda in both axes gave solid 6db over a single yagi. Thus the hole array could be built rather compact, yet it gives a little more gain than normally expected.

SP 1 DSU § 16 x 12 El.
horizontal polar diagram 432.050



D. : Diese 432 MHz EME-Antenne, ich glaube die Erste in Polen, wurde im Juli 1982 fertig, nach 1 1/2 Jahren Planung und Bauzeit. Vielen Dank für die Hilfe von SP1IYC Andrzey und SP1HKC Mirek und auch an die Mitglieder unseres Radioclubs in Stettin und SP 6 LB.

Es sind 16 x 12 El. Yagies (SP6LB) in normaler Quadratform gestockt. Der Stockungsabstand beträgt 117 cm (hor. und vert.). Es kommen 5 50Ω Koppler von SM6CKU (3KW auf 432)zum Einsatz. Die Steuerung geschieht per Handkraft. Koax Relais 1 ist ein Transco (50Ω 10KW auf 1 GHz, Sperrdämpfung 60db), Relais 11 ein Magnecraft (50Ω 100W auf 1 GHz, Sperrdämpfung 35db) als zusätzlicher Vorverstärkersicherung. Der erste Vorverstärker ist ein GASFET, der zweite ein NEC 645. Das Kabel ist H 100, die Rotorschleife aus RG-213, alle Stecker sind in N-Norm.

Der Mast ist eine alte Straßenlaterne, bei 7,5m abgeschnitten, der auf der Sonnenterrasse steht, sodaß alle Funktionen auch von dort aus bedient werden können.

Eine kleine Hilfsbake wurde 900m von der Antenne entfernt installiert, sie sendete auf 432,050. Der Empfänger vom IC 402 wurde zum messen benutzt, in Verbindung mit einem FET Voltmeter (100 MΩ). Es wurde kein Vorverstärker benutzt. Ein Präzisionsdämpfungsglied bis 1GHz wurde in die Antennenzuleitung geschaltet. Zuerst wurde der Wert für eine Yagi gemessen und notiert. Nun, mit allen 16 Antennen wurde dann mit dem Dämpfungsglied der selbe Wert am IC 402 eingestellt. Wir hofften auf 10-11db, aber es waren exakt 12db. Nicht zu beschreiben, wie froh wir waren. Der horizontale und vertikale Öffnungswinkel liegt (-3db) bei 9°. Das Sonnenrauschen, bei 30° Elevation, wurde mit 11db gemessen. Der Gesamtgewinn der Antenne dürfte bei 24dbd liegen.

Zur Zeit muß die Antenne noch nach Sicht zum Mond gedreht werden. In der Zeit vom 23.7.82 bis zum 22.8.82 wurden YU1AW 419, K2UYH 419, JA9BOH ? und viele einzelne Zeichen gehört. Es wurde ein 2,4 kHz Filter benutzt, ein NF-Filter brachte keine Verbesserung bei EME Signalen. Eine negative Eigenschaft wurde bei der Antenne festgestellt, sie ist sehr Empfindlich gegenüber Zündfunfenstörungen (SYRENA, Warthburg, Trabant etc.) So ein Auto kann auch über 100m noch ein qrm von S9+20db verursachen, da hilft auch der beste Noice Blanker nichts. Wenn diese Autos aber dann "schlafen gegangen sind ", ist das Rauschen aber sehr schön leise, bei auf den Mond gedrehter Antenne,

Die normale Art zwei Yagis zu stocken ist, sie in dem Abstand zu montieren, daß sich die Aperturen der Antennen gerade berühren, meistens bei ca. 2λ. Das ergibt theoretisch einen Gewinnzuwachs von 3db. Praktisch kann man aber nur ca. 2,2-2,5 db erwarten. Bei sehr kurzen Yagis kann man mit höherem Stockungsgewinn rechnen (zB. 2 x 3El. haben 4,2db mehr gegenüber einer, bei einem Stockungsabstand zwischen 1/2 λ-1λ). Bei seinen Ausführungen auf einer Antennentagung in Ånnaboda (Schweden Juni 1979) erklärte Leif, SM5BSZ, daß verschiedene Antennen bei Stockung mehr als 3db Zusatzgewinn erzielen können. Das begründete er damit, daß wenn sich die Aperturen zweier Antennen (möglichst kurze) sanft berühren, daß heißt eine enge Kopplung besteht, sich die Nebenzipfel in einer optimalen Stellung fast Auslöschen, und daraus der Zusatzgewinn entsteht. Die 12 El. SP6LB Antenne hat eine Länge von nur 2,9λ , so probierten wir diesen Hinweis aus. Es funktionierte! Eine vierer Gruppe aus 4 SP6LB Antennen im Abstand von 1,7λ in beiden Richtungen gab exakt 6db mehr Gewinn gegenüber einer einzelnen Antenne. Nun konnte die Gruppe kompakter gebaut werden und ein höherer Stockungsgewinn erreicht werden, als bei üblicher Stockung.

Nachdem eine genaue Az-Skala installiert wurde, ergaben sich folgende Messwerte. Die Hauptkeule (-3db) ist 9° , nicht 12 wie zuerst gemessen. Die beiden Nebenzipfel bei +/- 14° sind 11db unterdrückt und sehr symmetrisch, was auf einen guten Aufbau schließen läßt. Die nächsten Nebenzipfel sind bei +/- 41° und schon 17db unterdrückt, was sehr gut ist. Die Rück- und Seitendämpfung liegt bei 18db.

IC 402 Modifications

by DC Ø HW - G 8 LRH

E. : Since I have an IC 402, I was disappointed with the performance of the receiver. With the audio gain control, set at 25%, the noice output was found to be a strain on the ears, when listening to weak stations. Having talked to many owners of the IC 402, this problem seems to be fairly generaland an attempt to improve the sig/noice ratio was made by replacing the RF and Mixer MOSFET, Q 1 and Q2 with BF981 's. The only improvement noticed was a slight increase in front end gain but the noice level remained unchanged. It was noticed that, when the frequency selector was turned to an empty channel (no xtal), the receiver noice did not drop in level as was to be expected. This suggested that the noice was coming from the IF stages and not from the RF/Mixer stages. This fact prompted a detailed study of the IF circuit, and with refference to the Plessey Applications Handbook .

Two major facts came up to light. The interstage coupling (L11 and L12) causes a severe mismatch, causing the noice figure to deteriorate. Plessey recommends using only two stages of amplification as the noice generated in the 1st stage is sufficient to overload the 3rd stage (96-114 db of gain using 3 IF stages). So following modifications are neccesary. The removal of the tuned circuits L11 and L12, and replacing them with 1nF coupling capacitors. Connect the SSB demodulator to the output of the 2nd IF stage (IC 2). Changing the input and output circuit of the 3rd IF stage (IC 3), which is now used as an AGC amplifier with pre-set gain. Minor changes to the AGC demodulator and DC amplifier to improve the dynamic range. The emitter circuit of Q3 (2SC383) between FL1 and FL2 modified to counteract the 3db signal loss across R11 and R12. Also the input coupling capacitor C22 to the 1st IF stage (IC 2) is changed to 1nF. Fig.1 shows the modified IF and AGC circuit.

In each IC 402 handbook is a detailed PCB layout on Page 22, which is essential for carring out the changes. (All mods to the PCB, except replacement of C22, can be carried out after removing the Battery Comparement, 4 screws and one wire from the rear power socket.)
Fit a 100pF capacitor across R12 (1K). Replace C22 (100pF) with a 1nF capacitor. Remove C25, L11, C26. Fit a 1nF capacitor in position C25, fit a link across L11 to the input of IC 2 (C26 position). Replace C29 with a 1nF capacitor. Remove L12 and fit a link from C29 to C30. Replace C30 (5pF) with a 68pF capacitor. Remove c33 (10pF)! Connect a 1nF capacitor from the junktion of C29/C30 to the junktion of R24/D8. Cut the

printed track between IC3 pin 3 and the junktion of C33/C34. Fit a 47Ω resistor between pin 3 of IC3 and the junktion of C33/C34. Replace C34 (68pF) with a 10nF capacitor. Replace C35 (2.2nF) with a 10nF capacitor. Fit a 1K resistor between Q7 (2SC945) emitter and earth on the PCB. The only adjustment required after carrying out the modification is to set the AGC threshold (R23) so, that the "S" meter remains at zero with the internal receiver noice. (The antenna must be disconnected for this test)

Unfortunately no detailed test could be carried out at the time of the modification, and only a subjective listening test during an opening on 70cm gave very good results. The audio gain can now be turned up to maximum with out causing demage to the eardrums.

Fot those who are contemplating fitting a 3SK97 MESFET as RF amplifier Q1, a better front end sig/noice ratio can be acheived by rewiring the coax relay, so that the antenna is connected directly to the receiver input filter L1. The orginal filter L46/L47 is now wired permanently in the transmitter output as a harmonic filter, as shown in fig.2.

Since writting the orginal modifications to the IC 402, it has been possible to try a GASFET type S3030 from TI in the RF stage. This DG! FET has a noice figure of 0.5db, G=28db at 144 MHz. After fitting the S3030 it was found to give an improvement of about -3db over the BF981 front end noice. The circuit and mounting details are shown in fig. 3.

Replace R1 (150K) with a 56K resistor, R2 (100K) with a 68K resistor. Connect a 180Ω resistor and a 1nF capacitor to the source of the S3030 and PCB earth. Retune L1, L2, L3 and L4 for maximum signal. Warning: Static discharge can kill this device, it is therefore essential that the following points are stricctly observed. The tip of the soldering iron must be connected directly to the PCB of the IC 402 with an earth lead, before any soldering is to be carried out. Before unpacking the S3030, touch the frame of the IC 402 (blank metal) with all fingers of both hands. This will bring your hands to the same potential as the IC 402. Use a pair of tweezers, connected with an earth lead to the IC 402 chassis when handling the S3030.

All the above mentioned changes have been kept as simple as possible and no mechanical changes to the existing IC 402 are required.

D. : Seit dem Erwerb des IC 402 war ich mit den Eigenschaften des Empfängers nicht zufrieden. Mit der AGC, auf 25% eingestellt, war das hören von leisen Stationen eine große Anstrengung. Nach Rücksprache mit anderen IC 402 Besitzern stellte sich heraus, daß es ein generelles Problem war. Die Vorstufentransistoren durch BF981 auszutauschen brachte nur höhere Durchgangsverstärkung, der Rauschpegel blieb unverändert. Auffallend war, wenn der Bereichsschalter auf einer toten Stellung ohne Quarz stand, daß dann das Rauschen sich nicht veränderte. Daraus folgte, daß der Grund des Rauschens in den ZF Stufen lag. Das zog intensive Studien der ZF Schaltung und von Plesseyunterlagen nach sich.

Es liegt eine Fehlanpassung am Kreis L11/L12 vor., woraus ein schlechtes Signal Rauschverhalten entsteht. Plessey gibt an, daß nur 2 ICs maximal hintereinander geschaltet werden dürfen, sonst ist der 3.IC übersteuert durch das Grundrauschen des 1. IC (96-114db Durchgangsverstärkung bei 3 Stufen). Folgend die Verbesserungen: Es wird der Kreis L11/L12 entfernt und durch einen 1nF Koppelkondensator ersetzt. Der SSB Demodulator wird an den Ausgang vom 2.ZF Verstärker angeschlossen. Änderung der Eingangs- und Ausgangsbeschaltung vom 3.ZF Verstärker, der jetzt nur noch als AGC Verstärker arbeitet. Kleine Änderungen werden am AGC Demodulator und am DC Verstärker vorgenommen um den Dynamikbereich zu verbessern. Der Emitterkreis von Q3 zwischen FL1 und FL2 wird geändert, um die 3db Signaldämpfung an R11 und R12 zu kompensieren. Es wird auch der Einkoppelkondensator C22 in der 1.ZF Stufe auf 1nF geändert. Fig. 1 zeigt die geänderte Version.

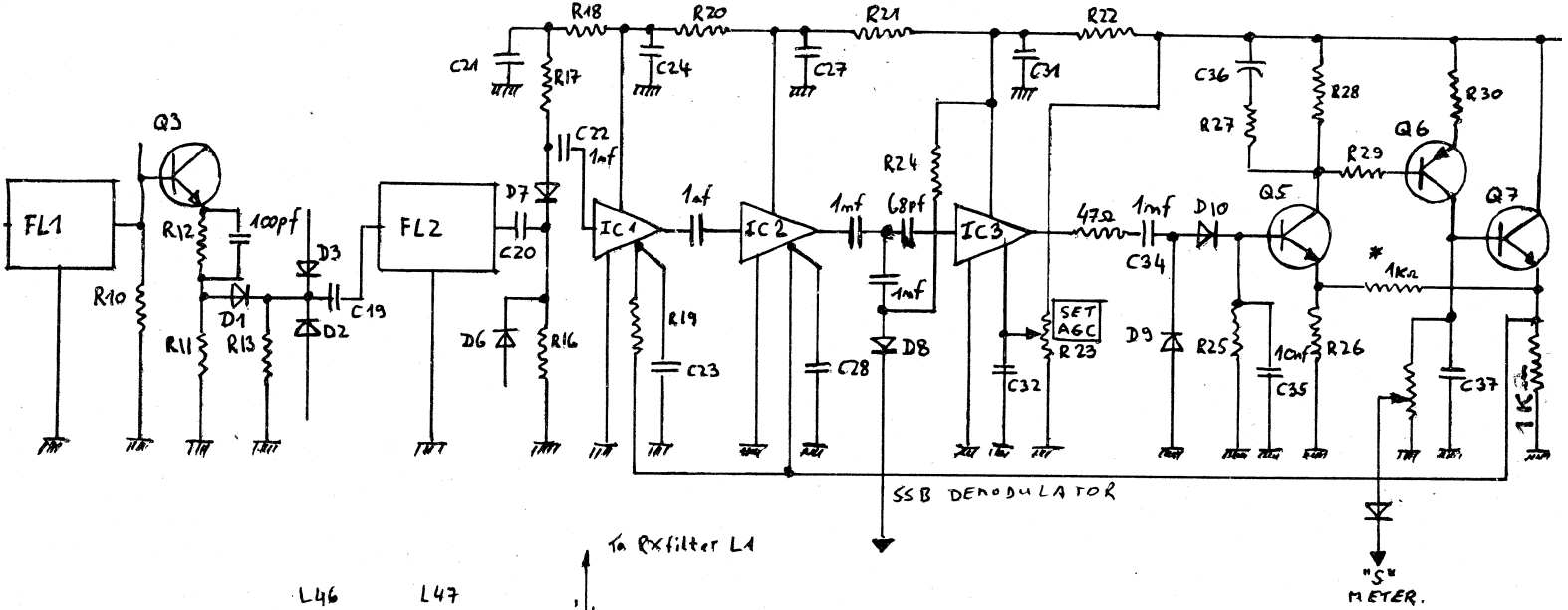


FIG. 1
IC402

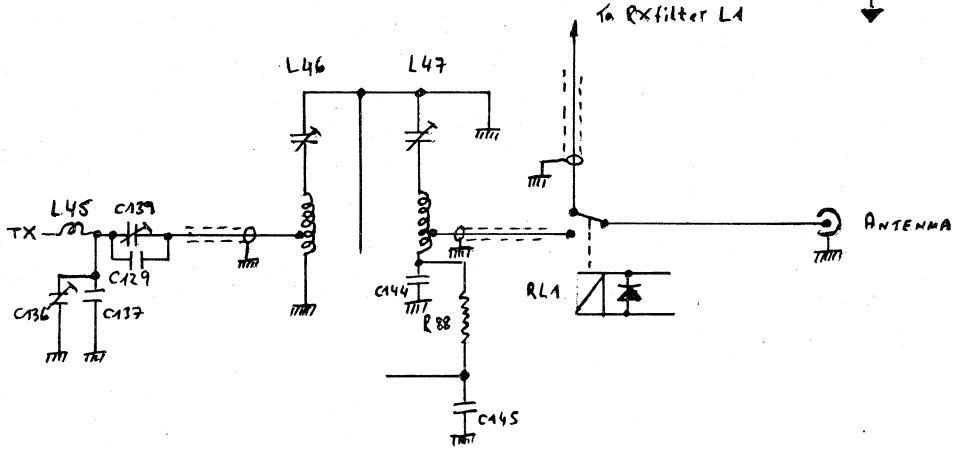
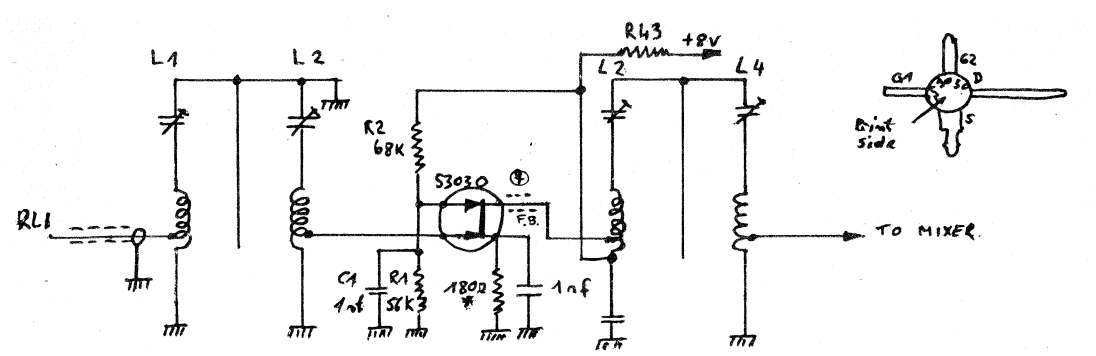


Fig. 2.



[* The 180Ω can be adjusted for ID = 10mA]

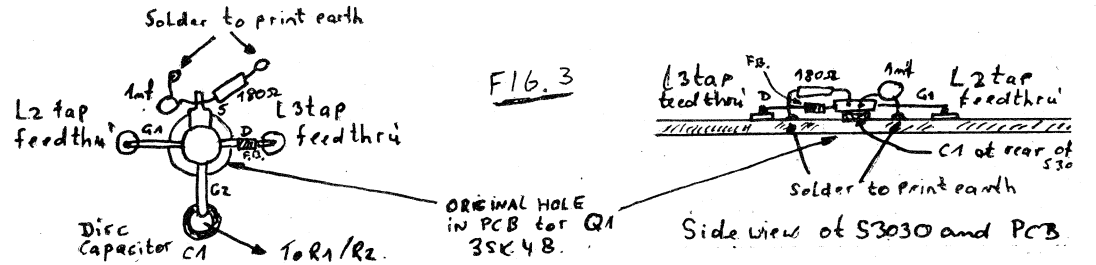


FIG. 3

In jedem Handbuch vom IC 402 ist eine detaillierte Platinenzeichnung auf Seite 22, die wichtig für die Änderungen ist. (Alle Änderungen auf der Platine können nach Entfernung des Batteriefaches, herausnehmen von 4 Schrauben und Entfernung eines Drahtes Ausgeführt werden, mit Ausnahme von C22). Zu R12 (1K) wird ein 100pF Kondensator parallel gelötet. C22 wird durch ein 1nF ersetzt. C25, L11, C26 werden entfernt, für C25 wird ein 1nF eingelötet, für L11 wird eine Drahtbrücke eingesetzt zum Eingang von IC2 (Position von C26). C29 wird durch ein 1nF ersetzt. L12 wird entfernt und eine Drahtbrücke von C29 nach C30 eingesetzt. C30 wird durch ein 68pF Kondensator ersetzt. C33 wird entfernt. Es wird ein 1nF Kondensator von C29/C30 nach R24/D8 eingesetzt. Die Leiterbahn von IC3 Pin 3nach C33/C34 wird unterbrochen, und ein 47ΩWiderstand eingesetzt. C34 wird durch ein 10nF ersetzt, C35 durch ein 10nF. Zusätzlich wird ein 1K Widerstand von Masse nach Emitter von Q7 eingelötet. Nun muß nur das "S" Meter mit R23 auf Null abgeglichen werden, ohne Antenne und der Frequenzwähler muß auf einer Leerraste ohne Quarz stehen.

Genaue Messungen konnten noch nicht vorgenommen werden, aber ein subjektiver Höreindruck bei den letzten guten Bedingungen ergaben ein positives Resultat. Es konnte nun maximale Lautstärke eingestellt werden, ohne das Trommelfell zu beschädigen.

Für die, die den 3SK97 im Eingang haben noch eine Verbesserung. Das Filter L46/L47 wird in die Sendeleitung ständig als Oberwellenfilter eingeschleift, sodaß bei Empfang die Antenne direkt an das Eingangsfilter L1 angeschlossen ist. Siehe fig.2.

Bei den Änderungen des ZF Teils war es mir möglich ein GASFET S3030 in die Vorstufe zu setzen. Der GASFET rauscht 0,5db bei 28db Verstärkung auf 144 MHz. Nach dieser Verbesserung ergab sich eine 3db bessere Rauschzahl gegenüber einem BF981. Diese Änderung zeigt fig.3. Nun die Details: R1 (150K) wird durch einen 56k ersetzt und R2 durch 68K. Ein 180ΩWiderstand parallel mit einem 1nF Kondensator wird vom Source nach Masse gelötet. L1, L2, L3, L4 müssen nun neu abgeglichen werden. Statische Aufladung kann den Transistor zerstören! Es müssen unbedingt die folgenden

Punkte beachtet werden: Die Spitze des Lötkolbens muß vorher mit der Masse der Platine in Kontakt gebracht werden. Vor dem Berühren des S3030 müssen alle Finger beider Hände die Masse der Platine berühren, sodaß die Finger das gleiche Potential wie die Platine haben.

Alle Verbesserungen wurden so einfach wie möglich gehalten und machen keine mechanischen Arbeiten notwendig.

REFLECTOMETER WITH COAXIAL COUPLER

by J. Ehrlich, DF 3 CK

To carry over rf power between generator (tx) and load (ant.), it is necessary to get best matching, to carry over maximal power. The transmission line is mostly coaxial line 50Ω, so the measurement is also with 50Ω impedance. The problem for OMs is, to get a good measurement to check the matching between transmitter and antenna or between two stages.

For higher frequencies (70cm 23cm 13cm aso.) only a few OMs, with contacts to the industry, can make measurings on this bands. Since some years it has changed, now there are very good directional coupler obtainable also for OMs. so the UHF/SHF interested OM is able to measure at these bands and to activate.

The energy is carry over through a coaxial line from the generator to the load. If generator and load are matched optimal, so the hole energy is transposed to heat in the load, coaxial line and load loss are idealized neglected. That is the prerunning energy and the prerunning wave or power.

Zur HF-Leistungs-Übertragung vom Generator zur Last muß man optimale Anpassung erreichen, um maximale Leistung zu übertragen. Als Übertragungsleitung wird Koaxialkabel mit 50Ω benutzt, so findet man meist Meßgeräte mit 50Ω. Das Problem ist nun, gute Meßgeräte zum messen von Stufen und Antennen zu bekommen. Die höheren Bänder (70cm 23cm usw.) konnten nur wenige OMs mit Beziehungen zur Industie vermessen. Das hat sich nun geändert, da nun sehr gute Richtkoppler erhältlich sind. Dadurch ist der SHF interessierte OM nun in der Lage im UHF/SHF Bereich Anpassung zu messen und diese Bänder zu aktivieren.

Mit einem Koaxial Kabel wird Energie vom Generator (TX) in Richtung Last (Ant.) übertragen. Sind Generator und Last impedanzmäßig richtig angepaßt, so wird die gesamte Energie in der Last in Wärme umgestzt. Koaxialkabel-und Antennenverluste sind idealerweise vernachlässigt. Man spricht deshalb auch von der vorlaufenden Energie und von der vorlaufenden Welle oder Leistung.

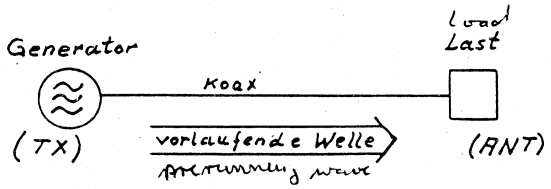


Bild: 1
fig 1

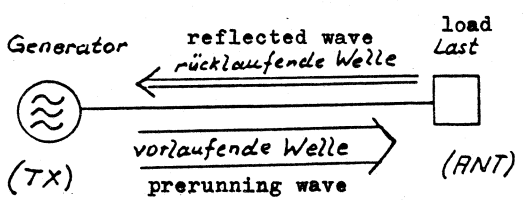
We know, nothing is perfect, the load impedance is not the same as the coaxial line impedance, some

Nun wissen wir, nichts ist perfekt, die Last-Impedanz ist nicht gleich der Koax-Impedanz; ein Teil der

thing of the prerunning power does not carry over, but is reflected to the generator. So there are two waves, a prerunning wave and a reflected wave in different directions on the coaxial line.

vorlaufenden Leistung wird nicht übertragen sondern zum Generator zurückgeschickt, reflektiert. Somit laufen 2 Wellen, eine vorlaufende und eine rücklaufende Welle in entgegengesetzten Richtungen auf dem Koaxialkabel.

Bild:2 fig.2



Through heterodyne from both waves it gives the welln known wave model, fig.3 , on the x axis is the voltage and on the y axis the locality. In a slot line (fig.4) the sum of the fields is indicated with a detecting element at a fixed place. The voltage ratio (fig.3), U max. at place 1 to U min. at place 2, is the standing wave ratio and it gives information about the matching.

Durch Überlagerung beider Wellen entsteht das bekannte Wellenmuster (Bild3) auf X-Achse = U, und auf Y-Achse = Ort. In einer Schlitzleitung (Bild4) kann man die Summe der Felder an einem bestimmten Ort mittels Meßsonde auskoppeln und zur Anzeige bringen. Das Spannungsverhältnis(Bild3), Umax:Ort 1 zu Umin:Ort 2 wird als Stehwellenverhältnis bezeichnet und gibt Auskunft über die vorliegende Anpassung.

Bild:3 fig.3

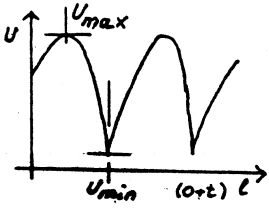
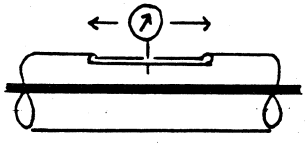


Bild:4 fig.4

Koaxiale Schlitzleitung

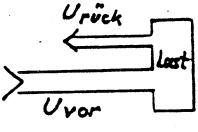


coaxial slot line

We don't talk about phase relation of the waves, but only about the amounts of the waves, scalar not vectorial. The most microwave components have dates which find out with scalar measurement. The values have already a frequency designation.

Wir berücksichtigen keine Phasenbeziehungen der Wellen, sondern betrachten nur die Beträge der einzelnen Wellen, also skalar und nicht vektoriell. Meistens sind die Mikrowellenbauteile mit Daten versehen, die mit der skalaren Meßmethode ermittelt wurden.

Rho = reflection coefficient voltage ratio between reflected to prerunning wave



$\rho = \frac{U_{rück}}{U_{vor}}$

Bild:6 Rho=Reflektionskoeffizient Spannungsverhältnis von rücklaufender zur vorlaufender Welle

RTL = Return Loss reflected coefficient logarithmic the return loss value (in db) is the measured value which tells how much the reflected wave is lower than the prerunnig wave

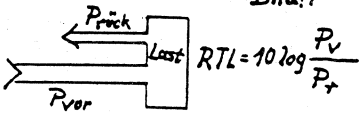


Bild:7

Rtl=Rückflußdämpfung Reflektionskoeffizient logarithmisch. Der RTL-Wert in db ist ein Maß um wieviel db die rücklaufende Welle geringer als die vorlaufende Welle ist.

SWR = Standing Wave Ratio Two waves on a line are added vectorial. U max = |Upre| + |Urefl| in phase. Umin = |Upre| + |Urefl| 180° out of phase. measured with a slot line

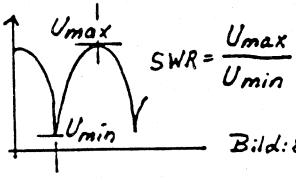


Bild:8

SWR = Stehwellenverhältnis Zwei Wellen auf einer Leitung addieren sich vektoriell. Umax = |Uvor| + |Uref| (in Phase) Umin = |Uvor| + |Uref| (180° außer Phase) Mit einer Schlitzleitung gemessen.

optimal matching
Z load = Z coax

fig. 9

total reflection
Z load = Ø or ∞

Optimale Anpassung
Z Last = Z Koax

Totalreflexion
Z Last = 0 oder unendlich

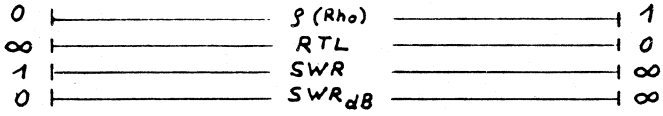
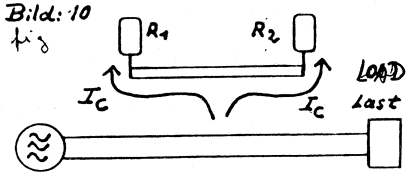


Bild:9

The directional coupler separates on a line two waves with different directions. So it is possible to measure only the prerunning wave or the reflected wave.and to compare both values. Better is a combination of both, a two way directional coupler or a reflectometer.
Fig. 10/11 shows a coaxial directional coupler with mixed coupling. A directional coupler has an input- and output connector (N- Norm) which is connected with the main line. A parallel line is coupling out some rf power, like the geometric conditions. The parallel line is terminated at both ends corresponding the characteristic impedance.

Der Richtkpppler trennt 2 HF-Wellen, die auf einer Übertragungsleitung in unterschiedlichen Richtungen laufen. Dadurch ist es möglich, eine Teilkomponente der vorlaufenden Welle oder der rücklaufenden Welle auszukoppeln und amplitudenmäßig zu bestimmen und zu vergleichen. Besser wäre ein Koppler der beides vereint und als Reflektometer bezeichnet wird.
Bild 10/11 zeigt einen Koaxial-Richtkoppler, der mit gemischter Kopplung arbeitet. Ein Richtkoppler besteht aus Ein-und Ausgang(N-Stecker oder Buchse), die durch die Hauptleitung v verbunden sind.Eine Nebenleitung koppelt entsprechend der geometrischen Verhältnisse eine entsprechende HF-Leistung aus. Die Nebenleitung ist mit ihrer charakteritischen Impedanz an beiden Enden abgeschlossen.

Bild: 10
fig



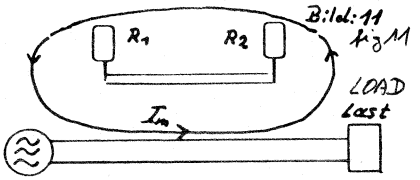
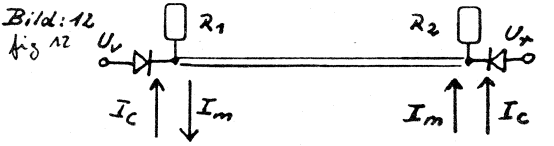


Fig.12 shows, that there is no indication of the prerunning component, because Ic and Im cancel.at R 1. At R 2 is a indication, because Ic and Im are added. In this direction only the reflected wave is coupled out and indicated.

Mittels HF-Demodulator wird die ausgekoppelte HF-Komponente zur Anzeige gebracht. Die magnetische und kapazitive Kopplung zusammen bewirken die Richtungsabhängigkeit. Bild 12 verdeutlicht, daß keine vorlaufende Komponente zur Anzeige gelangt, da Ic und Im sich an R 1 aufheben. An R2 findet jedoch aufgrund der Addition von Ic und Im eine Übertragung statt. In dieser Richtung betrieben wird nur die rücklaufende Welle ausgekoppelt und angezeigt.



The technical dates of a directional coupler are very important, here are the main points.

Frequency range :
small range, or some octaves
2 GHz - 18 GHz aso.
Connectors :
most N-norm mal or female

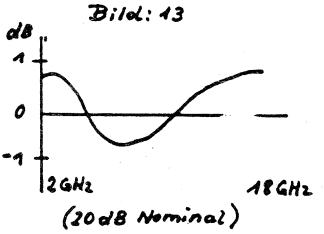
Fäange :
wave guide directional coupler as the case may be for example X-band, 8.2 - 12.4 GHz, WR 90, UG-135/U
Coupling :
coupling loss between main line and parallel line in db 3,6,10,20,30 or 40 for a limited frequency range for example fig.13/14 2GHz - 18GHz +/- 1db

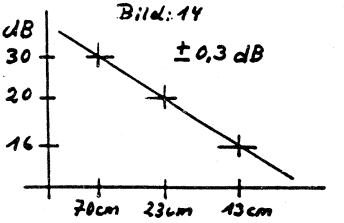
Nachstehend aufgeführte Daten sind wichtige Kenngrößen eines Richtkopplers, die entsprechenden Begriffe mit typischen Werten nachstehend.

Frequenzbereich :
Schmaler Bereich einige 100MHz im GHz-Bereich oder breit 2-18 GHz zB-
Stecker :
N-Norm 50Ω männlich oder weiblich

Flange :
Hohlleiterrichtkoppler, Flange je nach Band zB. X-Band,8,2...12,4 GHz WR90, UG-135/U.

Kopplung :
Auskoppeldämpfung zwischen Hauptleitung und Nebenarm in db:3,6,10, 20,30, oder 40 db für eine bestimmte Frequenz zB. 2 - 18 GHz 20 db +/-1





Tracking :
At a two way directional coupler the difference between both parallel lines, for example +/- 0.2db .... +/- 0.5db
SWR :
on the main line 1.1 db to 1.5db connectors does the most
Directivity,:
The most important characteristic quantity, it is decisive for the measurement accuracy at low reflection values. It has to decide from prerunning to reflected wave in db 20,30,40 db (if possible high values)
Isolation :
= diectivity + coupling (db)
Power :
permanance power, pulse power limitation through internal park over voltage, power of the parallel line resistor, plug aso.
Insertion loss :
coupling loss in the coupler and loss through the out coupling power 3db coupler : insertion loss 3.2 db to 3.5db. 20db coupler : insertion loss 0.2 - 0.5 db
Other declarations like weight, phase relationship , temparature are not unbresting for amateurs.
You can see, it is not easy to build a good directional coupler on a kitchen table, so it is very interesting that you can buy a precise directional coupler with very good dates.
In practice the directional coupler is placed between the generator and the testobjekt. So we have a complete reflectometer system to measure the amplitude value without phase information.

Tracking :
Bei dem Zweiweg-Koppler vergleicht mam die Kopplung der beiden Nebenarme (Tracking) -/+ 0,2 db ... +/- 0,5 db

SWR :
Hauptleitung: 1,1db...1,5db (Der Stecker liefert das meiste)
Richtschärfe :
Wichtigste Kenngröße, bestimmt überwiegend die Meßgenauigkeit, bei kleinem Reflektionswerten. Das Trennvermögen der Signalrichtung in db : 20,30,40,db (solltex möglichst groß sein)

Isolation :
= Richtschärfe + Kopplung (in db)
Leistung :
Dauerleistung, Pulsleistung
Begrenzung durch interne Spannungsüberschläge, Leistung des Nebenarmwiderstandes, Stecker.

Einfügungsdämpfung :
Übertragungsverluste im Koppler und Berücksichtigung der bereits ausgekoppelten Energie, zB. 3db Koppler : Einfügungsdämpfung ca. 3,2...3,5db 20db Koppler ca. 0,2...0,5db
Weitere Angaben wie Phasenverlauf, Gewicht, Abmessungen, Tempararturusw. sind für uns nicht relevant.
Wie man sieht kann man einen guten Richtkoppler nicht ohne weiters mit Hammer und Beißzange auf dem Küchentisch fertigen. Es ist daher besonders erfreulich, daß ein präziser und preisgünstiger Richtkoppler mit hervorragenden Daten im Amateurfunkhandel erhältlich ist.
Im praktischen Einsatz wird der Richtkoppler zwischen Generator (TX) und Testobjekt (Last,Ant.) eingefügt. Wir erhalten damit ein komplettes Reflektometersystem, zur Gewinnung der Amplitudenbeträge ohne Phaseninformation.

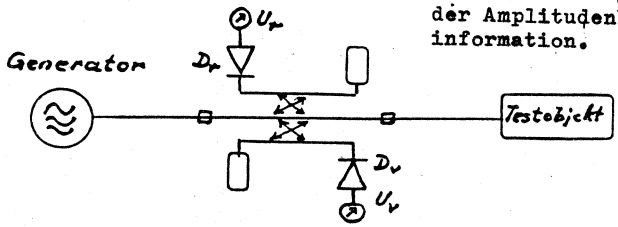


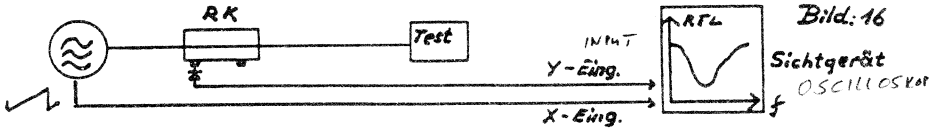
fig 15

(the arrows shows only the transmission direction, and do not agree with the physical construction)
The reflectionsystem includes generator, coupler, detection, indication.

The generator does the measure frequency, normally we have out Tx for this job. It has much power, but only a little frequency range. To check to match retain over a great frequency range, it is better to use a frequency generator. The frequency stability is not very important. A variable UHF tuner oscillator is useful. It is better to use a sweeper or a wobbulator, which can sweep automaticly a frequency range. With anooscilloscope, as an indication, it is possible to display at a wide frequency range the matching. Sweeper frequency and oscilloscope x-axis deflection are controlled by a synchronous one saw-tooth voltage.

(Die Pfeile geben die Übertragungsrichtung an und müssen nicht mit dem physikalischen Aufbau und Funktion übereinstimmen)
Unser Reflektometersystem besteht aus: Generator , Koppler, Detektor, Anzeigeeinrichtung.

Der Generator liefert uns die Meßfrequenz, üblicherweise unser Tx. Er gibt zwar eine große Ausgangsleistung ab, hat jedoch nur einen sehr kleinen Frequenzvariationsbereich. Um das Anpaßverhalten über einen größeren Frequenzbereich beurteilen zu können, ist es zweckmäßig mit einem Generator zu arbeiten. Frequenzstabilität ist unkritisch. Ein durchstimmbarer UHF-Tuneroszillator ließe sich verwenden. Idealer wäre ein Wobbler oder Sweeper der automatisch einen bestimmten Frequenzbereich durchfährt. In Zusammenhang mit einem Oszilloskop, als Anzeigeeinheit, ließe sich direkt breitbandig und auf einen Blick er faßbar die Anpassung darstellen. Sweeperfrequenz und Oszilloskop x-Ablenkung werden synchron von einer Sägezahnspannung gesteuert.



Important is the power or the amplitude of the generator, the Tx has certainly enough power, that means enough amplitude for the detectors. You have to take into consideratio, that the coupler for example has 20db, so the detection diode has only 1/1o of the prerunning voltage wave, or badly the testobject has Rho=0.1 RTL=20db, so the reflected wave at the outcoupling line has only 1/100 of the amplitude voltage of zthe prerunning wave. The generator power decides so the dynamic range of the reflectometer system.

continued in DUBUS 2/83

Wichtig ist die Leistung oder Amplitude des Generators, der Tx ist sicherlich leicht in der Lage einige Watt HF zu liefern, das heißt für die Koppler-HF-Demodulatoren, es ist ausreichend Amplitude vorhanden. Man muß ja berücksichtigen, daß der Koppler zB. mit 20db, die auf der Hauptleitung vorlaufende Welle, der Demodulatordiode somit nur 1/10 der vorlaufenden Spannungswelle angeboten bekommt, oder noch ungünstiger, das Testobjekt hat eine Rho=0,1 RTL=20db, das wiederum erzeugt an dem Auskoppelarm für rücklaufende Welle nur noch eine Spannungsamplitude von 1/100 der vorlaufenden Welle.

Wird in 2/83 fortgesetzt!

MICROWAVE NEWS

by DL7QY

10 GHz in PA0.....by PA0EZ

Obwohl es eine unbekannte Anzahl Amateure gibt, die auf 10 GHz "Breitband" mobil qrv sind, wird 10 GHz DX nur serioes von Amateuren versucht, die ueber 23, 13 cm ect bis nach 10 GHz Schmalband gekommen sind. In allen Kontesten werden Verbindungen gemacht, aber es fehlen noch Stationen im Ruhrgebiet (gibt es die?). Der PA0 dx-record ist jetzt noch 261 km zwischen PA0EZ und G8HPU/p. G3LQR hat die meisten PA0's schon gearbeitet. Die Strecke von AM67 nach CL/CM ist regelmaessig offen. Stationen die in PA0 jetzt qrv sind:
PA2DOL (CL03)/15 W, PA0CRA (CM75)/15 W, PA0JME (CL03)/.05 W, PA0DBQ (CM72).05 W, PE1BLE/A (BL30)/.8 W, PA0EZ (CM66)/.4 W, PE0PJV (CL36)/.04 W, PA0JGF (DM64)/.3Wund PA0EHG (CL48)/.4 W.
Weiter sind in Kontesten vielfach qrv: PA0MAR/p (CL01), PA0JRS/A (CK), PA0ASH (CM45) und PA0PLY/A (CM55).
Laut Erfahrung gibt es sehr regelmaessig gute Bedingungen fuer Strecken ueber Land wenn es ruhiges Wetter gibt. Die Bake von DL0QQ (DL09) ist bei PA0EZ auf 3cm hoerbar, wenn sie auch auf 2.3 GHz zu hoeren ist. G3LQR hoert regelmaessig die 10 GHz Bake von PA0DBQ und bei guten Bedingungen auch PA0MS/A (CL48) 300km! Die PA0's warten auf Aktivitaet in DL!! Wenn es auf 5.6 GHz DK0NA und PA2DOL gelingt, muesste auch auf 10 GHz etwas moeglich sein.

OH2BWC (MU) writes:....On 3/12-82 there was excellent tropo propagation over the East Sea, between Finland , Sweden and Germany. I wkd on 1296 MHz at 1825 DF9LN in FO51a with 53/519 reports and at 1840 DB4LT in EO07e was heard, but not completed. We made a sked for later in the evening, but propagation was lost.

G4BYV (AM25c) repots..I have inclosed my dx on 13cm for Jan. 83: wkd on 22.1. DJ9PC in DI and 23.1. DB5KS in DL. G3AUS is now qrv on 2320 MHz from YL square. G3LQR wkd on 22.1. on 2320 MHz DJ9PC in DI and on 1296 MHz (23.1.83) F1BUU in ZE, F1FHI in ZH and OE3LFA in II (1139 km). tks fer info, John

I2FHW (EE17f) wkd on 1296 MHzon 20.6.82 IW4AHX/6 in GD and IV3AVZ in GF.

SM7GEP (HR24e) wkd on 23cm 3.10.82 SM6FHZ in GQ, 4.10. SM1BSA in JR and 7.11. OH1FA in LU. (544 km)

OH0NC (KU71g) wkd on 1296 MHz via Tropo >400 km: 2.12.82 SM6HYG (FS58f) 589/559, OZ7LX (FP49c) 559/559, LA9DL (FT06h) 539/559, OZ3ZW (fo18e) 589/599 and LA8AK in DS80b with 539/559 reports. On 3.12.82 OZ1ABE in GP12j 569/589. On 24.1.83 DK3UC in FN14a 589/59, DC9OT in EM49j 57/56 and OZ7LX in FP49c 569/58. tks fer info Sam

DC0DA wkd on 23cm:31.10.82 OZ9SL in FP74g 53/57, OZ1ABE in GP12j 53/51 and DK0NA in FK58b. On 13cm 31.1.83DC9XG in EN37f 58/58, 3.3.83 ON5GF in CK55h 52/51 and DK0NA in FK58b 51/51. On 9cm 23.1.83 DC9XG in EN37f 59/59 and 18.2.83 DF9LN in FO61a 51/51. tks fer report Juergen

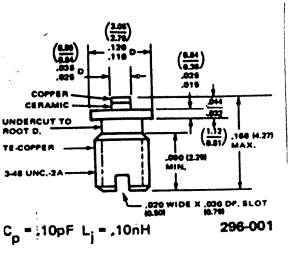
OE9XXI/9 (EH39c) OP.(OE9PMJ) wkd on 1296 MHz, using A 3m parabol, 200 W rf and MGF1400 in front end on 2.10.82 HB9BBD/p in EH, HB9MIO/p in DH, F1AHO/p in DH, F2TU/p in DI, DJ3ZU in DL43f, DJ9BV in DK26h, OE2CAL in

GH, OE3LFA in II, OK1KIR/p in GK45d; on 3.10. OK1CA/p in HK29b, DF3XU in FN31a (672 km), DF9LN in FO61a (742 km), DK0IK/p in EN69a (630 km), DL7APV in GM47c (600 km), HB9ICK/p in DG17d, HB9MTY/p in DG26c, DF1EQ in DL76a, PE1CHQ in DM53h (584 km) and PE0AGO in DM53h (584 km). 75 QSO's, 23 squares in 6 Countries during the Contest. On 2320 MHz 3m dish, 25W rf and MGF1400 in front end: 2.10.82 DL7QY in FJ61e, DKONA in FK58b, DJ9VS in EJ33a, DC8NV in FI79h and DJ9PC in DI80f. On 3.10. DF0RX/p in DJ09b, DC2CT in FI68j and DF1EQ in DL76a (439 km). 14 QSO's, 10 squares in 2 Countries during the contest. tks fer info Peter

F6BSJ (CG24j) reports: wkd on 1296 MHz on 30.10.82 PA0EZ in CM66b 519/519, F1FHI in ZH 59/58 and F2KX in BJ 559/529. Used equipment 5 W rf into a 1.5 m parabol and MGF1400 preamp. F6HLD/p had made some beautiful DX on 1296 MHz: the 30.10.82 also with some new squares for him: ZH, DM, CM, CL, DL, DK and DJ (total of 13 squares). When propagation seem to be good please turn your antenna in direction of CG! Stations QRV:F6HLD/p CG55a, 23 el, 100 W/ NEC NE720 preamp. F6GBY 23 el. 2 W and F6BSJ 5W 1.5m dish and 100 W, 2.2m dish in preparation.

40–50 GHz

	f	VTh	Po	Iop	Vop
DG8-8848B 296-001	40-60	1.4	25	400	3.5 @ 50GHz
DG8-8848C 296-001	40-60	1.4	50	800	3.5 @ 50GHz
DG8-8848D 296-001	40-60	1.4	100	1200	3.5 @ 50GHz



C_p = .10pF L_j = .10nH

HB9MIN Erich versucht eine Sammelbestellung fuer 47 GHz Gunnelemente zusammenzubringen. 1) Po min 10mW Vop ca 3.-4.5 V Iop max 250 mA ca 80 US$. 2) Po min 50 mW Vop ca. 4-5V Iop max 800 mA ca. 143US$. Beide Dioden haben Kathode und Kuehlkoerper an Masse. Gehaeuse "Microdisc" mit Gewindestutzen. Der Preis ist ausserordentlich niedrig und gilt fuer Einzelstuecke. Der Preis kann noch niedriger werden, wenn bei der Sammelbestellung 10 oder mehr Stueck zusammen kommen. Die Dioden sind erstklassige Ware und werden mit Messprotokollen geliefert. Bitte bei Interesse sofort schreiben an: Erich Zimmermann, HB9MIN, Eichholz, CH-3254 Messen.

LA9AK (DS80b) wkd on 23 cm 2.12.82 at 2205 SM4DHN/4 55/52 in GU79d, at 2224 SM0FZH 539/539 in JT54h and at 2226 OH0NC 559/539 in JU80b. Only with 5 W rf, PA-failure! tks fer info Jan

G4LRT (ZM45d) reports: worked via Tropo on 1296 MHz >250 km on 11.1.83 G3GNR XK, F1BUU ZE, on 22.1. GU3KFT in YJ , HB9AMH/p DH, ON5GF in CK and F6DZK in AI. On 23.1. F1FHI ZH and G3AUS in YK. On 2320 MHz: 23.1. G3AUS in YK32j (10th square worked) and 19.1. DL9LU in DK, DD3KL in DK. On 3456 MHz heard DL9LU in DK13j 53 and DD3KL hrd 31.

OK1CA/p (HK29b) (ex OK1AIB) writes....2/3.10.82 during UHF/SHF Contest 38 QSO's with 11576 points, best DX wkd on 1296 MHz via Tropo: HG4KYB JH, DLONN FH, DLOUH FH, OE5KE/5 GH, DLOFM FH, DL6NAQ/p EK, OE9XXI/9 EH, DK0IK EN, DF9LN FO, DK0BC EI, DJ5BV DK and OZ7LX in FP.

G3PBV (YK32b) wkd on 1296 MHz via Tropo: 31.12.82 - 1.1.83 ON5SHF hrd S5, but no stations qrv on 70cms or 23cms!! On 23.1.83 F1FHI ZH, G4CBN YN and ON5SHF BK hrd. tks fer info Dave

DL3NQ, Dieter berichtet....die haeufig raetselhaften Reflektionen bei besonderen Bedingungen sind etwas erhellt: Sie kommen aus der

Troposphaere selbst. Ein Signal von DKONA auf 9 cm, kam schraeg von hinten aus einer Antennenelevation von 4.5 Grad (Die direkte Richtung ist durch Berge versperrt). Das gleiche hat anschliessend auch DB3UU beobachtet, der DKONA's Signal zu diesem Zeitpunkt aus der direkten Richtung nicht hoeren konnte, im Gegensatz zu normalen Bedingungen. Ueber solch einen Reflektionsmechanismus ist auch das QSO mit DL7QY am 29.11.79 auf 23cm gelaufen. Seit dieser Zeit habe ich naemlich diesen Verdacht, den ich jetzt am 24.1.83 mit Hilfe von DKONA's Signal erhaerten konnte. Tks fer info Dieter

DJ9BV, Reiner schreibt:..im Juli 1983 werden wir wieder eine Woche auf Helgoland (dO70j) sein. Ich hoffe, dass bis dahin die 13cm Station fertig ist, so dass wir "DO" zum ersten Mal auf 13 cm aktivieren koennen.Unter DKOIK/p (EN69a) konnten folgende 23cm QSO's >400 km getaetigt werden:2/3.10.82 DJ9PC DI, DJ3ENA EH, HB9RG EH (672 km), DC9NH FJ, DKOBC EI, DLOEE/p EJ, DJ9HO/A GJ, OE9XXI/9 EH (630 km), DL9GU EJ, OK1AIY/p HK, PEOMAR/p CL, ON7WR/A CK, DC5MJ/p FI, DKOOX EI, OK1CA/p, DL7QY FJ, DL2AS/p GH, DLOFM/p FH (633 km). Rig:TX 2x2C39 100W RX:MGF1400 Ant: 4x26el-yagi. tks fer info Reiner

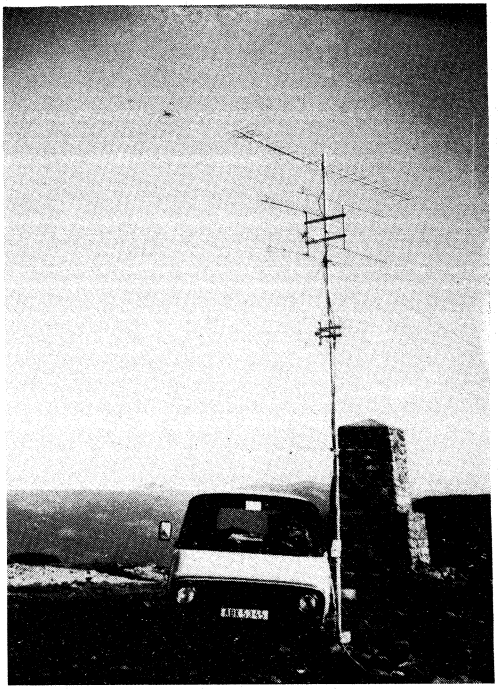
PAOWWM (CM63g) wkd on 1296 MHz via Tropo:3.9.82 G8MWR ZM, OE2CAL GH, DC2CT FI, G8TXG YM, F1FHI ZH, DC7QH GM, GW8AAP/p YN, 15.9.OHONC KU, SM1BSA JR, SM6IKY GQ, G4HWA/p AN, 2.10.G4KIY ZM, F1EBN/p BJ, F1DPX/p AJ, G8DKK ZL, OE2KMM GH and OE2CAL GH. On 2320 MHz: 25.8.82 PA3BNT/LX/A DJ, 3.9.DJ9PC DI and 2.10.DB9JC in DL. Tks fer info Wim

DB6BX (DM46c) wkd via Tropo on 1296 MHz:8.8.82 F1BEG/p (BJ39j), G3TDG (AL51g), OE2KMM (GH16c), G8PPR (ZN22h), 14.9.G3GRO (ZL80h), OZ7LX (FP49c), 15.9. HB9AMH/p (DH66c), 17.9.G3ZEZ (AL16f), G4KIY (ZM40j), 18.9.G4KDH (AL34h), 29.10. OE2CAL (GH16c), 30.10. DC2CT (FI68j), F1FHI (ZH63d), DK8VR (DJ55c). Tks fer info Peter

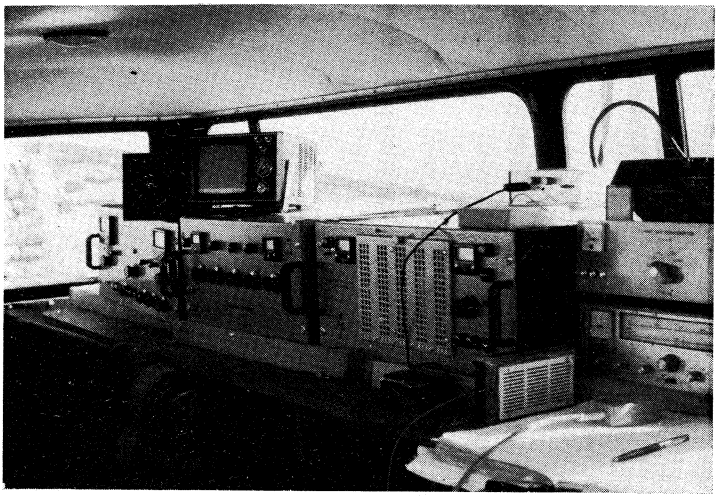
HB9AMH (DH66h) wkd via Tropo on 23cm: 7.7.82 G3LQR AM, G4KIY ZM, G3MMK ZN, ON5NK BK, G3AUS YK, G3LTF AL, G3DY ZM, G8HPU AM, G3JXN ZL, G3PSJ AL, G3PBV YK, F6CER BI, G8TXG YM, G4MAW YK, G4BRT ZM, G4BYV AM, G8IEM ZK, F2KX BJ, G8FEZ AL, G3TDG AL, PAOCRA CM, PAOEZ CM, PE1AKJ CL, PE1CHQ DM, G6AVK AL, G3FHG AL, G8MLA ZM, F6DZK AI, GW8TVX XL (first HB9/GW), G3ZEZ AL, PE1ALA CM, PAOFRE CL, PA2DRV CL, F6CDK DJ, PAOWWM CM, PAOMJK CL, PA2JOK CL, PAOPJV CL, PAOTGA CL, PE1FES CL, G3GIM ZL, G6GN YL,8.7. G8MWR ZM, G8GP ZL, GU3KFT YL, G4JTJ ZM, 9.7. DK3XU FN, DF5LQ EO, DB3HN EN, GJ8SBT YJ, G3COJ ZL, G4HWA ZL, G4KCT ZN, G8SFI ZN, G4KIY ZN. 15.9.PAOCRA CM, PE1CKK CM, DJ8XO FN, DB4LT EO, DL3HLA FN, OZ9NI GP, OZ1ABE GP, DF9LN FO, OZ7LX FP, OZ7IS GP, 30.10.82 OZ7LX FP, OZ2OE EP, DC4BK EN, DF7YX EM, DF5XP EL, G3ZEZ AL, G3LRP ZN, GD2HDZ XO, G8AYY ZM, G3DAH AL, G4KDH AL, OZ1OF EQ, 31.10. SM6FHZ GQ and OZ9QV in GP. Tks fer report Arnold

DC9BU/A (EK60b) wkd on 1296 MHz:30.10.82 G3GIM ZL50c, G3SPJ AL41a, G3JXN ZL39e, G8BCL ZL16f, G4KGC ZM65d, G8SFM YL39b, G8KAX AL32g, F6GCJ AG13a, F1FHI ZH63d, OZ9QV GP22f, OZ3SW GP11j, GW3CCF YN65f, OZ1OF EQ78b, SM6YGV FS58f, SM7CFE HQ58d, SMOFHZ JT54h, OZ1FGF EQ25c OHONC KU71g, on 24.1.83 F6DZK AI20a. Station used by DC9BU TX:70Wrf, 24el. aaray and MGF1400 preamp. Tks fer info Heinrich.

ON5GF, Michelle writes...since July 1982 I am also qrv on 13cm, but for the moment I can't tury the aerial (1.5m dish). Only 280' N/W to 80' N/E is possible. As soon as possible, I put the dish at the top for 360' rotation. Tks fer info Michelle



OK1AIY/p (HK18d), Pavel reports abt his SHF activity: 3.9.82 wkd on 1296 MHz: DG4GAN EI76a, OE3LFA II52g, DL7QY FJ61e, 4.9.DJ9PC DI80f, HB9RG EH63b, HB9MIN/p DH66e, 15.9. DH4NAG FK58b (also on 2320 MHz), UP2BJB in LP06d (First OK-UP on 23cm!). On 2/3.9.DL0NN FH19h, HG2KRD IH62c, DF9LN FO61a, DK0IK/p EN69a, DL7QY FJ61e, DL0KI FO51a, DF5LQ EO50j. On 2320 MHz: OE3LFA (First OK-OE on 13cm), DK0NA, OK1KIR/p, DF9LN, DL7QY and OK2KQQ/p. From /p in HK28c (930m asl): 30.10.82 G4BYV AM25c, PA0JOU CM57f, PE1CQQ DM09e, PA0FRE CL03j, PE1CHQ DM13h, PA0EZ CM66b, PE0EIN DM53b, PE1DPX DM41a, DJ5BV DK26h, DJ6GQ EI13j, PA0CRA CM75a, ON5GF CK55h, PA0JGF DM54j, PE1FOT CL06a, PA2GBK CL06a, PA0DRV CL03d, PA3BSK DL04a, DF7YU EL03a, PA2DOL CL03j, G3AKS YK32j, G4LRT ZM54d, G4KIY ZM40j, DK6AS FM44d, DD9DU DL38a, PA0LPN CM74e, PE1HQO DN71a, G3LTF AL11d, DB6BU DM36a, DB5BU DM36a, DC6TV DK16g, DK2UO DL74e, DJ6QK EJ76e, DK2DB EI03g, DL5FAU EK64j, DL6NAQ/p EK60b, DJ5SM EI14d. On 2320 MHz: PA0EZ CM66b, PE0ESN DM53b, PA0CRA CM75a, PA0FRE CL03j, PA2DOL CL03j, G4BYV AM25c and DK2UO DK74e. On 31.10.82 on 1296 MHz: DB9SB EJ80b, DK8VR DJ55e, DL3SP/A FJ27a, DB2VY DJ57a and DB9NI FJ46g. The two pictures showing Pavels /p (mobile) Shack, on left hand the used antenna mounted beside the car. Below the inside Shack. On the top of the mast the 70cm yagi and below the 4 times loop yagi array for 23cm. There below the 4 times loop yagi array for 13cm. Tks fer info Pawel



Bemerkungen zur Erstverbindung LX/DL auf 24 GHz von LX1GR.
Die Verbindung die im DUBUS Info 3/82 Seite 173 angefuehrt wird, zwischen DB8FP/LX und DC8UG/p kann nicht als gueltig angesehen werden. Dies hat folgende Ursache: Laut den Postbestimmungen,

die kuerzlich zwischen den deutschen und luxemburgischen Behoerden getroffen wurden duerfen, nur A- oder B Lizenzinhaber in LX ohne Gastlizenz QRV sein. Ein Antrag fuer C- Lizenzler eine Gastlizenz in LX zu bekommen, wird normalerweise abgelehnt werden. Auch in diesem speziellen Fall hat keine Sonderlizenz existiert die an DB8FP vergeben wurde. Also ist infolge dessen die Station auf der Luxemburger Seite illegal qrv gewesen. LX1GR (LX-VHF-manager)

PA0MGA, Marcel schreibt....vor mir auf dem Tisch liegt die DUBUS Nr. 3/82 und im Microwave News lese ich ueber die Erstverbindung im 24 GHz Band DL-LX. Das erinnert mich an meine Erstverbindung PA/DL im 24 GHz Band am 3.9.81 mit DC3QS , ueber welche nie berichtet wurde. Die verwendeten Geraete waren: Eigenbau Gunnoszillator mit Temperaturstabilisierung und Isolator, ohne AFC. Das Ganze war mit Styropor isoliert. Die Empfangsmischdiode (1N78f) erhielt das LO Signal ueber einen Richtkoppler (13 dB). Als erster Zwischenfrequenzverstaerker war ein BFT66 eingesetzt, und der Nachsetzer war ein umgebautes Autoradio. Die erzeugte Leistung von 100 mW wurde einer Hornantenne zugefuehrt (25dB Gewinn). Die Erstverbindung lief von DM65h (auf dem Dach der Technischen Hochschule in Enschede), ungefaehr 65m asl nach DC3QS in DM77h (150m asl). Die verwendete Modulationsart war FM, und der ueberbrueckte Abstand etwa 30 km. Wegen der Stabilitaetsprobleme und der Schwierigkeiten sich im Band zu finden, sind einige Versuche misslungen. Nachdem wir aber beide eine Temperaturstabilisierung eingebaut hatten, lief die Verbindung mit 58 beiderseits. Tks fer info Marcel

DF7FJ/p (DH20h) wkd on 10GHz 2.5.82 DC5GF/p (DI50b), on 24 GHz 2.5.82 DC5GF/p (DI50b) 5959, 20.6. DJ4YJ/p (FH46g) 5257. From EH11h on 21.2.82 on 5760 MHz DD4GR/p in EI32f 5959. F0GOH/p wkd 1982 on 10 GHz (DH06e) 3.10. HB9MDP/p (EH57d), HB9IR/p (EG13f), HB9MIN/p (DH66f), HB9MMM/p (DG32a), F6BCU/p (DI76g). On 5760 MHz 3.10. HB9MIN/p, DL9GBG/p (EI32f). On 24 GHz 3.10.HB9MIN/p and DC5GF/p.

DL7QY (FJ61e) wkd on 1296 MHz on 23.1.83 GW3CCF in YN65f, OE3LFA in II52g, PE1AKJ in CL80h, G4KKF in ZO02d, OZ1AXX in FQ61j, OZ9SL in FP74g, LA8AE in FT72h 57/59 SSB, 24.1. OE3PQU in HI69g, F6DZK in AI20d, F1FHR in BI12c. On 5760 MHz 24.1. DK0NA (FK58b) and on 10368 MHz CW/SSB DC8NV in FI79h with 419/51 reports. DC8NV only used on 10 GHz 2 mW and a horn antenna. The distance is abt 170 km!

IARU Region 1 ---- The 2.3 GHz AMATEUR BAND

1. WARC 1979 has not changed the seondary allocation to the amateur radio service of the 2300-2450 MHz band. The 2400-2500 MHz band will in most countries remain an ISM band (microwave ovens).
2. CEPT has withdrawn the existing recommendation concerning the use of the 2.3 GHz band.
3. Germany and the Netherlands have withdrawn the 2300-2320 MHz from the amateur service, in order to accomodate some radio links.
4. Switzerland gives amateur licences under special circumstances in the 2400-2450 MHz ISM band only.
5. As far as I know, Norway is the only CEPT country which does not allow amateurs to use the 2.3 GHz band, although in some other countries such as Ireland, France and Spain no amateur activities are yet reported.
6. In North-Western Europe amateur activity in the 2.3 GHz band is rather large, and still growing. The stations use the IARU (provisionally) recommended segment 2320-2322 MHz. In Italy activity is growing also, but there still the 2304-2306 MHz segment is used.
7. Amateur activity in the 2.3 GHz band is almost exclusively confined to weak signal telegraphy and SSB telephony in the 2320-2321 MHz segment (Italy 16 MHz lower).
8. In the U.S.A. the FCC is planning to withdraw 2310-2390 MHz from the amateur service, but at the same time to give the amateur service a primary (shared) status in the 2300-2310 MHz segment.
9. It is clear from the above that some coordinated effort is required to avoid a complete mess in the 2.3 GHz band. As CEPT has to formulate a new plane for this band, IARU Region 1 will have to start a coordinated European approch, talking into account the beginning of international traffic by moonbounce.
10. One thing is very clear: Amateur use of the 2.4-2.45 GHz segment for the weak-signal experiments is impossible, due to the noise level of microwave ovens (which are wideband and rather badly screened). The only advantage would be the availability of cooker magnetrons which can be syncronized and used for MWatts ERP. This would not be the linking of our administrations. For them this could be a reason not to urge us to shift to the ISM band.
11. The best solution would be that the amateur service could have exclusively use of a, say, two MHz wide segment in the lower band part. Taking into account the FCC plans and the problems of the Dutch and German administrations, the best solution could be an exclusive segment from 2309-2311 MHz.
12. We ask each delegate to arrange a meeting with its administration in order know:
    a) what are the possibilities and impossibilities for a very small exclusive amateur segment in lower part of the band,
    b) if such an idea is against the administrations views, what will then be the future of this band in their country
    c) will IARU Regio 1 actions have a positive influence on the point of view of the administration,
    d) will they allow, or even support, an IARU contribution to the relevant CEPT proup(s).

Hilversum, February 1983, PA0EZ VERON M.W. manager

The ITU Radio Regulations concerning the 2300-2450 MHz allocations after Jan 1., 1982: Region 1 FIXED, mobile, radiolocation, amateur notes 664,772. Region 2/3: FIXED, mobile, RADIOLOCATION, amateur notes 664,771,772. Note 664: 2400-2450 MHz amateur satellite, 772 2400-2450 MHz ISM, Note771 2310-2390 MHz in USA, Australia the telemetry in the aeronautical mobile service has priority over other mobile service.

continued on page 36

TROPO NEWS

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

by DL7ACG

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

DC8QB (EO38d) wkd:

3.12.		SM5CAK	HS	OH2AYG	MU	OH3MF	MU	OH5IY	NU
SM1MUO	JR	RR2TEJ	NT	OH2BDF	MU	OH3AZB	MU	OH5NW	NU
SM1MUV	JR	UR2EQ	NT	OH2AUK	LT	OH4UC	NV		
SM4KBC	GT	OHØJN	KU	OH2AWW	MU				

tnx fer info, Andy

DDØHZ (FN21f) wkd > 700 km:

5.9.		GW3OKA	YL	GW2HIY	XN	GW3IWJ	YN	F6FEO	BH
F6CTT/p	AJ	EI2DJ	WN	GW8YUJ	XN	G3UKV	YM	F6ABR	AG
12.9.		F1DPU	ZI	F1FHI	ZH	GW8KSF	YN	F1DXH	AI
F1DQK	BI	F1DZB	ZJ	F1GJP	ZH	G8RAO	ZM	F1AGO	AG
F1KCP	BI	F1DPX	ZH	G8RCF	YK	GW6IBY/p	YL	F5ZO	AI
F6CKZ	AJ	EI2DW	WN	G8NYA	XK	30.10.		31.10.	
13.9.		F6APE	ZH	F1DZB	ZJ	F1GXW	AG	F6APE	ZH
F6EQG/p	ZI	GM6IUE/m	ZR	G8YIH	ZL	F1BQM	AG	3.12.	
GW4MSE	XN	14.9.		G6JBR/p	YK	F1FVZ	AI	OH5IY	NU
F1FHI	ZH	GD4GNH	XO	GW4JTG/p	YM	F1CPX	AH	OH2AYG	MU
GW8FKB	XN	GJ8SBT	YJ	GW6ITR/p	YL				

tnx fer info

DF8AE (EM73e) wkd > 700 km:

13.9.		GW8NVN	YL	G8SFM	YL	31.10.		UP2BKH	KP
GM4JEJ	YQ	LA3UL	FT	G3DAO	XK	UQ2NX	MR	UA2FAY	KO
GW3NYY	XL	UQ2IV	KQ	G3CHN	YK	UP2BJB	LP	SM1LPU	JR
EI2CA	WM	UQ2GDA	KQ	GW8JLY/p	YL	UQ2AS	LQ	RQ2GAG	MQ
14.9.		30.10.		OK2BFH/p	JJ				
G4IGZ	YN	OK2VIL/p	JJ	OK2BFE/p	JJ				

tnx fer info, Rüdiger

DG5FAF (EK75j) wkd > 700 km:

5.9.		GW3OKA	YL	G4NVA	YN	GI4OPH	XO	G8IAJ	ZO
OK3KPV/p	JI	G4CYA	ZN	OZ1EYE	FQ	14.9.		LA6VBA	ES
OK3KWZ/p	JI	GI4JYJ	XO	EI2CA	WM	G3UTS	ZO	LA8AE	FT
13.9.		G8VES	ZN	G4CDC	ZN				
G4KEX	ZN	G6CMJ	ZN						

tnx fer info, Hans-Joachim

LA8AK (DS8Øb) wkd:

23.1.		OE2KMM	GH	DL5MCG	FI	DK7RR	GI	OE5VHL	GI
G8PNN	ZP	OE2CAL	GH	OE5GDL	GI	G3PBV	YK	DF9RJ	GI
DF9MV	GI								

tnx fer info, Jan-Martin

DF9PY/p (DK65g) wkd >700 km:

30.10.
OK2BFH/p JJ
F1GTR ZG
G4MPD/p YN
OK2BLE/p JJ
G6CJW YM
G8AWK YL
22.1.
F1GCD AF
F1GXB XI
F6CCH ZG
F6AXE YH
EB1VW XD
EA1NU XD
GU6EFB YJ
F1CHP ZG
GW3NYY XL
F5BV ZF
EA1YY XD
F6FVB/p XI
EA1KC XD
FX3THF bcn
23.1.
HG7KPL JH
OK3KYU/p JI
LA5XAA CS
GD3AHV XO
OK3CPY/p JI
HG1KZC IG
HG4YF JH
OK3CDM JI
OK3RMA JI
OL7BDQ JJ
OK3TFN JI
GW8VEE YN
GM8OFX YR
GM4OBL YR
GM3XOQ ZT
OE3SMB IH
HG7PR JH
OK3YCM JI
OK3CKJ/p JI
GM8BDX YP
G4RCE YO
OK2KQQ JJ
HG6KNB JI
HGØDG KH
OE3OKS IH
OK2KRT JJ
HG4KXG JG
HG8KAX KG
GB3LER bcn
OE3APC IH
HG6KNB JI
HG7PL JH
HGØHO KH
GW3KJW XM
OK3KJF/p JI
OE4EEA IH
HG5OR JH
OK3CIE JI
HG1XG IG
OE3FAC IH
HG2KML JH

tnx fer info, Stefan

DG1BP (DN37h) wkd >700 km:

3.9.
F5XU BF
4.9.
OE3XA/2 GH
12.9.
F1FHI ZH
13.9.
G8NYA XK
FØCJM/p ZJ
F1DIK ZH
EI9EH WN
GI4OPH XO
F6EQG/p ZI
GW2HIY XN
GW8FKB XN
GW8UCQ YL
F1GHP ZG
F1GTR ZG
EI7EH WN
GM6IUE/m ZR
GM6HYA XL
EI4CL WN
EI8BL WN
EI3V WN
14.9.
EI5EM WN
EI8EO WN
EI7DG WN
SM4LMV/4 HT
SM5CHK HS
SMØHAX JT
G6GBR/p YK
EI2DJ WN
GM8OEG YQ
15.9.
SM1NDF JR
SM1LPU/1 JQ
SM1NVW JR
SMØFPT IT
OHØJN KU
SK5ID IT
SMØKFJ IS
OH1DP LU
SMØFMT IT
SM4NFL HS
SMØKFV IT
OH1AWW LU
OH1DB LU
UR2GZ MS
SM1VHF bcn
30.9.
HB9HB bcn
FXØTHF bcn
FX3THF bcn
GB3VHF bcn
30.10.
OK2KZR IJ
DG7MAR GH
OE5VHL GI
F1GYA BF
F1ERG CH
F1BTK BG
1.12.
SK1VHF bcn
2.12.
SK4MPI bcn
3.12.
SK4MPI bcn
SK1VHF bcn

tnx fer info, Arend

DG4NAE (EJØ6a) wkd:

30.10.-31.10.
hrd
EA1NQ XD
AE1BEZ XD
EA1ARJ XD
31.10.
Y38WA HN
2.11.
OZ1GOK EP
26.12.
YU3ZV HG
31.12.
F1CPX AH
12.1.
SM7WT GP
15.1.-16.1.
I4ERN GE
22.1.-24.1.
F6FRR ZF
F1GHP ZG
F6GCJ AG
F6IBX XI
F1FHI ZH
F1BZN YI

tnx fer info, Udo

DL7YS (GM46b) wkd:

3.10.
OE3NDA II
OK2BFH JJ
9.10.
DF9RJ GI
17.10.
DL6KAI DK
DL1MBV FI
HB9QQ EH
18.10.
OE3NDA II
27.10.
PA3APH CL
OE3NDA II
OK2BFH JJ
6.11.
PAØMS/p CL
PA2VST CM
DKØOX EI
OK1KSF/p HI
7.11.
OK2KQQ/p JJ
DJ4UF DK

tnx fer info, Peter

EA1YV (VC69h) wkd >1000 km:

7.8.		G4OFF	YL	GW4CQT	YL	8.8.		EA8TF	RO		
EA8XS	JO	G3TA	YL	G6GN	YL	EB8HQ	RO	EA8WA	RO		
GW4EAI	YL	GW8XMT	YL	EA8AGY	RO	EB8GG	RO	EA8RCO	RO		
GW6JMV	XL	G4JZF	YM	G4IGO	YL						
G8PTQ	YK	G6GN	YL	EA8TD	RO						
GW6FLU	YL	G8KBQ	YL	EA8WD	RO						

tnx fer info

F6BSJ (CG24f) wkd:

3.9.		4.9.		14.9.		SM7GTD	HR	SM6GUS	GR
OK1KRA/p	GK	OK1DWA/p	GK	SM5CNQ	HS	SM6EOC	GQ	OZ1EYE	FQ
Y24XN/p	GK	Y59ZI/p	FK	SM6GDA	GR	SM6CTQ	HS	OZ3GW	FQ
OE5XDL	HI	Y42ZK/p	FK	SM6APH	GQ	SM6QP	GR	OZ1BEF/A	EQ
OK1KKH/p	HJ			SK7HW	HQ				

tnx fer info

F6CJG/p (BF21j) wkd:

8.8.		10.8.		G3UNU	ZM	GW6APZ/p	XM	PAØOOM	DN
EA4XA/p	YZ	DK1PZ	EL	G6DYH	YM	GW4NVO	YL	12.8.	
EA6KW	AZ	DK5AI	FL	11.8.		F6FTN/p	DC	PAØXMA	DM
EA3DGV	ZA	DL3NAZ/p	EJ	PE1EVX	CM	G4BRP	ZM	OZ3WU	EP

tnx fer info

F6ETI (YH24c) wkd >900 km:

2.9.		3.9.		13.9.		DJ9BV	EN	14.9.	
OE9NHI	EH	Y52ZN/	GK	DK7AW	FL	DK1KO	FN	SM6EOC	GQ
EI3VKB/p	WN	Y22MO		DF7OG	FM	DJ9YE	EN	OZ1APR	GP
		Y24XN	GK	Y23BD	GM			SM7MXO	HR

tnx fer info

G8KBQ (YL77h) wkd >800 km:

13.9.		Y24XN/p	GK	22.1.		Y30BNE/p	HM	OK1VLA	HK
LA6VBA	ES	31.12.		Y22QG	FM	Y24FD	GM	OK1KSL	HK
DL6FAW/p	EO	DF5DL	EL	Y23BD	GM	OK2LG	II	LA6HL	CS
SM1LPU/1	JQ	2.1.		DL4WCY	FM	OK1AAV	GK	OE5UAL	GI
30.10.		DC5AL/p	FL	DJ7YP	EM	OK1HAG	HJ	24.1.	
DL2NBO	FK	DF4IP	EJ	23.1.		OK2KZR/p	IJ	OZ1EYE	FQ
OK1KEI/p	HJ	16.1.		Y23FG	FM	OK1DKX	HI	OZ1IVW	FQ
OK1KKH	HJ	EA1ED	VD	OK1OA	HK				
OK1KRA	HK	EA1TA	VD	Y21SF	GL				
Y21SF	GL								

tnx fer info

I2FHW (EE17f) wkd:

1.8.		14.8.		OK2KZR/2	IJ	F6EVT	BI	20.8.	
IH9ONU	GW	I2DMK/IL7	HC	EA3CCK/6	BZ	IT9VMN	GY	IT9TDN	HY
2.8.		15.8.							
IH9ONU	FW	EA6IF	CA						

tnx fer info

G8LFB (ZL3Øf) wkd >700 km:

5.1.		F1GXX	ZF	22.1.		HB9RCJ	DH	DL8RBF	GJ
DJ6DC/p	EH	HB9RDB	DH	F8RZ	ZF	HB9QQ	EH	DF3RU	FJ
11.1.		17.1.		F1AHQ	DG	HB9MMM	DH	23.1.	
F1ETX	AF	F1BPS	AE	F8LF	DH	HB9MY	EH	OK1FM	GJ
F1AJE	AF	F6HLA	AD	F6DKQ	DH	OE5FPL	GI	OK1MBS	HK
F1FBE	AD	F1HI	AD	DF1CF	FH	OE3CEW	II	OK2KZR	IJ
12.1.		21.1.		HB9RO	DG	DL5MCO	FI	OE3LFA	II
F6CIS	ZE	F1CAS/p	AF	HB9RNG/A	DG				
HB9ASB	DG			HB9MKV	DH				

tnx fer info, Jim

OE1APS (II63g) wkd:

3.9.		4.9.		F6HVH	DI	YU6VHF/6	JC	8.9.	
F8ZW	DI	DF1VW/p	DJ	LZ2KBI/p	LD	5.9.		F1JG	CD
		ON1KXM	CJ	YO6AZR/p	MF	LZ1KSZ/p	LC		

tnx fer info, Alfred

OE3CEW (II52f) wkd >1000 km:

22.1.		F6CTW	BI	G3UNU	ZM	G4KLX	ZN	G6MNR	ZN
F6DKW	BI	GW6EUS/p	YM	G8UHU	ZN	G6CND	ZN	G4KUX	ZO
G4ANT	AM	G8FQO	AM	G4IGO	YL	G4JZ	YL	G3UVR	YN
G4IJE	AL	G6ADH	ZL	G8LJU	YM	G4LUX	YM	G8UWM	ZN
G8LFB	ZL	G6LZY	AL	G8VLL	AM	G8RZO	AL	G6NYU/p	YN
G3KEQ	ZL	G6AYX	AL	G3IMV	ZL	23.1.		G8BMJ	YN
G4DHF	ZM	G6KSD	AL	G4APL	ZL	G8VHB	ZN	G6CVS	ZN
G8RZP	AL	G8TGM	ZK	G6ADH	ZL				
G6CMS	AL	G4RRA/p	ZL						

tnx fer info, Erik

OE3PQU (HI69g) wkd >700 km:

22.1.		F6DWG/p	BJ	DK3OL	DL	G4RNI	ZO	PE1FMU	CM
GW4RWR	YN	G8CKZ	ZK	PAØCIM	DM	23.1.		DL7KAL/p	DK
F6CKZ	AJ	G8VES	ZN	PE1CZQ	CM	G4KTP	ZO	GM8MBP	YR
G8ROU/p	ZN	G6OJL	ZN	LX1CC	DJ				
G8GAU/p	ZN	G8WHB	ZN						
G8FUO	ZL	G4CYA	ZN						

tnx fer info, Peter

OE6OWG (HH78j) wkd:

4.9.		YO7VJ/p	LF	19.9.		I4AIR	FE	14.11.	
I4KIY/4	GE	YO7ARZ/p	LF	I4JED	FE	1.11.		I6NO	GD
IW4ANB/6	GD	11.9.		I6CXD	GD	I1UJB	GE	IW6AHE/6	GD
I4VOS/4	FE	IW4ANB	GE	25.9.		2.11.		21.11.	
I6CXD/6	GE	IW4ARD	GE	I4LCK/4	FE	YU1OVG	KD	YU1PTB	KE
I3YXQ/4	FE	I4ERN	GE	I2ZZZ	EF	YU1CM	KE	27.11.	
5.9.		I6SGD	GD	I6NO	GD	YU1LY	KE	I4AIR	FE
IØKIB/Ø	GD	18.9.		24.10.		3.11.			
YU1IW	KE	IW4AOT	FE	I4GBZ	FE	YU1OJO	KE		
YO7VS/	LF	I6NO	GD	IW4AOT	FE				

tnx fer info, Walte

OY9JD/p (WW76g) wkd >1000 km:

9.7.		PA3BSK	DL	PE1CUV	CK	DF7VX	EL	PA3BPG	CL
LA6HL/TF		DJ8PB	DL	DB1TP	EI	DJ1KN	EN	20.7.	
12.7.		PAØPKD	DN	DKØOX	EI	DLØBR	EN	GM8GCY	ZR
DC9BI	DN	PE1IMD	CN	DJ7UD	EI	PE1HXE/A	CM	OZ1FGP	EQ
PE1DAB	CN	ON7EH	CK	DJ7YP	EM	13.7.		OZ9PW	EQ
DL6BAG	DN	ON5DO	CL	DK1QH	EM	PAØSON	CL	OZ1FEF	EQ
PE1DXL	DM	DD3KF	DK	ON6NL	CL	PE1HSU	CL		
PA3BZZ	CM	GM5DTB	ZR						
PAØXMA	DM	DK8SG	EI						

tnx fer info, Jon

PAØWWM (CM63g) wkd:

4.9. OE5YHL GI 14.9. GW8XLY XL

tnx fer info, Wim

PA3BIY (CM72c) wkd:

3.9.		UQ2IV	KQ	29.10.		F1GYA/p	BF	UA2FAY	KO
GW3KYY	XL	SM6CTQ	HS	OK1JKT/p	GK	OK2BLE/p	JJ	UP2BEA	LQ
GU6JMI/p	YJ	15.9.		30.10.		OK1DJW/p	IK	RQ2GAG	hrd
4.9.		UP2BJB	LP	OK1KHI/p	HK	31.10.		UQ2GLO	hrd
OK3KJF/p	II	OH1DB	LU	OK2VPB/p	JJ	UQ2NQ	MR	UQ2GCG	hrd
14.9.		UR2RIW	LS	OK2LG	II				
SM6MPA	GJ	UR2GZ	MS						

tnx fer info, Peter

PE1AAP (CM67d) wkd >600 km:

1.12.		F1EAN	AG	22.1.		DK6MY	FH	SM6FUD	GS
SM7DLZ	IQ	F1GXW	AG	F1CHP	ZG	GM3XOQ	ZT	24.1.	
GM8YPI	YP	F6CRP	ZG	F1CCM	ZE	DG1MAJ/p	FH	LA6PV	FT
30.12.		31.12.		F1GCD	AF	OE5FPL/5	GI	LA9KM	FT
F6APE	ZH	GU6PGS	YJ	F1KLI	ZF	OE5JSL/5	GI	SM5MIX	HS
F6GAF	ZH	9.1.		23.1.		LA1BM	OT	SM6NJC	GR
F1GHP	ZG	DF1ZE/A	FH	EA1YY	XD	SK6DG	GR	OE5MGM/5	GI
F1BZN	YI								

tnx fer info, Dolf

PDØFFU (CK19h) wkd:

14.9. 18.40 GMT on 145,275 MHz in FM
EA8AJG in Santa Cruz de Tenerife ca. 3100 km

tnx fer info, Eddy

SM7FMD (HR24e) wkd:

14.9.		F1GKU	AK	30.10.		DB8KJ	DK	OH2BAQ	MU
G3KDH	ZL	G8XOC	AM	G8XIR	AL	DKØNA	FK	UR2GZ	MS
OK3XI/p	II	G8SFM	YL	G4KQH	AL	7.11.		UR2RKI	MT
PEØALM	CL	G4MVR	AL	31.10.		OH5IY	NU	8.11.	
PE1BNK	CM	G8ZNF	AM	OK2KZR/p	IJ	OH2AXA	MU	OH1AYQ	LW
G8PTP/p	ZL	G8NEY	ZL	DL6NAA	FK				
G6IHQ/m	ZL	G8GGP	AL	DD3KF	DK				
F1DBN/p	AK								

tnx fer info, Per-Arne

SM7GWU (HS75c) wkd >1000 km:

14.9.		G6ECM	AL	ON1IM	BL	ON6HE	BL	G4ODP	ZO
PAØFTF	CK	ON1NA	BK	GW4FPX/p	YL	F5XU	BF	G4LHU	AL
G3IMV	ZL	G4MWD	ZL	G3TTP	YL	OE3LFA	II	G8APZ	AL
G8VLL	AM	GW3OKA	YL	G8XYS	YK	G8UAQ	ZN	ON1IM	BL
G4ISM	AL	G4HMF	AM	G4HLX	ZL	G4EZT	ZL	RB5WAA	NJ
G8YLH	ZL	G8UGY	YL	G6ABB	AL	G4MDZ	AL	UB5WBJ/p	LI
G4IJE	AL	G8YLH	ZL	F1DBN/p	AK	G4KLX	ZN	UB5WCF/p	LI
G4CYA	ZN	ON5NK	BK	DF1ZE	EJ	15.9.		HGØDG	KH
G2DUP	XK	ON1KPF	CK	G6ICI	ZN	G8GGP	AL		
G8RZO	AL	ON1BG	CK	G4FDW	AK				
G4NQC	ZL	ON4ASL	BL	ON5FS	BK				
G3VYF	AL	PE1GWU	CK						

tnx fer info

UA3LBO (Q021h) wkd >1100 km:

15.9.		16.9.		OK2SGY/p	IJ	OK2BSH	JJ	OK1KPA	HK
OE3XUA	HH	OK2KZR	IJ	YU7BDG	JF	OK2EH	JJ	HGØIL	KH
Y22ME	HM	OK1HAG	HJ	OK2KYC/p	JJ	OK1KRQ	GJ	HGØHO	KH
OZ1ELF	EP	OK1MWD/p	HK	OK2BRD	JJ	OK2DFH	JJ	OK2LG	II
OK1AUN/p	GK	SM7KNK	HP	OZ1FDH	GP	OK1MG	HK	OK2PEW	IJ
DL6NAA	FK	OK1KCI	HK	OZ1DOQ	GP	OK2SNX/p	JJ	19.9.	
OK1IDK/p	GJ	OE3PUW	II	OK1AIY/p	HK	OK2DTI	JJ	OK2KQQ/p	JJ
OZ3WU	EP	DL8MAS	FI	DL7AEF	GM	OE3OKS	IH	OK2BLI/p	JJ
SM7JUQ	GP	YU7AR	KF	HG8ET	KG	UA2FAY	KO	Y22ME	HN
OE5XDL	HI	UB5WAL/p	LI	OK2KAU	JJ				
		UB5WCF	LI	UB5WBJ/p	LI				

tnx fer info

UB5ICR (SH39h) wkd:

21.10.		UO5LP	OG	30.10.		UC2AAB	NN	UC2ABN	NN
UO5OGX	OH	LZ1KSN	NC	UP2BJB	LP	31.10.		RC2OCD	PM
24.10.		LZ1QD	NC	SMØDJW	IS	RB5NAA	OJ	UT5BN	PK
LZ2FA	ND	25.10.		UQ2GAJ	LQ	UO5AP	OG	UC2ABT	NN
YO4YT	OE	LZ1XS	NC	RQ2GAG	MQ	RC2WBR	NP	UB5YM	MI
UO5AP	OG	YO4BBH	OF	UC2ACA	NN	UB5RBC	PL	UB5YCU	NI
UO5ODG	OH	LZ1QA	OD						
UO5OGX	OH	UA4AGM	WI						

tnx fer info, Alex

UR2GZ (MSØ4b) wkd >1000 km:

15.9.		DB1BP	DN	PA3BGM	DN	YU3EW	IG	OK2KYC/p	JJ
OK1AUN/p	GK	PE1DAB	CN	PAØRDY	CM	YU3TCK	IG	OK2BGQ/p	JJ
PAØRDY	CM	DG1BP	DN	OZ5GF	FO	OK2KQQ	JJ	HGØDG	KH
PAØOOM	DN	OK2SBL	JJ	DC8QB	EO	HG1YA	IH	HGØHO	KH
OE3XUA	HH	OK2KZR/p	IJ	PE1HIX	CM	HG1KVB	IH	UB5WCF/p	LI
OK2KNJ/p	JJ	OK1VBN/p	HJ	PA3AKM	DM	YU7AR	KF	UB5WAL/p	LI
OE3WBA	IH	OK1HAG	HJ	PA3APH	CL	OE3PUW	LI	UB5WBJ/p	LI
OK2BRD	JJ	PAØCSL	CM	PEØWGA	CM				
OK1KKH/p	HJ	PAØBLD	CM						
PAØNIE/A	CM	PA3BIY	CM						

tnx fer info

YU2KDE (JF23g) wkd:

5.9. YO6CBM/p NF 7.11. DK8ZB EJ

tnx fer info, Ivo

Y22ME (HM53a) wkd:

13.9.-15.9.		G4PEM	XK	G6HTJ	YN	GD4GNH	XO	28.10.-30.10.	
GW4LXO	YL	G3IGO	YL	G3UDA/A	YM	UA3LBO	QO	GW8JLY/p	YL
G2DUP	XK	G3UVR	YN	GM8NXC	YR	RC2WCG	OP	F1FVZ	AI
G8NYA	XK	GW8JLY	YL	GM8MJV	YP	18.9.		F1DZB	ZJ
G8MCP	YK	G3PBV	YK	GM4JEJ	YQ	UA3LBO	QO	F1DXH	AI
G8LJU	YM	GM4OBD	YR	GM4COK	YP			F1DPQ	AI
G6IEP	XK	G8XVJ	YN	GM4CXM	XP				

tnx fer info, Jürgen

Y23FG (FM69g) wkd >1000 km:

13.9.-14.9.		31.10.		EA1BEZ	XD	SM3AKW	JW	SM5MGW	HS
GW4MSO	XN	RR2RBD	MS	F6APE	ZH	OH1ZAA	KV	SM5NQM	IS
GW3NYY	XL	22.1.		G3DAO	XK	OH6AWB	KW	SM1NDF	JR
G2DUP	XK	F6GAF	ZH	23.1.		OH1ZP	LU	SMØMPQ	JT
EI9Q	WM	F1GHP	ZG	G8MZI/p	YK	OH1IR	KV	OH1BS	LU
G3DAO	XK	GU6PGS	YJ	GD3AHV	XO	OH1EQ	LV	OH1BJ	KV
EI2CA	WN	F1FHI	ZH	GW4GVS	YN	OH1DP	LU	OH1KH	KV
GD4GNH	XO	F6BQX/p	ZG	GM8OEG	YQ	OH1CO	LU	OH1AYA	KV
EI2DW	WN	G5YU	YK	GM8BZX	YQ	UR2GZ	MS	SM7MNQ	IQ
G8RCF	YK	F1BZN	YI	24.1.		OH3TR	LV	OH3ZS	MU
GW8NVN	YL	F1EQE	ZF	SM3LGO	IX	OH2BXE	MU	OH3OZ	MU
30.10.		F6ETI	YH	SM3AZV	IX				
G3CHN	YK	F6IBX	XI						

tnx fer info, Rolf

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

DB6BX (DM46c) wkd >600 km:

4.9.		GU8FBO	XJ	SM7FMD	GR	F1CVU	AJ	F1FEN/p	CF
OE2KMM	GH	EI2DJ	WN	15.9.		F1GNR	ZH	F1QV	AG
5.9.		14.9.		SMØDJW	IS	F1FHI	ZH	OE5EFM	HI
OE2KMM	GH	G6CBN	ZO	17.9.		F6APE	ZH	4.12.	
11.9.		G8MXP	YL	OY6UHF	bcn	OK2BFH/p	JJ	OE2CAL	GH
G8MJD/p	ZN	G8PPR	ZN	30.10.		OK2VIL/p	JJ		
13.9.		G8UWM	ZN	OK1AIY/p	HK	F1FYE	AI		
F6GNR	ZH	G8XVH	ZM						
F1CVU	AJ	SM6JJX	GR						

tnx fer info, Peter

DC9BU/A (EK6Øb) wkd >800 km:

29.10.		G8AAY	YK	GW3CCF	YN	SM7FMD	HR	LA8AE	FT
G8TFI	YL	G8EOJ	YK	G6DER	ZN	SM6CKU	GR	G4CLA	ZM
G8MXP	YL	30.10.		SMØCPA	IT	G8PPR	ZN	SMØFZH	JT
G8KBQ	YL	G3NAS	ZM	SM6CEN	FR	OHØNC	KU	SM4IAZ	HT
G3PBV	YK	G6CMG	YL						

tnx fer info, Heinrich

OY9JD (WW76g) wkd:

14.5. 19xPA in DM,DN,CL,CM,CN

tnx fer info, Jon

DF3EE (DL75b) wkd >1000 km:

15.9.
UP2BJB LP

30.10.
SM4AXY HT

SM1BSA JR

SMØDJW IS

31.10.
SMØFZH JT

tnx fer info

DF3LY (FO65j) wkd:

2.12.
LA3FW FT
LA8AE FT
SM4AMM HU
SMØKCR JT

UP2BJB LP
OH6NU MU
OH3TP LV
OH3ZS MU

3.12.
OH2CX MU
OH3ST MU
OH2BW MU
UR2EQ NT

OH6NU MW
OH2BGD MU
UC2AAB NN
UA3LBO QO

UC2ABN NN
UP2CH LP
UP2PU LO
UP2BJB LP

tnx fer info, Dieter

DF9PY/p (DK64b) wkd:

2.10.
G4JAR/p AL
G4NXO/p AL

F6CTT/p AJ
DLØFM/p FH

DKØIK/p EN
G4MRS/p AM

G4LOJ AM

DF9PY/p (DK65g) wkd:

23.1.
OE3EFS HI

DK8MF/A GH

OE3JHC HI

DL9RBK GJ

OE1RKU II

tnx fer info, Stefan

DG1NZ (FJ56j) wkd >700 km:

14.9.
G8TFI YL
G3VYF AL
OZ1HDB ER
G4LOJ AM

2.10.
F6CTT/p AJ
29.10.
G3LQF AM
G8FUO ZL
G4IOG AL

G8KEN AL
G3JXN ZL
30.10.
G8TFI YL
OZ7LX FP
OZ7FW GP

OZ1HRA EQ
OZ2BB EQ
F1DBN/p AK
G3NAS ZM
G4CLA ZM

SM6FYU GQ
SM6FHZ GQ
SM7LOF GQ
SM7CFE HQ
OZ2GG GP

31.12.
F1FHI ZH
22.1.
G8TFI YL
G8AGU YL
G4MAW YK

G4BVY YM
G4HFO XK
G6HKT YL
G3GNR XK
F6GR ZH
F6ETI YH

G6ADE ZN
G4MHF ZK
23.1.
G4IOQ YM
G4AUS YM
G3WOH YN

G3PEJ ZO
G6OZJ ZP
G4KKF ZO
G4HDS ZO

G4EEV ZO
G6CGY ZO
G3MMK ZN
LA8AK DS

tnx fer info, Wilfried

DKØIK/p (EN69a) wkd >600 km:

2.10.
DL9GBR/p FH
DFØTA/p FH
DLØUL FH
3.10.
G4JAR/p AL

F6CTT/p AJ
G4NXO/p AL
OE5XVL GH
OE3XUA HH
SP6BQA IK
OK2BTT/p II

HB9LE EH
OE1RKU II
OE3LFA II
F1DFE/p CI
OE5EFM HI

DG7MAQ/p FH
DKØVL EH
OE2CAL GH
OE2KMM GH
DB7PY/IN3 FG

DG7GAB/p FH
SM4IAZ HT
OE1ERC/9 FH
DLØFM/p FH
DK2LR FH

tnx fer info

F6BSJ (CG24f) wkd:

1.10.
G4JAR/p AL
PEØMAR/p CL

30.10.
PAØEZ CM
SM6HYG FS

PC1CQQ DM
DF3EE DL
OZ1HRA EQ

DL3UZ FN
DF5LQ EO
DF9LN FO

G8ECI AN
DK1KO FN
DJ9DL DL

tnx fer info

DL5LH (FO51j) wkd:

30.10.		31.10.		SMØFMT	IT	3.12.		OH2BWL	MU
HB9AMH/p	DH	DL2GBT/p	EI	SM4AXY	HT	OH1FA	LU	OH6NU	MW
ON4YZ	CK	2.12.				OH2CX	MU	SM1BSA	JR
DL9RBK	GJ	SM4IAZ	HT						

tnx fer info, Heinrich

DLØUL/p (FH26f) wkd >600 km:

2.10.-3.10.		DL2LAS	EN	DB3LC	EN	DF3XZ	FN	DL8QS	EN
DKØIK/p	EN	DL9HN	FN	DD7HE/p	FN	DC8CJ	FN	DL8RU	EN
DK6HA/p	FN	DF5LQ	EO	DF9LN	FO	DD4LF	FO	DB4LZ	EN
DDØHR	FN	DL2HAD	EN	DC9LS	FO				
DL8HAV	EN	DL3CM	FN						

tnx fer info, Walter (DL6SAQ)

DL6WU (EJ14h) wkd >500 km:

31.12.		F6AP[illegible]	ZH	G8FUO	ZL	EA1NU	XD	G8TFI	YL
F1FHI	ZH	F1EA[illegible]	AG	G6HKT	YL	(1305km)		G4CLA	ZM
F6CCH	ZG	22.1.		G3NNG	ZL	23.1.		G3MMK	ZN
F6ETZ	ZH	G3TD[illegible]	AL	G4BVY	YM	G8JVM	ZL	G8PPR	ZN
F1DYQ	AI	G4MA[illegible]							
F1CPX	AH	G8AGU	YL						

tnx fer info, Günter

DL7APV (GM47c) wkd:

22.1.		F6ETI	YH	G3LQR	AM	SM1MKY	JR	OHØNC	KU
G3LTF	ZL	EA1NU	hrd	GM8BDX	YP	SM4IAZ	HT	OHØJN	KU
G3NNG	ZL	23.1.		24.1.		UR2RIW	LS	OH1FA	LU
F1FHI	ZH	HB9QQ	EH	SKØCT	IT				

tnx fer info, Bernd

F6ETI (YH24c) wkd:

2.9.		DL1EY	FJ	11.9.		DL3UZ	FN	5.11.	
EI3VKB/p	WN	DBØAC	bcn	PE1GVK	CL	25.10.		F1AAM	CD
3.9.		9.9.		13.9.		F6EYM/p	CE		
DK2GR	FJ	HB9AEN/p	DG	DF7VX	EL				

tnx fer info

F6GNR (ZH63g) wkd >1200 km:

13.9.		OZ9OL	FP	30.10.		DC7ZU	GM	OZ9DT	FP
OZ1ABE	GP	OZ9FW	GP	Y22ME	HM	DK7LW	FO	SMØDJW	IS
SM7BAE	GP	DK3UC	FN	DC7OH	GM	SM7AAC	GP	OZ2OE	EP
OZ9TM	GP	14.9.		DC7UT	GM	Y24QO	GM	OZ9NI	GP
OZ1FER	GP	OZ7IS	GP	SM1BSA	JR	SM6ESG	GR	SM7CFE	HQ
OZ2GG	GP	SM6GWA	FS	DL7ZL	GM	OZ3SW	GP	SMØFZH	JT
SM6FYU	GQ	LA8AE	FT	DL7APV	GM				
OZ9DT	FP			OZ7LX	FP				

tnx fer info, Marc

HB9AMH/p (DH66c) wkd:

8.7.		GW8ELR	XL	LA8AE	FT	GD2HDZ	XO	SM6FHZ	GQ
EI9Q	WM	30.10.		1.HB9-LA		31.10.		LA8AE	FT
GU2FRO	YJ	SM6HYG	FS	SM6GWA	FS	SM6FYU	GQ	SM6CEN	FR

tnx fer info

G4FRE (ON8QK) (ALØ7a) wkd >600 km:

22.1.		DC5MJ	FI	DF6HT	FN	23.1.		OKOEA	bcn
HB9AEN/p	DH	DK2GR	FJ	DK2LR	FH	DK5AI	FL	DF1XV	bcn
DL1EY	FJ	DC6HY	FI	OKØEA	bcn	OE3OBC	II	DBØYI	bcn
DL9RBK	GJ	F1CCC/p	CG	DF1XV	bcn	EA1KC	XD	DBØIW	bcn
DG4GAN	EI	DL7QY	FJ	LA3UHF	bcn	EA1NU	XD	FX4VHF	bcn
F1BUU	ZE	DG1NZ	FJ			I2B	bcn		
EA1NU	XD	HB9AMH/p	DH						

tnx fer info, Dave

G4LRT (ZM45d) wkd >700 km:

11.1.		F1BUU	ZE	DG4GAN	EI	DL5GBP	EI	23.1.	
F1FVP	ZF	DC5MJ	FI	DF91C	EI	DL6KG	EI	OE3OBL	II
F1BUU	ZE	DK4GD	EH	DC6MK	EJ	DG7FZ	EK	OE3LFA	II
F1AJD	AF	DK5IE	EJ	DF3RL	FJ	DB2NJ	FJ	DG5FBI	EK
FX4UHF	bcn	DG6HY	FI	DK2GR	FJ	DJ4EJ	EI	HB9MIN/p	DH
22.1.		DL3NQ	EJ	DK9MN	FI	F1CCC/p	CG	LA8AK	DS
EA1NU	XD	DJ7WI	FI	DL3NAE/A	FJ				

tnx fer info

G8KBQ (YL77h) wkd >700 km:

13.9.		OZ7IS	GP	DC9BU/A	EK	17.1.		HB9AMH/p	DH
DL6FAW	EO	SM6GWA	FS	DL7ZL	GM	F1CCM	ZE	DL1EY	FJ
F6CBC/p	ZD	SM6MLY	FR	Y24XN/p	GK	F1BUT	AD	DK9SU	EI
OZ1FEF	EQ	DK6AS	FM	F1EA	DI	21.1.		23.1.	
OZ9PZ	EQ	OZ1EUI	FP	2.1.		F1BUU	ZE	DL4NAA	EJ
SM6ESG	GR	SM7CFE	HQ	F1BUU	ZE	22.1.		DK9MN	FI
SM6FYU	GQ	DB5KS	DL	F6BLP	ZE	DL9RBK	GJ	DF6VW	EM
DF7VX	EL	30.10.		F6CIS	ZE	DK1PZ	EL	LA2SN	ES
DL3UZ	FN	Y22ME	HM						
OZ1FER	GP	DC7UT	GM						

tnx fer info

I2FHW (EE17f) wkd:

2.8.		DL7QY	FJ	9.8.		15.8.		DB2VY	DJ
IH9ONU	FW	7.8.		DL9KR	EK	IT9VMN	GY	DL7QY	FJ
5.8.		DL9KR	EK	DL9GU	EJ	16.8.			
DL9KR	EK			DJ9DL	DL	DL9KR	EK		

tnx fer info

LA8AK (DS8Øh) wkd:

23.1.		DKØNA	FK	DJ5BV	DK	G4BVY	YM	G8TFI	YL
DK9MN	FI	DL9MCC	GH	DK1KN	DK	G3PBV	YK	G4NBS	ZL
DK2GR	FJ	ON4YZ	CK	PAØLPE	CK	G3JXN	ZL	G4JNZ	ZL
DF3CK	FH	DK8MF/A	GH	PE1DBJ	DK	G3SEK	ZL	DL7QY	FJ
DL7HR	FI	OE2CAL	GH	G8PNN	ZP	G3TDG	AL	G4CYA	ZN
DG1NZ	FJ	OE2KMM	GH						

tnx fer info, Jan-Martin

OE1APS (II63g) wkd:

22.1.		23.1.		PE1GBT	DN	DK5AI	FL	DF7XS	EM
G8FUO	ZL	PAØCIS	CM	DHØFAP/p	EK	DK5AJ/p	FL	DJ7YP	EM
G3NNG	ZL	DK3OL	DM						

tnx fer info, Alfred

OE3PQV (HI69g) wkd:

22.1.
G8FUO ZL

23.1.
DK3OL DL

PAØCIS CM
DC3VW/p DJ

DB2VY DJ
DG4GAN EI

tnx fer info, Peter

OK1CA/p (HK29b) wkd:

16.9.
HG8CY KG
YU1EU KE
RB5WAA MJ
17.9.
LZ2KBI LD

YU7BDG JF
18.9.
UQ2GFZ NR
UC2ABN NN
UC2ACA NN
UP2BJB LP

19.10.
PA3CGZ CL
20.10.
LX1SI CJ
LX1DB DJ

F6GCT BI
F6DKW BI
F1FHR BI
F1US AI

F6CER BI
F1FYE BI
22.10.
OZ3ZW FO

tnx fer info, Franta

OZ7IS (GP22j) wkd >700 km:

29.10.
UC2ABN NN
30.10.
F6APE ZH
F1EBN BI
6.11.
OH5NR NU
OH3ZS MU
OH1FA LU

7.11.
OH2BWL MU
OH3ZS MU
OH1ZP LU
OH5NR NU
OH2TI MU
2.12.
UR2JL MT
OH6NU MW

OH3ZS MU
OH3AC MU
OH3TR LV
OY6UHF bcn
3.12.
OH3OZ MU
OH2BGD MU
OH2BWL MU

UR2EQ NT
OH2CX MU
UR2GZ MS
UQ2NX MR
OH6NU MW
OH2BGD MU
UC2AAB NN

UA1MC PU
UC2ACA NN
UC2ABT NN
UC2ABN NN
UA3LBO QO
4.12.
RB5WAA MJ

tnx fer info, Iwan

PAØWWM (CM63g) wkd >400 km:

12.9.
F6APE ZH
OZ1BJF HP
13.9.
GW2HIY XN
F6ETZ ZH
F6GNR ZH
G4DGU XK

EI2DJ WN
14.9.
SM6CTP GQ
SM7HQD IR
SM7CFE HQ
15.9.
SMØDJW IS
SMØBYC IT

SM7FMD HR
OHØNC KU
SM4LMY/p HT
SM4IAZ HT
SM5DSN IT
SM7GEP HR

OHØJN KU
SM4AXY HT
UR2RIW LS
1.PAØ-UR2
23.10.
OE1ERC/9 FH

29.10.
F1FHI ZH
DF1CF FH
30.10.
OK2JI/p IJ
OK1XW/p HK

tnx fer info, Wim

SM7FMD (HR24e) wkd >700 km:

14.9.
ON4YZ CK
G3UQH YM
DL7QY FJ
G3TDG AL
G4LRT ZM
DB4BX DM
DK5QI EL

PE1EBV CM
G4LBV ZM
PE1ALA CM
DL2KBB DK
G8TFI YL
G3BHW AL
G2RD ZL

G6ADE ZN
G4BVY YM
15.9.
PAØWWM CM
PAØPRG CM
PAØGUS CN

PAØEI CM
PAØGRB CN
30.10.
DL7QY FJ
F1FHI ZH
DF3CK FH

DL6NAQ/p EK
DC9BU/A EK
31.10.
DKØNA FK
DK9MN FI

tnx fer info

UA3LBO (QO21h) wkd >1100 km:

16.9.
OK2DTI JJ
OK2BPR JJ

OK1MID/p HK
OK1KPA HK
OK2BSO JJ

OK2BRD JJ
OE3OKS IH

OK1MWL/p HK
OK1AIY/p HK

OK2DFH JJ
OE3PUW II

tnx fer info

SM7GEP (HR24e) wkd >600 km:

14.9.		G3VYF	AL	G4MAW	YK	15.9.		6.11.	
G8ATK	ZL	PA3AOH	DL	G4LDL	ZL	PA3BYI	CM	OH5NR	NU
G8DKK	ZL	PA3BSK	DL	G4OAE	ZL	PAØGUS	CN	OH2TI	MU
DL2KBB	DK	G8FUO	ZL	G8PTP/p	ZL	PAØWWM	CM	7.11.	
G4IOG	AL	PAØSTE	CL	G6IHQ/p	ZL	19.9.		OH3ZS	MU
G4BVY	YM	G8TFI	YL	DF3LY	FO	PE1CNP	CN	OH5NR	NU
G3LTF	AL	G3AUS	YK						
G8MXP	YL	G8BWR	ZM						

tnx fer info

SM7GWU (HS75c) wkd:

14.9.		PA3BYI	CM	DC9LS	FO	PEØSHF	CM	OZ1HDB	ER
DKØNA	FK	PE1CKK	CM	PE1CNP	CN	DHØLAC	FO	OZ1HDA	ER
DB6NT/A	FK	OZ4QA	GP	PA3BGL	CN	PE1FHH	CM	PAØEZ	CM
DL2KBB	DK	PAØGUS	CN	OZ2OE	EP	PE1EBV	CM	7.11.	
Y23FG	FM	DF3LY	FO	PA2DRV	CL	DB1BP	DN	RQ2GAG	MQ
DF1OH	EM	PE1ALA	CM	PE1FPC	CL	PE1DPX	DM	OH2TI	MU
15.9.		PA2JHO	CM						
DF6LT	FO								

tnx fer info

Y22ME (HM53a) wkd >800 km:

14.9.-15.9.		G3CIW	AL	F1FHI	ZH	G3IMV	ZL	F2KX	BJ
LA8AE	FT	G8ATK	ZL	F6GCT	BI	F1DBN/p	AK	G3VYF	AL
LA3FV	FT	G4LOJ	AM	F6GNR	ZH	G8TFI	YL	F6CER	BI
LA3VW	ES	G6HQT/p	ZM	F1EBN	BI	G8PTP/p	ZL	G3TDG	AL
G3PEJ	ZO	G3ZYC	ZN	G3WDG	ZM	F6GCJ	AG	G3NNG	ZL
G8JVM	ZL	RC2WBR	NP	G4KGC	ZM	F1FYE/p	AI	G4IOG	AL
GW8AMI	YN	RC2WCG	OP	G8KBQ	YL	G8ATK	ZL	G3LTF	AL
G3GRO	ZL	UQ2GFZ	NR	G4MHF	ZK	F1DBZ	ZJ	G3LQR	AM
G8TFI	YL	30.10.		G2AXI	ZL				
G8FUO	ZL	F6APE	ZH	G8GP	ZL				

tnx fer info, Jürgen

Y23FG (FM69g) wkd >800 km:

13.9.		30.10.		G8ATK	ZL	F6ETI	YH	SMØBYC	IT
G8TFI	YL	F1FHI	ZH	G8FUO	ZL	G6BBH/p	ZM	SKØCT	IT
GD4GNH	XO	F6APE	ZH	F1CXP	ZF	F6GNR	ZH	SMØEJJ	IT
1. GD-Y2		F6GCJ	AG	31.10.		G3COJ	ZL	OHØJN	KU
G4DGU	XK	G8BCL	ZL	UP2BEA	LQ	G8JVM	ZL	UR2RIW	LS
14.9.		F1FYE/p	AI	URQ2GAG	MQ	23.1.		SM5QA	IT
G3PEJ	ZO	F1DZB	ZJ	22.1.		G3PEJ	ZO	SMØFMT	IT
G6HQT/p	ZM	G3COJ	ZL	G3NNG	ZL	24.1.		SMØCPA	IT
G4BVY	YM	F6GNR	ZH	F1FHI	ZH	SM3AKW	JW	OH1FA	LU
G4KGC	ZM	G8PTP	ZL						

Y23FG/p (FM49a) wkd > 800 km:

2.10.-3.10. SM5DWC IT

tnx fer info, Rolf

OH1AU/MM activating the JV-square

Some weeks after the Tuliranta VHF-UHF-SHF meeting, at the time for SRAL Nordic VHF-UHF test and the VHF-activitytest in July, the radioamateurs in Turku are planning to activate the JV square. Negotiations has taken place with the shipsowners Folkline, which traffics the route Kaskinen-Gävle, i.e. almost diagonal through the square, and with the finnish governments post- and teleoffice about the passengerferry m/s FOLKLINER. Both parts have admitted the projekt.
SRAL Nordic VHF-UHF test is this year the weekend 2.7.-3.7. (1400-1400 GMT) and the July VHF-activity test at 5.7. (1800-2200 GMT)

tnx for info, Hasse (OH1DP)

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continued from page 25

DL7APV (GM47c) wkd via tropo on 1296 MHz

22.01.83	2200	F6DZK	419	519	AI
23.01.83	0840	OE3LFA	529	529	II
	0940	DK2LR	529	52	FH
	1155	G3NNG	419	519	ZL

tnx fer info Bernd

DKØNA (FK58b) wkd via tropo on

1296 MHz

31.12.82 F1CPX (AH)

23.1. 83 F6CER (BI) , F1EA (DI) , F6DZK (AI)
Bake DLØWY (GH) 55dB

3456 MHz

23.01.83 DL3NQ (EJ) , DB3UU (EJ) , DL7QY (FJ) , DC8NV hrd
DL2AS (GH) , Bake DLØWY (GH) 30 dB

5760 MHz

23.01.83 DB3UU (EJ) , DL7QY (FJ) , Bake DLØWY (GH) 12 dB

tnx fer info Michael (DB6NT)

METEOR SCATTER NEWS

Bernd, DF2ZC
PO Box 16 12
239o Flensburg

Supplements to the MS-List

EA1YV - VC A.B.Quintas/López Mora Str. 7o-1A/ Vigo
DF9PY DK S.Heck/Im Aul 21/5569 Schalkenmehren //o6592-4654
PAØBLD CM P.H. de Boer/Str. v. Gibraltar 17/1183 GT Amstelveen //o2o-45o17o

LX1GR DJ G.Remy/36,rte de Haller/6312 Beaufort//86857
SM6EAN FR M.Espling/Ekehöjdsg.23/42168 V.Frölunda
DH1MAI now DL5MCG W.Rauh/Frauentorstr.22/89oo Augsburg //o821-152316

F6HVK CH A.Quivy/39 r.du chateau d'eau/Carcelles les monts/
ex F1AUQ 2116o Marsannay-la-Côte //8o-454912
F6DRO AD D.Dehays/9,r.C.Nodier/315oo Toulouse
DL7YS GM P.John/Karlsbergallee 32-34/1ooo Berlin 22
OE6IWG HH W.Steinwerder/H.v.Hofmannsthalweg 3/86o5 Kapfenberg //o3862-251485

G4OAE ZL D.Crisp/2,Flaxman Close/Earley/Reading/Berkshire //734-874232

Alternative VHF-Net on 3645 kHz????????

Peter, DL7YS, suggested a second VHF-Net on 8om band for the night hours when 14 MHz is not good for European traffic. Short term skeds could be prearranged there during the shower especially short time showers like the Quatrantids that occured during the night this year. Moreover VHF infos could be exchanged e.g. about a night aurora.
3645 kHz would have the advantage that the UAs also could work there.

How about it? Any discussion is welcome! DF2ZC
Bernd

PAØBLD CM55j:

27.o7.	213o-223o	YU3ULM	GF	38	27	RANDOM
3.o8.	o5oo-o54o	IW5AVM	FC	26	26	SSB
5.o8.	23oo-234o	YU3TTL	HG	27	38	RANDOM
8.o8.	2ooo-22oo	HG6VX/p	JH	27	48	
9.o8.	o4oo-o525	YO2IS	KF	27	27	
11.o8.	o5oo-o6oo	IW9AJZ	GY	27	26	got my rogers?
	2ooo-22oo	I5WHC	FD	27	26	" " "
12.o8.	213o-223o	YU2RSD	HF	28	28	RANDOM
	233o	OE6WIG	HG	37	37	"
	24oo	YU1AWW	KE	38	38	"
13.o8.	o1oo	UK2BAB		37	37	"
14.o8.	oo45	YU7PEY	KF	27	38	"
15.o8.	o93o-1o2o	IØXPS	GB	26	26	ending in an E_s-QSO!!

tnx fer info, Pieter

DL 4 NAA (EJØ6a) worked complet MS-QSOs

DATE	TIME	CALL	LOC	TX	RX	
25.09.1982	0400-0500	F1GTR	ZG	27	r27	SSB
02.10.	0500-0700	LA6cU	CU	r26	26	
19.10.	1700-1825	LA6QBA	FT	27	26	
23.10.	0400-0515	YU1OO	KC	r26	37	
	0600-0650	F1JG	CD	r26	26	SSB
	0700-0815	UC2ACA	NN	26	r26	45 sec
	1310-1430	LA8OW	EU	r26	26	
24.10.	0600-0715	OH5IY	NU	26	r26	120 sec!!
	0800-0930	LA8OW	EU	26	r27	
	1010-1130	YU7AU	KE	r26	26	
	1535-1710	SMØEJY	IT	r26	27	
13.11.	1630-1810	OH1ZAA	KV	r26	r26	
28.11.	0600-0620	SM5MIX	HS	r37	27	ufb
	0800-0905	F6DRO	AD	25	r27	
04.12.	0500-0620	OH3MF	MU	r25	27	13 sec
10.12.	1700-1900	HG8KWG	KG	27	r27	5b 2p
11.12.	0100-0245	Yu7MAU	JF	26	r26	17b 6p
	0500-0700	UP2BKH	KP	27	27	
12.12.	0600-0650	UR2RQT	MS	r25	27	SSB
	0815-0905	LA6QBA	GV	25	r38	ufb
	1800-2000	YU6GAS	JC	25	r26	20b 15p
14.12.	0100-0140	I1JTQ	DF	27	r26	
18.12.	0630-0750	LA7KK	FU	25	r27	ufb 15 sec
19.12.1	0600-0800	I6WJB	HC	r25	r27	7b 45p
29.12.	2100-2300	LA1TV	ET	r27	26	10b 3p
30.12.	0500-0650	SM3COL	IW	r26	27	14b 10p 27 sec
	0800-0900	F1FVP	ZF	r26	26	SSB 5b 5p
	1200-1245	F6FOE	YI	r26	r46	MS 10 sec Tropo 419
02.01.1983	1100-1230	LA6HL	CS	r27	r26	6b 9p
	2300-2400	EA6FB	AY	r26	26	SSB
03.01.	0000-0100	EI2CA	WM	r26	26	SSB 4b
	0100-0235	UQ2GCG	LR	26	r26	
	0300-0400	IW5ACZ	FD	r26	27	SSB C?
	0500-0640	OK3AU	KI	26	r26	8b 26p
	0800-0955	IØNLK	GB	26	r26	15b 30p 15 sec
04.01.	sorry for sked-partner!! not qrv for very qrm in my own familie. pse take new sked!!					
08.01.	2300-2413	SM7GEP	HR	r26	26	5b 18p 10 sec

I'm very interested in anny MS CW or SSB test. Freetime is every day 0000-0600 or on weekends without the tv-time, hi. pse take contact: Christian Pritzl, Ulmenweg 49, 8750 Aschaffenburg, Germany, tel. 06021/88397

73 es good luck

Christian DL4NAA

Rig: FT225RD Mutek Frontend
PA 8874 1000 W input
16 elm F9FT

F6BSJ CG24f:

	6.7.82	0430-0600	LA1K	FX	26	27	12B-10P	1,5 s	NC
	9.7.82	0400-0535	SM3UL	IV	27	26	14B-14P	1,5 s	C
	15.7.82	0000-0040	CN2BL	YV	27	27	13B-20P	2,5 s	C
	17.7.82	1000-1100	GM3WCS	YQ	27	27	10B-15P	4 s	C
+	20.7.82	0315-0340	SM7AED	GQ	27	28			C
	21.7.82	0400-0500	YU2CBM	ID	27	26	18B-15P	3 s	C
	26.7.82	2100-2150	LA6CU/P	DS	27	37	18B-10P	1,5 s	C
	26.7.82	2200-2235	UK2RDX	MT	26	27	12B-10P	2 s	C
	27.7.82	0600-0635	HG8ET	KG	27	27	45B-25P	3 s	C
	28.7.82	0400-0530	LA1K	FX	27	27	13B-10P	5 s	C
	29.7.82	0400-0425	OL6BAB	IJ	27	38	14B-20P	3 s	C
	29.7.82	0425-0500	OK2VMD	IJ	27	39	12B-13P	2 s	C
	29.7.82	0500-0531	I4MKN	GE	26	27	SSB 10B-15P	2 s	NC
	30.7.82	0400-0425	SM3COL	IW	47	27	11B- 6P	95 s !	C
	31.7.82	0600-0720	HG6VX/P	JH	26	26	6B- 6P	10 s	NC
	31.7.82	1800-1900	HG6VX/P	JH	26	26	7B-16P	1,5 s	C
	2.8.82	0200-0230	UQ2GFZ	NR	26	26	10B-14P	9 s	C
+	2.8.82	0255-0345	UQ2GHJ	NR	27	27	16B-12P	8 s	C
+	2.8.82	0430-0505	SM3BIU	HX	27	27	13B-17P	5 s	C
	5.8.82	0000-0200	UK3AAC/P	PP	26	26	8B- 4P	1,5 s	C
	7.8.82	0400-0500	HG4KXG/3	JG	26	28	17B-25P	5 s	C
+	9.8.82	1600-1650	SM1BSA	JR	27	27	16B-12P	10 s	C
	9.8.82	2000-2030	GM5ENZ/P	WQ	27	27	12B-12P	10 s	C
+	9.8.82	2110-2155	GM5EHK	ZR	27	36	22B-10P	10 s	C
	10.8.82	0400-0530	UR2EQ	NT	26	36	29B-20P	30 s	C
	10.8.82	0600-0700	I4MKN	GE	27	27	SSB 10B-10P	5 s	NC
+	10.8.82	1210-1240	OZ2ZB	EQ	37	26	10B-10P	15 s	C
	10.8.82	1800-1930	YU2JL	HD	26	37	23B-20P	4 s	C
	11.8.82	0800-0840	EIØRTS	UN	27	27	8B- 8P	2 s	C
+	11.8.82	0920-1000	YU1OO	KC	26	37	6B- 4P	20 s	C
	11.8.82	1900-2000	YU6MHT	JB	27	27	13B- 8P	5 s	C
+	12.8.82	0506	OZ1ELF		27	27	SSB on a burst	60 s	C
+	12.8.82	0549	SM4GVF		27	27	SSB on a burst	35 s	C
+	12.8.82	0756	OZ4VV		27	39	SSB on a same burst	90 s	C
+	12.8.82	0757	OZ1CJG		39	39	SSB		C
+	12.8.82	0757	SM5CHK		39	27	SSB		C
+	12.8.82	0844	SM7WT	GP	38	38	SSB on a burst	68 s	C
+	12.8.82	0853	SM7WT	GP	39	39	SSB on a burst	32 s	C
+	12.8.82	0910	YU3ZV		37	37	SSB on a burst	65 s	C
+	12.8.82	0918	Y22HA		27	27	SSB on a burst	30 s	C
+	12.8.82	0943-0948	SM4KVM		27	27	SSB on a burst	30 s	C
+	12.8.82	0954	OZ3VI		39	39	SSB on a burst	60 s	C
	12.8.82	1700-1735	EA6FB	AY	27	27	SSB 6B- 3P	30 s	C
	12.8.82	2100-2139	OK3KCM	JI	27	27	SSB 7B- 5P	60 s	C
	12.8.82	2200-2300	YU7PWX	JF	27	27	14B- 6P	2 s	C
	13.8.82	0600-0700	SK6HD	GS	37	37	15B-10P	30 s	C
	14.8.82	0630-0730	LZ1AB	LC	27	25	10B- 8P	38 s	C
	15.8.82	0100-0220	UQ2GCG	LR	27	27	29B-26P	22 s	C
	15.8.82	1950-2030	G4OAE/OH0	KT	27	27	15B-10P	3 s	C
	28.8.82	2000-2125	SMØLRN/P	JS	26	27	9B-12P	1,5 s	C

+ : RANDOM

NC : UK3AAC(SP), I4MKN, IWØBFZ, UB5LIQ, CT1ADW, GM4IGS.

merci pour les infos

NIL : OZ2GZ, HG6KNB, SK2KW, I8TUS, SM3JAW, G8MJD, UK5EDT, YO7VS, SM2CKR, EA7CJY OH5LK.

DDØNZ (FN21f) wkd MS (SSB):

19.07.	0400-0500	I6DQE	GD	26	26	5b	7p	C	3sec.
23.07.	0400-0412	F1JG	CD	26	37	9b	20p	C	3sec.
24.07.	0500-0545	YU2CCB	IF	27	27	5b	2p	C	3sec.
12.08.	0000-0100	F6FTN/p	DC	26	27	7b	22p	C	3sec.
"	0943	F1JG	CD	27	59	1b		C	RANDOM
"	1212	YU3EW	IG	27	27	1b		C	?RANDOM
"	1255-1257	F1FVP	ZF	27	59	2b		C	RANDOM
"	1310	F6CJG	BF	27	27	1b		C	RANDOM
"	1341	OE4OKS	?	27	27	1b		C	RANDOM
"	1342	IK1AIK	?	27	27	1b		C	RANDOM
13.08.	0000	YU7AR	KF	27	37	1b		C	RANDOM
"	0100	HG8ET	KG	27	27	1b		C	RANDOM
"	0141	YU3ZW	IG	27	37	1b		C	RANDOM
"	0210	YU3EW	IG	27	27	1b		C	RANDOM
"	1017	F6CJG	BF	27	27	1b		C	?RANDOM
14.08.	1000-1200	G4OAE/OHØKT	26	27	4b	8p	C	7sec.	
13.12.	2020-2045	F6FHP	AE	27	27	5b	20p	C	RANDOM
14.12.	0425-0435	I1JTQ	DF	27	27	4b	10p	C	RANDOM

Hrd Random during Perseids 1982:
YU2CMS,YU7EA,YU3ZV,I1ANP,G8TQC,G8HLD,I2AV,F1GHU,HG8ET,
YU1MS,GM8YJU,YU2RGO,YU1YA?,YU3EW,YU2CCB,I1OVG,YU1POA,
YU2DAN,YU2JL,F1JG,F6CJG,HG1KYY,F1ANT,F1CCC,YU3HCX,
IW3QBC,YU3ZW,YU7AF,YU3CAB,IØLBK,F6FHP,F6DWQ,IØDLP,
F1DHF,G6GGE
Hrd Random during Geminids 1982:
YU1EU,YU1ES,F1JG,F6HHP,F6KCP
MS-SSB PROPOSALS ARE
EVERY TIME WELCOME!

vy 73 Joachim

tnx fer info

OE 6 IWG HH47 j wkd in SSB

1982 06 26	0300 - 0500	LA 9	FM	EU	NIL					
06 27	0700 - 0800	GM 4	CXM	XP	NIL	QAZ !!!				
08 11	2100 - 2200	PA Ø	CIS	CM	NIL					
	2300 - 0000	OZ 1	DPR	EP	26	26	3b	5p	NC	
08 12	0000 - 0100	GM 5	EHK	ZR	26	--	1b		NC	
	0200 - 0300	OZ 4	EN	HP	26	--	1b		NC	
	0500 - 0600	GM 3	WCS	YQ	26	--	2b	2p	NC	
	1000 - 1020	PA 2	GFL	DM	26	26	4b	8p	C	
	1100 - 1138	EA 6	FB	AY	26	26	6b	7p	C	
	1900 - 2000	GI 8	YDZ	WP	26	--	3b	mni	NC	
08 13	0433	F 1	FIH/p		37	hrd	Randoom			
	0442	PA Ø	OON		27	hrd	"			
	0449	F 1	FMP		26	hrd	"			
	0613	F 1	FBI		26	26	"		C	
	0729	F 6	CJG		26	27	"		C	
	0811	YU 6	VHF/6		38	hrd	18 sec	"		

tnx fer info

METEOR - SCATTER EXPEDITION TO 4U1ITU

Nach umfangreichen Vorbereitungen wurde unter dem Rufzeichen 4U1ITU in Genf eine Anzahl Meteor-Scatterversuche durchgeführt, auf die viele Stationen in Europa lange gewartet hatten. Wie im Amateurfunk üblich ergaben sich auch gewisse Schwierigkeiten, als zB. kurz nach Beginn der Sendungen ein Koaxstecker des Kabel für die Hauptantenne verbrannte..... Die meisten Verbindungen am 13. und 14. December erfolgten mit einer wenig geeigneten 6dB-Antenne.

13.13.82	2100 UTC	DK6AS	FM	CW	27	27	C	
	40	DL7YS	GM	CW	27	27	C	
	2300	LZ1AB	LC	CW	26	26	NC	no RRR rec
14.12.	0100	UK3AAC	SP	CW	nil hrd			ant defect.
	0300	YU2BZA	IG	CW	27	27	C	
	0500	HG1YA	IH	CW	36	38	C	
	0610	SM5CMU		CW	37	37	C	random
	0630	PAØRDY		CW	26		NC	random
	0700	OZ1ASL	FO	CW	26	38	C	
	1700	G4IJE	AL	CW	26	26	C	
	1900	G8OPR	ZL	SSB	27	26	NC	
	2000	IA9BM	EU	CW	nil hrd		NC	
	2100	UC2ACA	NN	CW	26	26	C	
	2200	SM7BAE	QP	CW	26	37	C	
	2300	SM6BOC	GQ	CW	26	--	NC	
15.12.	0000	OZ9QV	GP	CW	nil hrd		NC	
	0100	SM5MIX	HS	CW	nil hrd		NC	
	0400	GM4CXM	XP	CW	nil hrd		NC	

Der Störpegel in Genf war vergleichsweise sehr hoch, was empfangsmäßig einige Schwierigkeiten bot.

4U1ITU wird in Zukunft für MS QSO QRV sein. Aber auch HBØAYX wird in Zukunft aus DG in Meteor-Scatter aktiv sein. Beide Stationen sind auf dem VHF Netz anzutreffen.

HB9QQ

tnx fer info

G8KBQ YL77h:

14/12/82. Geminids shower.
I1ANP EE. F1JG CD. F1FIH CD.

YU3ES Incomplete qso as he did not get all of call.

3/1/83. Quadrantids shower.
I4BXN FE. YU3ES GF.

tnx fer info

F6CJG/p BF21j wkd:

6.06.	o746	SM6AEK	GQ	59	53	RANDOM
16.07.	o255	CN2BL	YV	27	27	
8.08.	o617	EA7AG/m	YX	55	59	RANDOM
1o.08.	15oo	GM3WCS	YQ	37	27	
	2ooo	OZ1DFH	GP	26	27	

11.08.					
o5oo-o525	GM5ENZ	WQ	26	27	
o6oo-o7oo	GM4IGS/p	YT	27	29	
o8oo-o835	GM5EHK	ZR	37	28	
1ooo-1o45	GM4KUX/p	WR	26	26	
16oo-1634	OK3AU	KJ	27	27	
18oo-184o	YU6VHF	JB	26	26	
23oo-231o	GM4CXM	XP	26	27	SSB
12.08.					
o6oo-o635	YU1OO	KC	26	36	
o758	SM5CHK	HS	37	27	RANDOM
	OZ4VV	EQ	27	27	"
o8oo-o83o	UQ2GLO	KQ	27	27	
o835	SM6EOC		27	27	RANDOM
o843	SM7AED	GQ	53	55	"
o854	OZ1FGP		52	52	"
o9o6	DK6AY		26	26	"
o935	OZ1ELF		27	38	"
o956	OZ1AAE		27	59	"
	OZ1FGP		51	37	"
1ooo-1o26	UR2EQ	NT	27	27	
1o38	G4DSC		27	27	RANDOM
12o8	OZ1DPR	EP	27	37	"
1236	G8TLC		27	37	"
1237	PAØEWM		26	27	"
1238	LA5IH		27	27	"
1257	DDØHR		27	27	"
131o	OZ1FDH		27	27	"
	SM6CKU		27	27	"
	OZ1DOQ		27	27	"
1317	LA5IH		27	27	"
1324	GM4IGS	YT	27	27	"
	LA9BM/p		27	27	"
14oo-15oo	OH4UC	NV	26	26	
15oo-1536	OHØJN	KU	26	37	
16oo-163o	SM7DLZ	IQ	27	27	
165o-173o	SM6EOC	GQ	27	27	RANDOM
173o-1745	OZ1YXF	GP	27	27	"
2ooo-21oo	UQ2G?		27	26	QRM
21oo-2125	YU1ADN		38	27	
2142	IØCUT		53	53	RANDOM
2232	LA5IH		28	39	"
2339	HG1YA	IH	27	39	"

13.08.				
oo11	IW9AJZ	52	--	NC
o2oo-o3oo	CT1ADW	26	27	
o334	OZ1ASL	27	27	RAN.
o45o	OE3OKS	27	38	"
o724	YU4EPI	27	27	
o725	OE6IWG	27	27	
o727	YU2RSD	27	27	
o758	OK2BPH/p	27	37	
o8oo-o9oo	UQ2GCG	26	26	
1o16	OE5JFL	37	27	
	IØDLP	38	38	
1o2o	IW3QBC	38	27	
1622	OE3OKS	59	59	
11oo-1145	I4XCC	26	26	
115o	SM5CHK	26	37	
12oo-125o	SK6HD	26	38	

merci pour les infos,
cher Guy

REMEMBER TO USE 144.4oo and 144.145!!!!!

DG4NAE EJØ6a wkd Gem.'82: (all SSB)

12.12.	o4.oo-o6.oo	SM2ILF	KY	26	--	2b 8p	NC	2sec.	
	o6.47-o7.oo	UR2RQT	MS	26	--	mni	NC	6sec.	random
	22.oo-22.48	LA7KK	FU	27	27	7 32	C	5sec.	
13.12.	o2.oo-o2.47	GW3NYY	XL	27	26	mni	C	7sec.	
	o4.oo-o5.oo	YU7QCA	JF	26	--	4 12	NC	3sec.	+
	o6.oo-o6.1o	LA9BM	EU	--	--		NIL		+
	2o.oo-21.oo	EI2CA	WM	26	26	3 13	NC	3sec.	$
	22.oo-22.17	LA1K	FX	27	26	mni	C	10sec.	fb
	23.43-oo.3o	SK2KW	KY	37	--	mni	NC	14sec.	random
14.12.	o5.oo-o6.oo	SMØGWX	JT	--	--		NIL		
	o5.41-o5.53	LA9BM	EU	39	39	mni	C	12sec.	random
	1o.oo-11.oo	CT1WW	WB	--	--		NIL		

+ vy QRN by static rain $s9^+$

$ QRM LA6QBA-OE1ABM

hrd.random: SK2KW,YU3ES,YU7AR,YU1EU,YU1POY,YU3ZV,IØLBK, SM5CNQ,F1EIT,F1FHI,EA3ADW +mni Others

sri about skeds in Quadrantids,influenza made me dumb like a fish.

IW2BNA / EF 36b / wkd MS in SSB

						p.	b.		
26.09.82	0700-0800	OZ4 EM	HP	26	-	5	2	NC	hrd 32sec.
	0900-I000	DF5HC	FN	-	-	I	-	NIL	via TROPO
03.I0.82	0700-0800	OZIEYE	FQ	-	-	3	-	NIL	
	0800-0900	OZIFDJ	GP	-	-	-	-	NIL	
II.I2.82	2200-2300	OZIEYE	FQ	26	26	I9	9	C	2sec.
I2.I2.82	I800-2000	OH5IY	NU	-	-	-	-	NIL	
	2000-2200	UB5LIQ	RJ	-	-	-	-	NIL	
	2200-2250	OZIFDJ	GP	27	26	II	7	C	4sec.
I3.I2.82	0500-0536	Y22QG	FM	26	26	27	I3	C	7sec.
	I800-I900	DG9DM	DL		NOT QRV for QRL				
	I900-2000	DF7DJ	DL	-	-	-	-	NIL	
	2I00-2I37	GM4CXM	XP	26	26	I6	9	C	5sec.
	2000-2I00	SM6EOC	GQ	-	-	-	-	NIL	
	2200-2300	SM6CEN	FR	-	-	-	-	NIL	
	2300-2400	LA9BM	EU	26	-	2	I	NC	
I4.I2.82	0000-0I00	G3WOH	YN	-	-	-	-	NIL	
	0400-0446	Y23FG	FM	26	26	I6	I0	C	3sec.
	0527-0529	LA9BM	EU	26	26		2	C ??	RANDOM
	0600-0700	LA7KK	FU	-	-	-	-	NIL	
	2300-2400	LA6HL	CS	26	-	2	2	NC	
I5.I2.82	2200-2300	OZIASL	FO	-	-	-	-	NIL	

G4OAE/OHØ KTØ5e wkd:

11.8.	1400-1445	DL4EA	DL	26	26	C	13b	5p
	1600-1700	F6BSJ	CG	--	--	NC		Aurora QRM
12.8.	0000-0100	G3NSM	ZL	26	26	C	24b	2p
	0100-0155	G3WZT	ZK	26	27	C	11b	4p
	0230-0300	UG5OGX	??	26	--	NC	1b	Random
	0400-0445	DK3UZ	EN	26	27	C	26b	12p Many doppler shifted bursts.
	0540-0550	DL9MCY	??	26	27	NC		Final rogers missing
	0600-0645	G4IJE	AL	26	26	C	16b	3p
	0700-0800	G8VR	AL	26	26	C		30 second burst
	0800-0900	G4IGO	YL	26	26	C	18b	6p
	1000-1045	G3IMV	ZL	46	26	C	14b	6p 57 second burst
	1045-1105	G3VYF	AL	37	37	C	5b	27 second burst
	1135-1200	G4FUF	AL	37	49	C	10b	9p 23 second burst
	1400-1525	YU2DI	JF	26	26	C	7b	2p
	1800-1945	PA3BIY/A	CM	26	26	C	10b	5p
	1955-2025	DK6AS	FM	26	38	C		
	2030-2105	DJ9CZ	DL	26	37	C		
13.8.	0400-0530	DDØHR	FN	26	--	NC	6b	8p SSB
	0600-0700	G4MDZ	AL	36	27	C		
	0800-0825	DL6NAA	FK	37	27	C		
	0903-0940	ON7EH	CK	26	--	NC		Random
	0940-1030	F8OF	CG	26	27	C		Random
	1200-1330	HG8ET	KG	26	26	C		SSB
	1450-1555	DJ4AX	DL	37	27	C		
	1600-1735	G3SEK	ZL	26	27	C	17b	18p
	1800-1855	G3FOI	AL	27	27	C	18b	6p
14.8.	0200-0235	Y22ME	HM	26	27	C	15b	8p
	0250-0350	DL9GS	DL	26	26	C		Random
	0400-0525	OZ1FXI	FP	28	27	C		
	0600-0725	I3TJG	GF	27	27	C	17b	13p
	0935-1010	G3WOH	YN	26	27	NC	7b	6p Final rogers missing
	1010-1044	DDØHC	FN	27	26	C		SSB
	1044-1200	DF3RI	??	26	--	NC		SSB
	1200-1227	G8NGO	HX	26	26	C		SSB
	1225-1300	ON6UG	FL	37	27	C		
	1300-1335	DF1CF	FM	26	26	C		

G4OAE/OHØ continues:

15.8.	0600-0635	DF5DL	EL	26	27	C	7b	8p
	0800-0855	YU2CCB	IF	26	26	C	4b	2p
	1000-1200	G3PBV	YK	46	2?	NC		20 second weak burst
	1200-1315	PAØRDY	CM	26	27	C	14b	5p QRM on frequency
	1400-1445	PAØOOM	DN	28	27	C		
	1600-1745	Y23FG	FM	26	26	C	20b	15p
	1800-1940	F6DKQ	DH	36	26	C		20 second burst
	1940-2035	F6BSJ	CG	26	27	C		
16.8.	0400-0555	G3WOH	YN	46	27	C		
	0800-0835	ON7EH	CK	26	26	C		

NIL: YU2EZA G8VJS YU3EST OZ1FTU YU2DG F1JG G4IYA PAØHWM DL5MCG F1FIH LA6HL LZ1AB G4BRK G8WRB OL6BAB G8VES.

thanks for the nicereport and your interesting letter, Dave
Some extracts of the letter will be printed next issue
73 DF2ZC

G4IGO YL38f wkd:

3o.o5.	o6oo-o715	DL6NAA	FK	27	26	34	24	C	1s
5.o6.	oooc-o11o	OZ1FTU	FP	26	--	2	4	NC	keyer fault
	o6oo-o8oo	SM7GEP	HR	26	27	29	2o	C	2s
6.o6.	o2oo-o33o	UA3LBO	QO	26	26		1		1s
9.o6.	o6oo-o645	U31XV/p		26	26	mni	43	C	7s SSB
18.o7.	o6oo-o652	I4MKN	GE	26	26	3o	34	NC	25s SSB
1o.o8.	o5oo-o7oo	YU7MAU	JF	26	26	13	7	C	2,5s
12.o8.	o544	I6WJB	HC	26	26		1	C	SSB RANDOM
	o8oo-o9oo	G4OAE/OHØ	KT	26	26	12	2o	C	17s
	13o9	YU2SFU?		37	37		1	C	SSB RANDOM
	1334	F1JG	CD	39	37		1	C	" "
	22oo-2335	UA3LAW	PO	26	26	7	1	NC	
	2338	IW5AVM	FC	39	26		1	C?	" "
13.o8.	o6oo-o74o	F6FTN	DC	27	27	25	17	C	72s
	22oo-2255	SMØLRNpJS		26	26	17	8	C	5s

Hrd Perseids Random:11.o8. YU2RGO,I4BXN 2os,12.o8. F6CJG 5s, OE3OKS 7s,YU3ULM,F1FHI 5s, Y22ME 4,F1BLL 7s, IØCUT 4s, YU3ZV 7s, F1CAL 15s, HG1KYY 8s, I3LGP, F1CAL 1min, OK3KCM 4s, I5WJW 4s, I1BEP 3s, OE6LOG 7s, G4D?? 3s, IT9V? 8s, YU3ES 2s, 13.o8. SM7FJE

NIL:OH5LK,SM3BIU, CT1BKW, UR2RGM,OZ1CFO, UA3LBO, UA3LAW, YO6AFP, OK2VBP/p

thanks for info, Ken

F6DRO wkd fm AD-square:

2o.o5.	o5oo-o7oo	OK2KZR	IJ	26	26	13	3	C	
28.o5.	22oo-24oo	Y23FG	FM	37	??	13	1	NC	
7.o6.	oooo-o2oo	Y22HA	GO	26	26	5	4	C	
18.o6.	o9oo-1ooo	DK1PZ	FL	37	26	m	a	n	yC 1)
16.o7.	23oo-24oo	CN2BL	YV	26	--	m	n	i	NC 2)
29.o7.	o6oo-o8oo	DL1MF	GH	26	27	m	n	i	C
	o8oo-1ooo	DF1OH	EM	27	27	m	n	i	C
3o.o7.	o5oo-o7oo	G3WZT	ZK	27	27	m	n	i	NC no rrr
	o7oo-o9oo	OE3CEW	II	26	26	m	n	i	C
1.o8.	22oo-24oo	OK1OA	HK	37	37	m	n	i	C
2.o8.	o5oo-o7oo	DG7AT	FM	26	26	m	n	i	C SSB 1,5s
	o7oo-o9oo	ON7EH	CK	26	26	m	n	i	C
	22oo-24oo	OZ1EKI	EP	26	27				C
3.o8.	o8oo-1ooo	DK2PH	EL	26	26				C
4.o8.	o5oo-o7oo	DK5AI	FL	27	28				C
	o7oo-o9oo	OK2VMD	IJ	26	26				C 4s
5.o8.	o2oo-o4oo	OZ1FTU	FP	??	27				NC
	o6oo-o7oo	G4MEJ	ZM	27	27				NC SSB 4s no rrr
	o7oo-o9oo	GW4EAI	YL	26	26				C 17s
6.o8.	o4oo-o6oo	Y22QG	FM	27	27				C
	o6oo-o8oo	DF6NA	EJ	27	27				C 8s
1o.o8.	22oo-24oo	SM4IVE	HT	26	--				NC 3)
11.o8.	oooo-o2oo	SM5CHK	HS	26	--				NC 4)
	o2oo-o4oo	UP2BJB	LP	26	--				NC 5)
	o6oo-o8oo	G4DSC	ZO	27	27				C
	13oo-14oo	EA7AG	YW	28	--				NC 6)
12.o8.	o8oo-1ooo	SM5CHK	HS	26	--				NC 7)
	1225	PE1AGF		27	26	1		C	RANDOM
	1236	G8MXP	YL	27	27	1		C	"
	1253	OZ1FMU		37	37	1		C	"
	1334	OZ1DPR	EP	37	37	1		C	"
13.o8.	oooo-o2oo	SM4KVM	HT	26	??			NC	
	o4oo-o6oo	SM7DLZ	IQ	26	26	m	n	i	C 3os

Hrd RANDOM CW:28.o7.SM7AED, 12.o8.PAØRLS
SSB:11.o8. PA2VST,OZ1FDH, 12.o8. LA9BM,OZ9PW,GM3ZJU?, OZ1DPR

1) I was using only 10 W due to PA failure
2) His rx was QRT!
3) QRM by another QSO on the same frequency!
4) QRM by F6BSJ on the same frequency!
5) Vy weak and QRN.
6) Very strong the first period but NIL after.
7) QRM by G3WZT-YU3USB on the same frequency.

Not QRV in April due to Antenna problems.
NIL:DK3FW,G4IGO,YU2OCB,DF5MO,PAØOOM,I3TJQ,OK3CPY,SMØIOT,GM5EHK/p, G8VES,I6DQE,PE1JTE,OZ1CLL,IV3HWT,SM3UL,OZ9PW,OZ1FDH,SM6EAN, SM4GVF.

merci pour les infos, cher Dom

REMEMBER TO USE :

144.145 CW and 144.4oo SSB

DD Ø HR (FN21f) via MS in SSB:

5.o6.	o4oo-o415	F1FIH	CD	27	27	5b	28p	C	2sec.
6.o6.	o9oo-o912	GI8YDZ	WP	27	37	5	9	C	6sec.
7.o6.	o3oo-o335	IW5AVM	FC	27	26	1o	28	C	3sec.
19.o6.	o5oo-o6oo	EA3LL	AB	--	--	--	--	NC	
2o.o6.	o5oo-o7oo	EA3LL	AB	27	--	2	8	NC	2sec.
6.o7.	o6oo-o65o	C31YQ	AC	27	26	16	5	C	4sec.
17.o7.	23oo-24oo	YU2CBM	ID	--	--	--	--	NC	not qrv?
19.o7.	o5oo-o6oo	I6DQE	GD	27	27	6	8	C	5sec.
22.o7.	oo47-oo58	G3OUL/p	XJ	27	26	7	13	C	2sec.
24.o7.	o2oo-o3oo	YU2CCB	IF	48	26	3	9	C	16sec.
1o.o8.	o8oo-o9oo	YU3TTL	HG	--	--	--	--	NC	not qrv?
1o.o8.	2ooo-21oo	GM5EHK	ZR	38	27	3	1o	NC	no rrr
1o.o8.	21.2o	YU2CMS		27	hrd	1		NC	no break!
1o.o8.	22.39	YU4BMN		37	hrd	1		NC	no break!
1o.o8.	23.o4	I1BEP	DE	38	hrd	1		NC	no break!
1o.o8.	23.28	YU7AR		36	hrd	1		NC	no break!
11.o8.	o8oo-o9oo	I1ANP	EE	46	26	5	11	C	17sec.
"	o5.24	G8HLD		48	hrd	1		NC	
"	o5.24	G3TQC		27	hrd	1		NC	
"	12.22	F1GHU		39	hrd	1		NC	no break!
"	2o.52	I5WJW		39	hrd	1		NC	no break!
"	22.34	YU2IGO		37	hrd	1		NC	no break!
"	23.56	OK3AU	KI	49	hrd	1		NC	no break!
12.o8.	oo.12	YU7AR		27	hrd	1		NC	
"	oo.48	F6FTN/p	DC	27	27	1	--	C	RANDOM
"	o1.42	YU1POA		36	hrd	1		NC	no break!
"	o2.14	YU3EW		27	hrd	1		NC	
"	o2.43	G4BAH		36	hrd	1		NC	no break!
"	o7.32	F1JG	CD	27	27	1		C?	RANDOM
"	o7.39	F1FHI	ZH	39	39	1		C	RANDOM
"	o7.39	HG1KYY	IH	26	?	1		NC	RANDOM
"	o7.42	F1JG	CD	39	39	1		C	RANDOM
"	o9.41	I1JTQ		27	27	1		C	RANDOM
"	o9.41	F1IL		38	38	1		C	RANDOM
"	11.48	EA3ADW	BB	39	37	1		C	RANDOM
"	12.56	F6CJG	BE	39	59	1		C?	RANDOM
"	13.1o	F6CJG	BE	27	27	1		C	RANDOM
"	13.4o	F1JG	CD	27	27	1		C	RANDOM
"	13.4o	HB9PUY	EF	28	37	1		C	RANDOM
"	13.4o	IW2BNA		27	27	1		C?	RANDOM
"	23.58	YU1AW		27	27	1		C?	RANDOM
13.o8.	o4oo-o6oo	G4OAE/OHØ		26	--	6b	24p	NC	

LA1K in FX42c

82-12-13	2210-2220	DG4NAE	EJ	26	27	6b	5p	C	
	2223-2243	DF1CF	FH	26	27	mni	mni	C	1)
	2326-2343	DL5NA	??	26	27	mni	mni	NC	2)
82-12-14	0300-0400	G8MJD	ZN					nil	
	0517-0535	DB5VT	DJ	26	37	mni	mni	C	1)
	0536-0552	DB6DC	DL	27	37	mni	mni	C	1)
	0554-0604	DG1DJ	DL	26	27	mni	mni	C	1)

1) Random .290
2) QRT bc of power failure.

OK2SGY from IJ37G:

2. 1.82	18-20	OH5IY	NU	27	26	4b	30p	NC	
	22-24	PA0NIE	OL	26	26	2	27	NC	
3. 1.82	00-02	LA5IH	CU	26	26	2	4	NC	
	08-10	F6BCQ	YI	27		3	5	NC	
	10-12	F6KCP	BI	27		3	14	NC	
	12-14	ISOPUD	EZ	27	26	12	25	C	

From IJ18D:

5. 6.82	02-04	SM6CMU	FR	26	26	19	37	C	
	06-08	LA5IH	CU	26	26			C	
	10-12	GM4IPK	YP	26		4	25	NC	
	18-19	UK3AAC	SP					NIL	
	20-22	UA3LAW	PO	27	27	10	31	C	
8. 8.82	22-24	SK2AU	KY	27	27	2	17	NC	
10.8. 82	05-06	LA8OW	EU	26	27	5	17	C	
	10-12	UA3TCF	WQ	26		1	3	NC	
	12-14	ON6UG	BL	38	27	9	30	C	
	18-20	PA3AJG	DM					NIL	
	22-24	SM3JAW	JX					NIL	
11. 8.82	00-02	SMOIOT	JT	27	27			C	
	02-04	SK7JD	IR	27	27	5	39	C	
	05-06	GM5EHK	ZR	27	26	6	19	C	
	06-08	OH4UC	NV	27	27	10	6	C	
	08-10	UA3TBM						NIL	
	10-11	UR2EQ	NT	28	26	2	17	C	
	18-20	SM2EKM	KZ					NIL	
	20-21	F1FVP	ZF				14	NC SSB	
	22-23	ON1IM	BL	55	52	tropo		C	
12.8.82	02-03	F1JG	CD	sri,not qrv					
	03-04	F6HLD	CG	27	26	7	42	C	
	04-05	G8JHL	YN	27	27			C SSB	
	05-06	F1GHU	BD	37		2	7	NC SSB	
	06-08	UK6ABI	TF				2	NC	
	10-12	GM3WCS	YQ	27	38	16	56	C	
	12-14	RB5LCX	RK					NIL	
	18-20	LZ1AB	LC					NIL	
	20-22	RB5LKW	SJ	26		2	6	NC	
	22-24	G4ASR	YM	27		5	18	NC	
13.8.82	01-02	G4GZA	ZN	38	59	3	7	C	
	06-07	F6CJG	BF	27		3	5	NC	

OK2SGY continues

13.12. 0800-1000 UY5OE SX 2 NC
1200-1400 OA6YAF DB 26 26 3 7 C

from IJ37g:
13.08. 22-23 SM3JAW JX 26 27 5 17 C
14.08. 22-24 G3WLH YM 26 26 7 28 C
15.08. 04-06 G4ASR YM 27 26 6 18 C

NIL:UK2RDX,OH5LK

OK2GY wkd fm IJ18d:
8.08. 20-22 PA0OOK DM 4 NC
11.08. 04-05 GM5EHK ZR 27 26 12 24 C
13.08. 00-01 G4GZA ZN 27 37 8 18 C

tnx fer info

LA1K exped. to FU27c
==========

82-12-11	0200-0235	OK1DA	MK	27	26	17b	27p	C	
	0245-1320	G3BD	YO	37	-	2b	-	NC	
	1400-1500	G3RJ	YO	27	37	22b	67p	C	
	0545-0620	PA0HUM	CK	27	27	17b	18p	C	
	0800-1000	DF6UA	EJ	27	27	6b	15p	NC	
	1300-1900	DL9GS	DL	26	27	5b	3p	NC $)	
	1900-2000	G4DEZ	AL					$$)	
	2000-2100	OK2VMD	IJ					nil	
	2100-2200	DF7DJ	DL					nil	
	2200-2400	LA3TQ	JD					nil	
82-12-12	0000-0100	DL1GBF	FI					nil	
	0100-0200	DL3MGB	GI					nil	
	0200-0400	DL1MF	GH					nil	
	0400-0600	OK2SGY	IJ					nil	
	0615-0700	G3POI	AL	36	37	29b	42p	C	
	0700-0735	DL9GS	DL	27	26	mni	mni	C (r)	
	0735-0810	G8VR	AL	26	26	19b	9p	C (r)	
	1700-1800	G3WZT	ZK	27	-	2b	4p	NC	
	1300-1830	Y22ME	HM	26	27	15b	63p	C	
	1900-2000	DK2PH	EL	27	27	23b	10p	C (r)	
	2000-2100	YU7AU	KE	26	-	1b	-	NC	
	2100-2200	Y22RG	FM	28	27	9b	18p	C	
	2120-2155	DK0TU	??	37	27	mni	mni	C (r)	
	2200-2300	I3TJQ	GF	27	-	4b	-	NC(qrm)	
	2230	??AFB	??					heard	
	2300-2320	DF7RG	GI					nil	
	2320-2355	DL7AFB	GM	28	38	9b	3p	C (r)	
82-12-13	0000-0120	G3IMV	ZL	27	26	5b	7p	NC	

(r) = Call with no sked prearranged
$ = Preamp OFF. All rest skeds worked without.
$$ = LA1K not QRV.

All QSO's on 144.112 (except OK2SGY on 144.021).

DL7YS wkd via MS (GM46b)

16.10.82	2300-0045	SM3JGG	HV	26	--	6b	7p	NC	
17.10.82	2100-2130	IW5ACZ	FD	--	--			NIL	
17.10.82	2300-0010	YU7AU	KE	27	--	3b	9p	NC	
18.10.82	2300-0000	UA3DHC	TQ	--	--			NIL	
20.10.82	2200-0000	I1BEP	DE	26	27	7b	11p	NC	
21.10.82	0000-0200	RB5LGX	RK	--	--			NIL	
21.10.82	0300-0500	IW5ACZ	FD	26	27	mni		NC	
21.10.82	0500-0630	SM3JGG	HV	26	26	2b	mni	C	
21.10.82	0700-0800	GM4CXM	XP	26	--	mni		NC	
21.10.82	1620-1750	YU7AU	KE	27	26	mni		C	
21.10.82	2000-2200	RB5LGX	RK	--	--			NIL	
21.10.82	2200-0000	UY5OE	QJ	--	--			NIL	
29.11.82	1050-1250	OH3MF	MU	26	27			C	
1.12.82	1500-1600	G3UNU	ZM	26	26			NC	
12.12.82	2100-2215	YU4TP		26	--	6b	20p	NC	Random
12.12.82	2300-2345	I4YNO	FE	27	26	mni		C	SSB
13.12.82	0000-0120	G3UNU	ZM	27	26	mni		NC	sri, QRM on Freq
13.12.82	0200-0300	YU7QED	KF	27	26	mni		C	
13.12.82	0400-0445	UO5OAA	OH	--	--			NIL	
13.12.82	0600-0625	OH3TR	LV	--	--			NIL	
13.12.82	2000-2100	GM4CXM	XP	38	37	mni		C	SSB
13.12.82	2130-2230	4U1ITU	DG	27	26	mni		C	
13.12.82	2300-2320	F1GHP	ZG	27	27	mni		C	SSB
13.12.82	2338	IW5ACZ	FD	27	27	1b	6sec	C	SSB Random
13.12.82	2346-2352	IØLBK	GB	27	27	mni		C	SSB Random
14.12.82	0200-2310	UA1ZCL	RC	26	--	4b	6p	NC	vy weak refl.
14.12.82	0333	YU1EU	KE	27	27	1b	5sec	C	SSB Random
14.12.82	0400_0525	HG8KWG	KG	26	--	3b		NC	
14.12.82	0556-0600	F1JG	CD	27	27	mni		NC	SSB Random
14.12.82	1830-1940	RO5OAA	OG	37	26	mni		NC	CW Random
14.12.82	2000-2030	OH7UV/8NY		26	--	1b	2p	NC	
14.12.82	2100-2200	I6WJB	HC	26	26	mni		C	
14.12.82	2200-2250	I1ANP	EE	26	27	mni		C	

DL7YS continued (GM46b)

2. 1.83	2100-2200	LA6CU	CU	--	--		2p	NC	
3.1. 83	0200-0320	I4GOC	GE	26	27	5b	10p	NC	
3. 1.83	0500-0640	I2FHW	EE	26	27	7b	21p	NC	
3. 1.83	2200-2236	I4TDK	FE	--	--			NIL, other QSO on Freq	
3. 1.83	2250-2300	F1ANY	BD	26	26	4b		NC	SSB Random
3. 1.83	2300-2345	EI2CA	WM	26	--	2b		NC	
3. 1.83	2351-	F1ANY	BD	27	27	1b	8sec	C	SSB Random
4. 1.83	0000-0035	YU7MAU	JF	--	--			NIL, QRM on my side	
4. 1.83	0100-0115	G4OIG	ZM	--	--			NIL	
4. 1.83	0130-0136	F1FVN		27	27	3b		NC	
4. 1.83	0300-0345	YU7OQC	KF	--	--			NIL	
4. 1.83	0500-0600	UB5LNR	RJ	26	--	2b		NC	

Was not vy lucky during the Quadrantids, but some Skeds were NIL, when om Random good reflections were coming through from nearly same diections ? Also the 144,200 and 144,100 were just crowded during the peak of the shower. On 144,400 was vy low activity; I was calling a couple of times, but no luck, so I went back to 144,200 to work somebody. Good luck and DX to all the VHF-friends

tnx fer info

de DL7YS, Peter

DF2ZC EO29h wkd:
11.12.
23oc-2335
I3TJQ GF 26 27 2o 5 C

2335-o1o5
I3LGP GF 26 27 68 18 C

7.o1.
22oo-2245
SM2CKR KX 27 27 34 4 C

vy 73 de Bernd

F1EIT/P (BG52G) wkd SSB

13-12-82
0200-0300 LA6HL CS 26 -- 10p 1b NC
0300-0358 SM0EJY IT 26 26 22p 9b C 20s
0500-0600 LA6HL CS NIL
1800-1852 Y23FG FM 26 36 14p 5b C 8s
1900-1911 OZ6ZR FQ 27 26 9p 7b C
2000-2100 OZ9PW EQ NIL sked not OK ?
2100-2200 I3TJQ GF 26 -- 28p 2b NC
2200-2231 GM4CXM XP 27 27 27p 20b C
2300-2322 HG8ET KG 26 26 8p 11b C
Hrd random :DK1KO,HG8KCP,YU3ES,DJ8MA?
14-12-82
0000-0100 OE5MKM HI 27 -- 9p 8b NC *
0100-0200 DL3MBG GI 26 27 15p 5b NC
0200-0230 IW5ACZ FD 26 27 16p 15b C
0300-0340 SM5MIX HS 36 27 11p 18b C 7s
0430-0435 YU7AR 29 38 mni C random
2000-2100 EA7AG YW cannot be QRV SORRY
Hrd random :I4MCC,YU4BMN,F1JG,DF7D?
G8JHL,IW5ACZ,SV1YE?,DD0?,G8KBQ
* Vy strong bursts fm YU7AR just near
QRG during the 10 first minutes
TKS to F6DZK and school teacher in BG
for help

44

I4XCC GD/Ø34:

13/12	0700-0742	OZ1EYE	27	39	FQ41h	mni refl.		C
14/12	0100-0150	F6DWG	37	37	BJ41j	7 sec burst		"
"	0237-0243	G4CMC	27	27	?	Random 144.200		"
"	0350-0400	G8JEL	37	37	?	" "		"
"	0425-0435	G3UNU	28	28	ZMØ4c	" "		"
3/ 1	0100-0205	GM3WCS	27	26	YQ73e	6 sec burst		"
"	2300-0000	LA6HL	27	27	CSØ9g	23 sec burst !		"
4/ 1	0100-0140	PAØCIS	27	27	GM15h	mni refl.		"

73 es dx de:

Remarks: CW qso with F6DWG, GM3WCS, LA6HL, PAØCIS.

I4XCC

tnx fer info

DL7YS (GM46b) wkd MS

Oct. 2. 82	Ø9-11	IW5ACZ	26	--	3b	1Øp	FD	NC	SSB
" 9. 82	Ø2-Ø3	RB5LGX	--	--	-	-	RK	NIL	
" 16. 82	23-Ø2	SM3JGG	26	--	6b	7p	HV	NC	
" 17. 82	21-22	IW5ACZ	--	--	-	-	FD	NIL	SSB
" 17. 82	23-Ø1	YU7AU	27	--	3b	10p	KE	NC	
" 18. 82	23-00	UA3DHC	--	--	-	-	TQ	NIL	
" 20. 82	22-00	I1BEP	26	27	12b	38p	DE	C ?	(Tropo-QRM)
" 21. 82	01-02	RB5LGX	--	--	-	-	RK	NIL	
" 21. 82	03-05	IW5ACZ	26	26	8b	22p	FD	NC	SSB
" 21. 82	05-07	SM3JGG	26	26	2b	16p	HV	C	
" 21. 82	07-08	GM4CXM	26	--	6b	8p	XP	NC	SSB
" 21. 82	08-10	GM6PZ	--	--	-	-	XQ	NIL	SSB
" 21. 82	16-18	YU7AU	27	26	6b	15p	KE	C	
" 21. 82	20-22	RB5LGX	--	--	-	-	RK	NIL	
" 21. 82	22-00	Uy5OE	--	--	-	-	SK	NIL	
Nov.13. 82	10-12	LB1S	--	--	-	-	GV	NIL	
" 29. 82	11-13	OH3MF	26	27	7b	30p	MU	C	

Not vy successful, hope it will be better in the future
vy 73 de DL7YS

DF9PY / DK65g / MS-Report :

11.12.82	0200-0400	YU7QED	KF	26	26	3b	26p	3s	NC	CW
"	0600-0700	LA6CU	CU	-	-	-	-		NIL	CW
"	1800-1945	YU3TAK	HG	26	37	2b	13p	1s	C	CW
"	2000-2140	YU7AU	KE	27	26	5b	20p	5s	C	CW
"	2200-2300	HG8CE	KG	-	-	-	-		NIL	CW
12.12.82	0500-0700	CH3MF	MU	27	27	2b	15p	2s	C	CW
"	0700-0900	GL6BAB	IJ	27	36	5b	25p	3s	C	CW
"	1900-2120	YU7KN	JF	27	(sri,key not ok)				NC	CW
18.12.82	0600-0800	I6WJB	HC	26	26	4b	39p	2s	C	CW
"	1900-2050	EA3ADW	BB	26	26	5b	28p	2s	C	CW
23.12.82	2100-2140	LA1TV	ET	-	-	-	1p		NC	CW
29.12.82	0600-0700	UC2ACA	NN	-	-	-	-		NIL	CW
2. 1.83	0800-0840	F1GCA	BD	-	-	-	-		NIL	SSB
"	1000-1100	F1JG	CD	28	26	2b	13p	3s	C	SSB
"	1420-1540	YU2EZA	IG	26	29	4b	18p	2s	C	CW
"	1616-1700	IØCUT	GB	27	-	-	5p		NC	SSB
"	1800-1900	OZ1EYN	HO	-	-	-	-		NIL	CW
"	2100-2140	UK5EDT	RI	-	-	-	-		NIL	CW
3. 1.83	0000-0040	UY5OE	SK	-	-	-	-		NIL	CW
"	0200-0300	HG8ET	KG	27	27	8b	25p	5s	C	CW
"	0300-0330	IW5AVM	FC	-	-	-	-		NIL	SSB
"	0400-0600	LA5IH	CU	26	26?	1b	9p	3s	NC	CW
"	0600-0640	UK2RDX	MT	-	-	-	-		NIL	CW
"	1300-1340	IWØBCU	GB	27	26	5b	7p	8s	NC	CW
"	1500-1600	I1ANP	EE	-	-	1b	5p	0,5s	NC	CW
"	1700-1810	EI2CA	WM	28	-	1b	9p	1s	NC	CW
"	2000-2100	YU6AA	JC	27	26	5b	14p	6s	C	CW
"	2200-2300	UK6HAR	UE	26	-		1p		NC	CW
4. 1.83	0000-0100	UK3AAC	SP	-	-	-	-		NIL	CW
"	0200-0250	YU7QDM	KF	39	37	10b	9p	5s	C	CW
"	0319-0336	YU3EST	?	28	27	3b	mni	5s	NC	SSB R
"	0400-0430	HG8KWG	KG	38	38	6b	3p	5s	C	CW
"	0515-0540	HG8ET	KG	39	37	4b	1p	20s!	C	CW R
"	0700-0730	YU4AVW	JE	-	-	-	-		NIL	SSB
"	1300-1340	LA6CU	CU	-	-	-	-		NIL	CW
"	1600-1720	YU1OO	KC	26	27	9b	4p	2s	C	CW
"	2000-2045	HG2SU	JH	-	-	-	-		NIL	CW

MS log SM7GWU HS75c

12.12.81	2000-2050	SM2BYA	KB	27	26	23b	52p	C	5sec		
13.12.81	0800-0845	DF5IZ	EJ	27	26	24b	42p	C	3sec		
13.12.81	1800-1900	OK3RMW/p	KJ	26	27	5b	7p	C	4sec		
04.08.82	2100-2300	FØDCH/p	XI	27	26	13b	18p	C	37sec		
11.08.82	1200-1400	EA3LL	AB	26	26	3b	11p	C	3sec		
12.08.82	0600-0700	F1JG	CD	26	26	7b	12p	C	2sec	SSB	
12.08.82	1000-1145	YU1ADN	XD	26	26	13b	6p	C	4sec		
12.08.82	1300-1350	GJ8SET	YJ	26	36	4b	2p	C	10sec	SSB	
12.08.82	2210-2315	RA3ACS	SP	49	27	3b	MNI	C	23sec	RANDOM	
12.12.82	0200-0340	HG6NQ	JI	26	27	8b	19p	C	2sec		
03.01.83	1500-1620	DL6KAI	DK	37	26	5b	32p	C	10sec		
04.01.83	0300-0332	F1EEN	CF	26	26	5b	MNI	C	5sec	SSB	
04.01.83	0400-0505	RB5LGX	RK	27	27	15b	9p	C	4sec		
04.01.83	0600-0655	OK3AU	KI	27	26	18b	23p	C	17sec		

Hrd RANDOM: 4/1 83 UY5HF+called, UB5GBY, RB5EHB,UO50GX

73 Stefan

DA8AK DS80b

83-01-03 2200-2310 YU2EZA 26 26 12b 16p C 3s burst

Nil: UK3AAC, GI4KSO.

Skeds only at 1200 lpm. Take-off to south is not good. Pse 70cm tests 1000-1500 lpm. I hope SM6CKU also will be QRV on 70cm CW/MS soon.

Jan-Martin.

OE1APS (II63g) 144 MHz MS - SSB

821212	19oo - 194o	GI4OPH	XO33j	26	26	3b	14p	2S	C
	20oo - 2022	G4IJE	AL12g	26	26	13	31	3S	C
821213	19oo - 1925	GM4CXM	XPØ9g	26	37	6	15	5S	C
	20oo - 21oo	GM6PZ	XQ77e	26	26	1	10	1S	NC
	21oo - 22oo	LA6QBA	FT75e	26	26	4	31	2S	C
	22oo - 23oo	G4KLX	ZN??	nil					
	23oo - 24oo	G6BBS	ZK15a	26	26	1	4	1S	NC
821214	18oo - 19oo	F1KFN	CF15e	26	26	5	11	4S	NC

73 DE Alfred

HG 8 ET /:KG22j:/ wkd via MS:

12.12.	1800-1835	DK2LM	EJ21f	27	26	8B	11P	C	3sec	
	1935-2005	DF7DJ	DL39a	39	27	MNI		C	11sec	R
	2040-2103	OH1ZAA	KV38h	27	27	MNI		C	3sec	R
	2103-2125	OH3MF	MU23j	27	27	5B	6P	C	2sec	
13.12.	0000-0035	LA6QBA	FTØ5c	26	--	3B	3P	NC	2sec	
	1940-2030	SMØEJY	IT	37	37	MNI		C	18sec	R
	2300-2319	F1EIT	BG52g	26	26	4B	6P	C	3sec	S
14.12.	0055-0112	RB5IOJ		27	38	16B	21P	C	5sec	R
	0135-0150	UB5ICR	SH39h	28	28	MNI		C	6sec	R
	0330-0350	DL8GP	DJ	27	37	MNI		C	12sec	R
03.01.	0200-0255	DF9PY	DK65g	27	27	9B	21P	C	3sec	
	1500-1555	IWØBCU	GB38g	27	27	7B	14P	C	1sec	
04.01.	0330-0355	G3NSM	ZL	37	27	28B		C	18sec	R
	0400-0420	SMØDCX	IT7Øb	37	37	34B		C	16sec	R
	0420-0450	SM6EO		37	27	19B		C	14sec	R
	0515-0538	DF9PY	DK65g	28	39	23B		C	9sec	R
	0600-0635	SMØAGP	IT7Øb	27	27	8B		C	3sec	R

NIL HRD:

12.12. DF1SO, I1KTC, ON1BXS
13.12. I1ANP, F5DE, GM8OEG
14.12. GI4OPH, LX1GR
02.01. LA6CU
03.01. GM3ZXE, GM4CXM, LA6QBA, GI4OPH, IW5AVM, ON1KXM
04.01. G8JVM, OZ1DSK

HRD Random:

12.12. DF5HC, G4IYA, DF7VX, DF7DJ, Y22ME, PAØNIE, DF1S?, SM5CNQ, OH1ZAA, RA3YCR, UB5EDT, DL9MC, UK3AAC, HG6NQ
13.12. SM5CHK, UB5GBY, F6DWG, PA3BBI, SM5MIX, PA3CGR, DF5DJ, OZ1DFJ, Y22ME, UA3PBY, RB5EHB, OZ1FOQ, UO50GX, SM6EOC, F6BSJ, PAØOOM, LA1TV, DJ9BV, OK2LG /:back scatter:/
14.12. UB5ICR, UB5GBY, RB5IOJ, UB5GDV, UK5IEC, DL8DAT, RB5OEJ, DL8GP, HG2SU /:back scatter:/
02.01. UB5EDT, UA3RFS,
04.01. DL8DAT, G4IYA, PAØRDY, PAØNIE, PAØRLS, PAØBBI, DF9PY, UW3GU, UB5GDV, UA3DHC, G3NSM, SM6EO, SMØDCX, SMØAGP.

VY 73!

46

OE3CEW II52f wkd 144 MHz MS/CW

8.9.82.	0400-0505	SM2CKR	KX	26	27	16b	4p	C	10sec.
9.10.82.	0600-0800	LA6CU	CU	--	--	---	---	N	
10.10.82.	0600-0655	G4IJE	AL	26	26	17b	mni	C	3sec.
16.10.82.	0600-0730	OH5LK	NU	26	27	10b	9p	C	0,5sec.
17.10.82.	0200-0400	LA6QBA	FT	--	--	---	---	N	
21.10.82.	0700-0900	UA3DHC	TG	--	--	---	---	N	
11.11.82.	1220-1420	LA7KK	FU	26	26	2b	1p	NC	
12.11.82.	0800-0855	LA7KK	FU	26	26	9b	mni	C	2sec.
14.11.82.	2300-0015	I1DMP	DF	26	26	23b	mni	C	0,5sec.
15.11.82.	2300-2355	EA3ADW	BB	26	26	31b	mni	C	1sec.
17.11.82.	2200-2325	SMØHAX	JT	26	26	17b	2p	C	0,5sec.
19.11.82.	2300-0035	SM6CMU	FR	26	26	15b	7p	C	0,3sec.
20.11.82.	0800-0920	LA6QBA	FT	26	26	12b	6p	C	1sec.
21.11.82.	0700-0825	G3IMV	ZL	26	26	16b	mni	C	10sec.
27.11.82.	1200-1400	YU1OO	KC	--	--	---	---	N	
30.11.82.	2200-2320	LA9BM	EU	26	27	24b	13p	C	8sec.
6.12.82.	2300-0100	SM3JGG	HV	--	--	---	---	N	
9.12.82.	2200-2400	RQ2GGC	LQ	--	--	---	---	N	
11.12.82.	2300-0100	LA6CU	CU	--	--	---	---	N	
12.12.82.	0600-0640	OH5IY	NU	26	27	26b	4p	C	1sec.
	1600-1715	UA3LBO	QO	26	27	17b	mni	C	1sec.
14.12.82.	0600-0700	F6FHP	AE	--	--	---	---	N	
	1600-1750	9H1CD	HV	26	26	20b	mni	C	2sec.
18.12.82.	2300-0100	OZ1CFO	ER	--	--	---	---	N	

YU2EZA IG54f via MS

24.01.82.	2200-2400	ON4TI	OK	26	-	40p	19b	1s	NC
04.02.82.	0500-0640	G4DEZ	AL	27	26	86	25	1	C
07.02.82.	2100-2200	ON4TI	OK	26	26	7	-	-	NC
08.05.82.	2000-2200	UK5EDT	RI	26	26	10	6	-	NC
08.05.82.	2200-2320	PA0RDYLX	CJ	28	26	40	23	2	C
16.05.82.	2200-2400	PA0HWN	OK	27	26	48	23	2	C
18.05.82.	1000-1200	UO5OGE	OG	26	26	18	16	2	C
19.05.82.	0500-0625	OZ2ZB	EN	27	26	69	35	5	C
20.05.82.	0400-0600	G8VR	AL	27	26	11	16	4	C
20.05.82.	2100-2235	UK3AAC	SP	26	26	9	14	3	C
22.05.82.	0500-0615	DJ8PB	DL	26	27	27	17	9	NC ^^
22.05.82.	0615-0725	DF7DJ	DL	29	26	93	19	2	NC ^^
24.05.82.	1800-1935	UQ2GFZ	KE	-	-	-	5	-	NC
31.05.82.	0500-0630	I2ZHA	GO	26	26	24	16	1	C
29.05.82.	0400-0525	SM0EJI	IT	27	26	65	26	3	C
01.06.82.	1900-2030	UQ2GFZ	KE	26	-	5	4	-	NC
01.06.82.	2200-2300	DK1PZ	KL	26	-	22	5	1	NC
09.08.82.	1900-2000	F6DWG/p	AJ	27	-	4	5	2	NC
10.08.82.	0200-0255	UO2ACA	NO	37	26	30	24	17	C
10.08.82.	0600-0745	G4GZA	ZN	27	26	86	26	5	C
10.08.82.	2000-2130	OH5IX/4	NV	26	-	-	4	2	NC
10.08.82.	2200-2320	FE1BTX	CN	27	26	98	29	10	NC
11.08.82.	0100-0140	UB5LIQ	EJ	-	-	17	1	-	NC

NIL: OZ1FTU; UA6YAF ; F6DDV; OZ1FTU; F6DKQ;

UA3TCF WQ14a:

18.09.	0300-0500	OZ1ASL	FO	27	26	7	31	NC
24.10.	0200-0400	UB5BAE	MJ	27	--	1		NC

NIL:OZ1DOQ,OZ1ASL,LA6QBA

tnx fer info

UR2GZ MSo4b wkd:

1.05.82	0400-0600	OK1DPB	HK	26	26	13 c	22 p	C	2 s
5.05.	0200-0400	OK1AFN/p	IK	27	26	9	13	C	9 s
2.06.	0200-0340	RB5LGX	RK	26	26	20	10	C	6 s
3.06.	0100-0245	UY5OE	SK	26	26	14	5	C	1 s
12.06.	0400-0320	DF5DE	EK	26	27	15	25	C	4 s
13.06.	0400-0450	OK2PEW	IJ	27	26	20	30	C	5 s
13.06.	1000-1200	UB5IEP	TI	26	26	8	6	C ?	
5.08.	0200-0330	DL9MCC	GH	27	27	23	30	C	5 s
5.08.	2100-2300	HG6VX/p	JH	27	26	17	31	C	8 s
10.08.	1300-1400	OL6BAL	JJ	26	-	1	1	NC	
11.08.	1100-1200	IW5ACZ	FD	26	27	3	-	NC	SSB,
11.08.	1200-1300	OH7TN/9	ND	27	25	10	3	C	10 s
11.08	2000-2200	UA6ALT	UF	26	-	2	2	NC	
12.08.	0000-0200	YO7VS	LE	26	39	8	4	C	3 s
12.08.	1120-1200	DF1OH		38	37	Random		C	
12.08.	2200-2300	OK3KNM	JI	27	26	5	2	C	4 s

UA3LBO QO21h wkd:

26.06.	1500-1540	UA6YAD	TE	26	26	6	1	C
27.06.	0200-0300	OE6WIG	HG	27	26	10	9	C
	1800-1900	DF0HF	FK	26	26	5	4	C
10.08.	0000-0030	I6DQE	GD	27	27	5	5	C
	1800-1900	UA6YAF	TE	27	27	6	1	C
11.08.	0800-0840	OH7TN9	ND	26	26	6	1	C
12.08.	0000-0100	I2CVC7	HB	26	36	5	8	C
	0600-0740	G4MDZ	AL	26	26	5	1	C
	0800-0925	I2AV	EF	36	47	7	6	C
	1000-1100	G4CDC	ZN	26	26	6	2	C
	1600-1645	G4IJE	AL	26	26	7	4	C
	1400-1500	F6FHP	AE	26	--	1	NC	
	1800-1915	G8VR	AL	37	37	7	4	C
	2100-2200	IW5AVM	FC	26	26	6	2	C?
31.08.	0100-0120	SM4KWZ		37	39	m n i		C RAN.
	0400-0455	OE3PUW	II	27	27	m8	2	C
	1600-1630	GM5EHK	ZR	26	26	6	1	C
	2100-2130	YU3USB	HG	27	27	m n i		C

47

F8OP CG36F

9.6.82	GW4ASR/P	27	27	XM
20.6.82	I6DQE	26	27	GD
	SM4GVF	26	27	HT
30.6.82	OZ1DOQ	26	27	FP
2.7.82	SM5MIX	26	27	HS
3.7.82	SM4GVF	26	27	HT
4.7.82	SM3UL	26	26	IV
13.7.82	CM2BL	27	27	YV
14.7.82	SM5CHK	27	27	HS
16.7.82	CN2BL	27	26	YV
29.7.82	OK2VMD	26	27	IJ
	OL6RAB	26	26	IJ
	OK3TJK	26	27	II
	UQ2GLO	26	26	KQ
31.7.82	HG4XT	26	26	JH
01.8.82	LA2PT	26	36	FT
02.8.82	LA2PT/P	26	26	EV
04.8.82	LA6CU/P	26	37	DS
06.8.82	EA3ADW	27	27	BB
07.8.82	Y22HA	26	27	GO
09.8.82	HA8KWB	26	26	KG
	GM4ENZ	27	27	WQ
10.8.82	YU1ADE	27	27	KD
11.8.82	EI0RTS	27	27	UN
	YU100	26	37	KC
12.8.82	HG4KXG	27	27	JG
	SM4KVM	37	37	HT
	LA9EM/P	27	27	?
	SM6CMU	59	59	FR
	SM5EEI	37	38	JU
	OZ1ASL	37	37	FO
	OZ1DPR	37	37	EP
	OZ1CFO	26	26	ER
	YU7NTU	26	27	KF
	SM6CEE	37	37	FR
13.8.82	G4OAE/OHØ	27	37	KT
	YU7AU	26	27	KE
14.8.82	YU6AA	26	26	JB
	SMØLRN/P	26	26	JS
	LZ1AE	27	27	LB
	SK6HD	26	37	GS
	GM4EHK	27	27	ZR
15.8.82	OK3TBY	26	28	II
17.8.82	SM1BSA	26	27	JR
26.8.82	SMØEJY	26	26	JT
28.8.82	LA5IH	26	27	CU
29.8.82	OZ1FDJ	26	27	EP
	OZ1DOQ	27	37	EP
	SM6CMU	27	27	FR
23.10.82	UC2ACA	26	26	NN
18.12.82	G3WOH	26	27	YM
	YO6AFP	26	26	MG
28.12.82	LA6QBA	26	26	FT
29.12.82	OK1AFM	26	27	IK
	LA1TV	26	26	ET
01.1.83	YU3TSB	26	26	HF
02.1.83	EA3IH	26	26	BB
	YU7QDM	26	27	KF
	YU2EZA	26	27	IG
	OK3TCM	26	26	JI
03.1.83	IW5AVM	26	26	FC
	OZ1EYE	27	26	FQ

UA1ZCL RC48c wkd:

821108	2200-2235	SM3JGG	27	27	25b	mni C
	2317-2355	SM5CNQ	27	37	3o	mni C

tnx fer info

DF6OB FM44c:

10.06.82	0200-0240	C31YA	AC	26	26	SSB		C
12.06.	0800-0835	EI2CA	WM	26	27	4	11	C
20.06.	0130-0145	G3RAF/p	WJ	27	26	SSB		C
09.07.	0050-0120	GW3NYY	XL	26	37	10	31	C
10.07.	0000-0025	F6KAW/EA6	CZ	27	27	28	33	C
11.08..	0100-0123	GW6AFZ/p	XM	27	28	SSB		C
11.08.	0800-0825	UK2RDX	MT	26	27	5	21	C
11.08.	0920-0940	UR2EQ	NT	37	27			NC Random
11.08.	1000-1200	UA6YAF	TE	26	26?	2	12	NC
11.08.	1200-1300	UA3MBJ	SR	--	--	1		NC
11.08.	1900-2100	RA3AGS	SP	26	27	5	11	C?
12.08.	0200-0245	YO7VS	LE	26	37	3	18	C
12.08.	0335-0420	YU2RQQ	HF	27	38			C Random
12.08.	1113-1114	OH7PI	NW	37	37	SSB		C Random
12.08.	1148	EA3ADW	BB	37	37	SSB		C Random
12.08.	1200-1300	YU3USB	HG	26	26	8	25	NC
12.08.	1900-2000	YU2CBM	ID	26	26	1	5	NC
13.12.	0600-0800	EA1ED	VD	26	--	SSB		NC
14.12.	0045-0120	UB5GBY	QG	37	37			C Random
14.12.	0135-0205	UO50GX	OH	38	28			C Random
14.12.	0205-0310	9H1CD	HV	26	27	14	22	C
14.12.	0345-0356	F1JG	CD	27	28	SSB		C Random
14.12.	0400-0500	F1GTR	ZG	28	27	SSB		NC?
15.12.	0200-0400	UB5BDC	MJ	26	26?	2	8	NC
03.01.83	0000-0100	G6BBS	ZK	26	--	SSB		NC
03.01.	0100-0205	OE6WIG	HG	26	26	12	25	C
03.01.	0300-0400	I4YNO	FE	26	--	SSB		NC
03.01.	0900-1000	YU100	KC	26	--	1	2	NC
04.01.	0100-0123	F6CRP	ZG	26	27	SSB		C
04.01.	0300-0400	EA3AIR	BB	37	37			C Random
04.01.	0515-0535	YU7OQC	KF	38	27			C Random

NIL: UK3AAC, YO5BIN UA1ZCL UB5IEP OH5IY/4 EA3LL UA3TBM UK5IEC UA3UBD I5YDI IW5ACZ I4BXN SM3AKW

DF6OB not QRV: UK5IAZ UK6ABJ SM3UL vy sri! (Perseids)

Hrd Random: 12.82: SK2KW LA6QBA F6DWG YU3TTL YU3FM 4U1ITU UB5WBL UB5LIQ UY5HF YU2CBU YU1EU F8OP UC2ABN 1.83: YU1JTQ IØRDJ G4DCV F1FHI F1JG YU3FM HG8ET YU3RM I6WJB LA1K F6DWG

OHØNC/OJØ JU56c wkd:

12.08.82	001o-0030	YU2DG	JF	38	38	C
	074o-0815	OE5KE	HI	26	37	C
	0820-09oo	OE5EFM	HI	37	27	C
	09oo-092o	HG8CE	KG	27	27	C
	093o-101o	DL9GH	DL	26	37	C
	102o-1125	DL7GP			26	--No report, QRM from DL4EA
	122o-1255	G4ASR	YM	37	37	C
13.08.82	081o-0855	OK1KKH			37	37 NC no RRR, QRM from DL's CL

73 de Sam

Luckily, Tropo and Aurora Condx vy good during the expedition.

UA3TCF WQ14a wkd:

23.04.	21oo-23oo	UB5GFS	RG	26	--	2b	3p	NC
8.05.	o2oo-o4oo	RB5LGX	RK	27	26	27	17	C
	o4oo-0545	HG1YA	IH	27	26	1o	5	C
9.05.	o2oo-o4oo	UY5OE	SK	28	26	9	15	C

NIL: OK1DPB tnx fer info

AURORA NEWS

by DH Ø AHR

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

DE3UZ (EN20c) wkd via Aurora in CW (> 1000km)

820907
1832 OH1FS LU46d 53a 55a Ø 1834 OH2BAZ MU54h 55a 58a Ø

830124 1702 OH1DF LU42j 54a 55a 340

830205
1742 OH3RW MU24b 54a 55a 5 1850 OH1DP LU42j 59a 58a Ø
1852 OH1BS LU42e 56a 56a Ø

830209
1746 OH1AJ LU41c 51a 53a 350 1755 OH3TR LV50g 31a 51a Ø

830302
1532 OH2DG NU42g 55a 57a Ø 1619 UA3MBJ SS78e 55a 55a 30
1540 OH5NW NU13e 59a 58a 20 1704 UK2RDX MT35g 57a 57a 340
1608 OH1AJ LU41c 57a 58a 10 2206 OH6CY MW70h 51a 55a 350
2221 OH1DP LU42j 59a 59a 350

tnx fer info, Eddy

DB 6 BX (DM46c) wkd via Aurora in SSB :

820712
1451 GM8EOG 58a 58a

820712
1451 GM8EOG YQ36c 58a 58a 1o°
1512 GM8YJU YOØ5a 56a 58a "
23 GM8TSI YP16h 56a 59a "
27 GM8MJV YP25g 58a 58a "
31 SM4KVV HT56c 52a 59a 0°
53 GI8YDZ WP67b 58a 57a "

tnx fer info, Peter

F 6 BSJ (CG24f) via Aurora:

13/ 7/1982

28 Qso with G, PAØ, DL, ON until line N. Best dx :
OZ60L Fp5Øe

26/ 9/1982
12 Qso with GD, EI, DL, GI and PAØ until line O.
Best dx :
GD4 OM - XO, GI8RLE - WO

tnx fer info

144 MHZ AURORA PA0WWM CM68G

26-09-82 1454 UC2AAB NN18C 55A 52A 45 GRD
26-09-82 1502 GW3LAD YL36F 53A 51A 30 GRD

G1BF ([illegible]) wkd via Aurora on 144 Mz (only SX):

[illegible]o41o

[illegible]	GI8UIV	XO31g	59a	59a	15°
[illegible]o7/12					
152o	[illegible]	MT50c	57a	55a	15°
[illegible]	GI8YDZ	[illegible]	57a	55a	3o°
[illegible]o7/13					
[illegible]	[illegible]	[illegible]	55a	55a	3o°
[illegible]	GI8UIV	xo31g	59a	59a	3o°
[illegible]o7/14					
1014	[illegible]	CG72c	58a	58a	75°
1[illegible]	GI2DS	[illegible]5of	58a	59a	15°
[illegible]	[illegible]	[illegible]4o1	58a	58a	15°
0214	GI4[illegible]	[illegible]49[illegible]	56a	55a	15°
[illegible]	U[illegible]	[illegible]026g	57a	57a	6o§°

§ QRAg 1606 km SSB!

82o8[illegible]

17o4	GI8YDZ	WP67d	59a	57a	15°
82o[illegible]o8					
1156	OE3[illegible]	II52f	57a	59a	4o°
1215	SM4[illegible]	HT56c	59a	55a	3o°
4o	[illegible]M4KWZ	HT56c	59a	56a	3o°
[illegible]	[illegible]7DLZ	IQ53h	59a	59a	3o°
53	[illegible]CVU	AJ31d	57a	57a	3o°
56	SM1NDF	JR22e	43a	55a	3o°
1311	OE3OKS	IH21h	59a	59a	9o°
14	DG3CC	FIo7f	53a	45a	9o°
19	OE9[illegible]I	[illegible]H49h	55a	55a	7o°
32	[illegible]U7AR	Kfo1c	51a	51a	6o°
44	YU2CMS	TF33f	51a	57a	9o°
58	[illegible]G1KSC	IG15j	53a	59a	6o°
14o1	[illegible]G1B	IG15j	59a	59a	6o°
14o5	I[illegible]BC	GG76a	45a	52a	6o°
19	I4[illegible]N	FE56c	59a	59a	45°
2[illegible]	F6HWY	[illegible]H64a	59a	59a	45°
821113					
17o4	GI8YDZ	WP67b	58a	57a	3o°
821124					
1819	GI6[illegible]	XO31g	59a	59a	0°
37	GI4OFK	XO31j	59a	57a	0°
821207					
1645	GI8YDZ	WP67b	53a	52a	15°
1827	[illegible]	[illegible]o5j	59a	59a	3o°
36	GI8YDZ	WP67b	55a	57a	3o°
821210					
1745	GI8YDZ	WP67b	59a	59a	2o°
1[illegible]oo	GM3JIJ	WS69c	53a	47a	2o°

= strong QRM, sri

tnx fer info, Arend

DH Ø HAR ex DD Ø HR (FN21f)

821124:

15.38	GM 3 XOQ	ZT	57a	57a	1o°
51	LA 1 GCA	CU	53a	57a	2o°
.58	OH 1 DP	LN	52a	54a	"
19.oo	DJ 6 XH	FI	52a	53a	4o°
21.53	LA 1 TV	ET	55a	55a	0°
.58	LA 7 KK	FU	55a	55a	"
23.12	OH 1 AWW	LU	54a	55a	"

tnx fer info

DL7YS (GM46b) wkd via Aurora 144 Mc

Nov. 24-82	1802	SM6CMU	59a	59a	FR50b	0°	
"	1803	SM1BSA	57a	55a	JR22e	0°	
"	1818	G4IJE	55a	52a	AL12g	0°	
	1820	OZ1EHW	56a	55a	FO30a	0°	
"	1841	SM7LAD	57a	57a	GP48a	30°	
"	1841	SM1BSA	59a		JR	315°	hrd
"	1848	PAØOOM	59a		DN	300°	hrd
"	1849	DK9IP	55a		EI	30°	hrd
"	1855	PAØOOM	59a		DN	20°	hrd
"	1902	F6DWG	58a	57a	BJ41j	30°	
"	1907	F6KCP	55a	45a	B114e	30°	
"	1924	Y22QG	56a		FM	30°	hrd
"	1928	DL9GS	57a		DL	30°	hrd
"	1929	YU3ZV	51a		HG	30°	hrd
"	1934	PAØRDY	53a		CM	40°	hrd
"	2118	SM4VA	55a	55a	GT47a	15°	
"	2135	LA1TV	55a	55a	ET29g	20°	
"	2200	SM4ANQ	42a		HU66d	20°	
"	2248	LA1TV	41a		ET	30°	hrd
"	2301	RQ2GAG	55a		MQ	30°	hrd
"	2310	OH1BP	52a		LU42j	10°	hrd
"	2313	SMØEJY	57a			340°	hrd
"	2331	LA8SJ	54a		FT	20°	hrd
"	2333	SM6CEN	53a	54a	FR40b	20°	
"	2336	LA8SJ	58a	56a	FTØ5f	20°	
"	2355	SM4NFL	55a			20°	hrd
"	2359	LA9BM	54a		EU32g	10°	hrd

Between 1800 and 1900 the band was real crowded by DLs and PAØs. At the same time I was monitoring the 80m-Band. All the signals from european stations on 3,7Mc had the fluttering echoes on, what you sure will know from the W6 and W7 stations on 14 Mc longpass

tnx fer info, Peter

DDØHZ (FN21f) wkd via aurora on 144 Mc :

820712

1515	SM4KVV	HT47b	55a	41a
1537	GI8YDZ	WP67b	52a	52a
1550	GI8UPV?	XO31g?	51a	53a

820713

1755	OE5OLL	GI58b	53a	53a
1850	G8LEF	ZN21e	59a	42a

820714

0125	G8OPR	ZL63b	59a	59a
0133	GI8UPV	XO31g	59a	59a
0137	G6BDJ	YL38j	52a	53a
0140	GM8MJV	YPØ5c	59a	59a
0144	G8LZM	ZO34d	59a	59a
0147	G4AFJ	ZMØ9j	59a	57a
0152	G4ACV	AL67d	59a	57a
0155	G8YRS	AL35g	59a	57a
0202	EI2DW	WN5Øf	55a	57a
0207	G8WPO	ZN51e	59a	59a
0213	G8LJU	YM79a	56a	59a
0218	G8XFQ	YN2Øn	59a	58a
0224	G8MKQ	YN15b	57a	59a
0229	G8NGO	ZKØ9b	59a	59a
0232	G8LLJ	ZL73g	59a	59a
0235	G8MXE	XKØ8j	59a	57a
0238	G8APZ	AL32g	59a	59a
0245	G8CKZ	ZKØ4f	59a	58a
0252	G8CHD	YN76c	55a	55a

820807

1227	SM7NJF	HP31j	56a	57a
1240	SM6KKX	GR72j	57a	56a
1313	SM6KT	GS35j	55a	55a
1350	SM1MKY	JR44g	57a	55a
1407	SM4KVV	HT56c	54a	52a
1430	SM7CAD	HR4Øg	52a	55a
1438	G8LZM	ZO34d	55a	55a
1502	GM6CFN	XR3Øg	57a	53a
1522	G8NWZ	YM69d	52a	52a
1524	G4LBV	ZM41c	53a	53a
1525	G8CXQ	ZM53e	51a	53a
1527	G4JZF	YM3Øb	56a	55a
1528	G6CMV	YM69e	54a	52a
1530	G8YWF	ZO58c	55a	55a
1535	G4CLA	ZMØ5g	55a	55a

821124

1547	SM4DSV	HU27j	54a	52a
1603	LA5ZK	FT22b	59a	59a
1706	DG8NAQ	FJ56n	55a	54a
1733	GI4OPH	XO33j	58a	57a
1738	F1CNT	BJ33b	57a	59a
1756	GI6FIW	XO31g	54a	53a

821129

2115	SM5NER	ISØ8d	57a	55a

820906

1433	GJ8KNV	YJ7Øc	59a	59a
1435	DC9WA	DK	57a	57a
1436	G8YUA	ZL49h	53a	53a
1443	GW4IGF	YN76a	59a	57a
1449	GJ8YVL	YJ7Øj	57a	57a
1455	SM4LXV	GTØ8f	59a	55a
1505	OZ1NEE		59a	59a
1505	G4JRL	ZN	57a	58a
1617	F6CKZ	AJ55c	59a	59a
1621	ON4ABJ	CL63g	59a	57a
1624	PA3CBE	CM43c	56a	59a
1643	LA4LR	CT56d	59a	53a
1655	LA1ZV	CS29f	59a	56a

820926

1406	GW8FKB	XN69h	55a	56a
1416	SM5NCQ	HS48d	55a	56a
1429	F1BBD	BJØ9b	55a	57a
1432	G8FPR	ZL63j	53a	55a
1436	G16FIW	XO31g	55a	55a
1524	F1BRO	BJ	52a	52a
1530	F1KBF	BIØ1j	59a	57a
1534	GW8XLL	YN53c	54a	55a
1546	SM1MKY	JR44g	59a	58a
1548	OZ1GTE	FP74g	59a	59a
1551	G8FDJ	ZN53c	55a	53a
1552	GM8YPI	YP2Øa	56a	54a
1554	G4FBK	ZL39g	59a	59a
1602	GW8JLY	YL34d	59a	58a
1752	LA1ZE	CS29f	57a	55a

821124

1357	SM4KVV	HT56c	59a	59a
1405	SKØKM	IT6Øc	52a	55a
1406	SM6MUY	GR12e	53a	55a
1409	SM7MEB	HQ31j	54a	57a
1411	SM6NEY	GRØ4c	55a	59a
1416	SM1MUT	JR12d	52a	55a
1421	G8NWR	YM69d	53a	53a
1437	SM4MNN	HT56c	54a	56a
1448	PE1BBA	CLØ3c	54a	57a
1455	G8XVJ	YN48f	57a	56a
1500	Y22SA	GNØ5b	55a	56a
1501	SM7JUQ	GP36h	59a	59a

821207

1849	LA2SN	ES45h	59a	59a
1859	LA1ZE	CS29f	54a	53a
1909	SL6ZYW	GSØ3h	54a	53a
1920	LA8WF	FTØ3e	56a	44a

821208

1657	LA6ZW	FV72a?	55a	55a

821210

1837	GI8YDZ	WP67b	54a	53a

DDØHB (FN21f) wkd via Aurora :

820711c:

SK Ø BJ	IS	53a	52a	0°
La 5 IH	CU	52a	53a	"
GM 8 YJU	YO	55a	52a	"

820713:

17.55 OE 5 OLL	GI	52a	53a	350°
18.52 OK 1 MBS	HK	53a	58a	310°
23.43 GI 8 UPV	XO	56a	52a	0°
23.52 G 6 IEP	XK	57a	53a	"
23.59 G 8 TGM	ZK	59a	52a	"

820714:

00.02 G 3 SDH	YL	48a	58a	"
.05 GU 8 FRO	YJ	59a	59a	"
.10 G 6 AUS	YM	57a	58a	"
.22 G 4 ILI	YL	52a	59a	"
.30 UQ 8 GLO	KQ	55a	54a	"
01.30 G 8 MXE	XK	55a	56a	"
.59 EI 2DW	WN	54a	53a	"

+ 33 x G,GM aus Zo, ZM, ZN, YN, ZL, ZK, YM, AL, YP, YO.

820807:

GM 6 CFN	14.42	XR	55a	53a	350°
G 8 KBG	15.13	YL	57a	57a	"
GW 8 FKB	.22	XN	59a	57a	0°

DF9PY (DK65g) wkd via Aurora in CW :

820926

1606	G4ODA	ZM2Øg	53a	52a	0°
22	G3JXN	ZL39e	55a	54a	"
44	G3NNG	ZL23f	57a	59a	"
1908	PAØNIE/A	CM64d	41a	52a	"

tnx fer info

YU2KDE(JF23g) wkd via Aurora in CW :

820906

1702	PA2VST	55a	55a	CM24j
18	DF2HC	55a	51a	FN31b

tnx fer info, Bozo

Please send your infos tiped on a machine in a space of 17cm x 24cm, tnx.

OK1BMW/p /HK52b/ wkd via Aurora on 144Mhz in CW:

820410

1638	OZ1FDH	GP22b	55a	55a	0°
1703	SM6JWH	GQ26g	56a	53a	0°
1713 - 1800	QRN electric rain				
2223	SM6CMU	FR50b	59a	59a	0°
2248	LA8AK	DS80b	57a	56a	0°
2258	SM6CEN	FR40b	54a	55a	0°

820811

1704	GM5EHK/p	ZR42h	55a	33a	350°

820925

1325	SM6AOQ	GR41a	58a	57a	20°
1330	SM7DLZ	IQ53h	59a	59a	20°
1338	SM7BYB	HQ30a	59a	57a	20°
1344	OZ4EM	HP64e	55a	55a	20°
1348	PAØCSL	CM63d	57a	57a	20°
1354	G3YYF	AL33j	58a	57a	15°
1358	SM7CMC	HQ53d	58a	59a	15°
1401	PAØOOS	DN63b	59a	58a	15°
1403	PAØHIP	CL34b	57a	58a	15°
1442	OZ1BOK	GP21a	57a	57a	15°
1445	PAØKDV	DN71f	58a	55a	15°
1452	PAØBLD	CM55j	58a	57a	20°
1457	UC2ACA	NN18d	57a	55a	55°
1459	OK3AU	KI27h	57a	57a	60°
1502	DL8BAB	EN76f	58a	57a	30°
1505	OZ1FGP	EQ68a	59a	59a	20°
1508	SM5CHK	HS36j	59a	57a	15°
1518	PA3BBV	CM66g	58a	55a	30°
1523	UP2AN	MO27b	57a	57a	40°
1525	UP2BCE	MP22b	56a	56a	35°
1527	DJ9UX	DL66e	58a	57a	30°
1537	G4DEO	AL35g	56a	52a	15°
1547	OZ1BPO	ER49j	59a	59a	20°
1555	UA3LAW	PO26g	58a	57a	45°
1615	OZ1ELF	EP49h	59a	59a	15°
1618	G4GZA	ZN47c	58a	57a	0°
1634	OZ5NM	FP34h	59a	55a	0°
1645	SM6FLL	GR35h	53a	53a	0°
1710	SM6CMU	FR50b	57a	55a	0°
1822	SM6LJP	GS60h	59a	55a	0°
1828	UR2RQT	MS80e	57a	59a	0°
1830	QRT for TVI				

OK1BMW /HK72b/ wkd via Aurora on 144 Mhz in CW:

820906

1600	DF1ET	DL44h	57a	33a	15°
1607	PA3BGM	DN61c	53a	52a	15°
1640	SM6CMU	FR50b	58a	55a	15°

tnx fer info and for the tiping,73!

OK1DIG / HK41F / contd.

820906	1453	DF7DO	59A	59A	CW	50	DL30H
	1458	DD1DA	59A	55A	SSB	50	DL59C
	1500	ON5UM	58A	HRD	SSB	50	CK03A
	1505	DG4GAN	57A	HRD	SSB	50	EI76A
	1513	DL2RAH	59A	59A	CW	50	EO29A
	1522	DF6LN	59A	57A	CW	50	FO51J
	1527	SM7DLZ	59A	57A	CW	50	IQ53H
	1535	DF7OG	59A	56A	CW	50	FM21J
	1544	DK2ZF	59A	55A	CW	50	DN37G
	1547	DL6BF	59A	55A	CW	50	DM57C
	1557	OZ1BVW	55A	51A	CW	50	EP48A
	1601	DJ4AX	59A	55A	CW	50	DL47G
	1607	DL6DAR	58A	52A	CW	50	EL22G
	1609	PA0ERW	56A	53A	CW	50	CL48B
	1611	DJ0VZ	56A	51A	CW	30	DK43A
	1614	SM6EOC	59A	55A	CW	30	GO25F
	1617	SM6CMU	58A	57A	CW	30	FR50B
	1629	UP2BJB	54A	55A	CW	30	LP06D
	1638	SM6AEK	58A	54A	CW	40	GQ26B
	1647	DL0PR	52A	BEACON		23	EO
	1705	DK1KO	59A	57A	CW	20	FN12G
	1712	SM5CHK	53A	HRD	CW	20	HS
	1722	SM6CEN	55A	57A	CW	10	FR40B
	1734	SM7LAD	57A	55A	CW	30	GP48A
	1940	UQ2GFZ	51A	HRD	CW	0	NR
	1943	UQ2GLO	55A	HRD	CW	340	KQ
820926	1433	G4GZA	59A	54A	CW	15	ZN47C
	1454	G3UVR	55A	HRD	CW	0	
	1501	DL8BAB	55A	53A	CW	10	EN76F
	1554	SM6GTF	55A	51A	CW	0	GO63D

tnx fer info,dr om

DK 1 VI (EJ 54 f) wkd via Aurora

on 144 MHz in ssb:

820807

1526	G	8	VHB	ZN	44	j	55A	55A 045
30	G	4	CLA	ZM	Ø5	g	55A	- "
34	OZ	9	SL	FP	74	g	55A	55A "
39	DL	1	YAW	EM	74	g	56A	56A "
43	DD	4	BN	EN	63	a	52A	53A "
55	G	8	FVZ	ZL	Ø9	j	52A	53A "
1611	G	8	LZM	ZO	34	d	52A	52A 020
16	GM	3	?CS	YQ	73	c	51A	- "

Tks fer info, dr Ernst.

OK1DIG / HK41F / wkd via Aurora on 144 MHz

DATE	UT	CALL	RST	RST	MODE	QTF	QTH
820807	1505	SM7IWG	55A	54A	CW	0	HR63G
	1510	G4IJE	55A	HRD	CW	10	AL12G
	1514	SM6AOQ	56A	56A	CW	10	GR41A
	1515	DJ9YE	58A	52A	CW	10	EN14A
	1522	UK4QV ?	56A	HRD	CW	30	
	1523	F6KBF	54A	HRD	CW	30	
	1525	OZ1BEF/A	59A	HRD	CW	30	EQ
	1533	PA0KDV	55A	55A	CW	30	DN71F
	1537	UA3LBO	55A	HRD	CW	30	QO
	1543	LA1EKO	57A	HRD	CW	20	BQ37G
	1548	GM5EHK/P	55A	HRD	CW	20	ZR42B
	1557	DK2ZF	54A	55A	CW	30	DN37G
	1602	SM7BYU	52A	55A	CW	30	GP15D
	1622	GM3WCS	55A	HRD	CW	0	YQ
820906	1230	SM6EHY	56A	59A	CW	20	GR23G
	1232	UW3GU	55A	HRD	CW	20	TP
	1235	SM7KNK	59A	59A	CW	20	HP32C
	1237	OZ1FGP	59A	56A	CW	20	EQ68A
	1242	G4IJE	58A	52A	CW	20	AL12G
	1243	F6DWG	56A	HRD	CW	20	BJ
	1245	RA3AGG	53A	HRD	CW	20	GP19J
	1246	SM7DLZ	59A	HRD	SSB	20	IQ53H
	1247	SM6ENY	58A	HRD	SSB	20	
	1250	OZ1ABE	59A	59A	CW	5	GP12J
	1253	SM1BSA	56A	56A	CW	5	JR22E
	1256	RR2RBD	52A	HRD	CW	20	
	1258	OZ4MM	55A	55A	CW	20	FP53A
	1301	PA0RDY	59A	HRD	CW	20	CM
	1305	F6CER	56A	HRD	CW	30	BI
	1309	G4ISM	55A	51A	CW	40	AL56H
	1312	DF7DJ	56A	55A	CW	40	DL39A
	1314	PA3CEF	55A	55A	CW	40	DN74A
	1320	OK2KZR/P	59A	59A	CW	40	IJ32J
	1322	PA3AIZ	55A	54A	CW	40	CM72G
	1325	SM7JUQ	57A	58A	SSB	40	GP10H
	1328	OZ1CYK	57A	55A	CW	40	GP32B
	1334	PE1ACB	57A	55A	SSB	40	DM65A
	1344	OZ1EXZ	56A	55A	CW	40	FP53A
	1352	SK7VHF	59A	BEACON		46	GP
	1352	DL0PR	59A	BEACON		46	EO
	1458	OK3TJK	57A	57A	CW	55	II46G
	1358	PA3BSK	59A	55A	CW	55	DL04A
	1405	PA3BZZ	57A	55A	CW	55	CM66B
	1408	YU7MAV	52A	55A	CW	70	JF50J
	1413	OE3WBA	59A	HRD	CW	70	II
	1416	I4XCC	59A	55A	CW	70	GD03D
	1425	OK3AU	56A	58A	CW	70	KI27H
	1434	PA3BRS	59A	57A	CW	60	CM70C
	1441	G6NB	55A	55A	CW	50	ZL06E
	1443	PA0LDE	55A	55A	CW	50	CL48A
	1444	PA3AUC	59A	55A	CW	50	CL49A

IW2BNA (EF36b) wkd via aurora on 144 MHz SSB:

6.9.1982

14,00	PAØERW	CL48d	59a	59a	15°
14,07	PA3AAN	CLI2b	55a	59a	"
14,11	PA3BRS	CM7Øc	57a	56a	"
14,14	PEIAGJ	DKOIf	59a	59a	"
14,16	PA3BGL	CN7Øa	57a	52a	"
14,27	DDIDA	DL59c	59a	59a	"
14,34	PEIFIG	CM74j	59a	59a	"
14,44	ONIIM	BL79c	57a	54a	"
14,48	DAIOD	EJI4a	59a	59a	"
14,57	DAIOD	EJI4a	59a	59a	"
14,58	PEIFIG	CM74j	59a	59a	"
15,03	PEIFMU	CMI5b	59a	59a	"
15,08	PAØXMA	DM44h	59a	59a	"
15,15	PEIEVX	CMI5h	55a	59a	"

From 15,28 GMT signal in SSB wasn't comprehensible, but I heart many CW signals till 18,30 GMT.

tnx fer fb info, Walter

A U R O R A from LA9BM (EU32G)

26.9.82

1430	DL7AEF	GM47D	53A	57A
1758	Y23LA	G061E	54A	52A
1820	PAØNIE/A	CM74D	53A	55A
2032	GM4JEJ	YQ38G	54A	55A
1815	OZ4EM	HP64E	57A	59A
2037	PAØFAS	CM78H	54A	55A
2040	PA3AXY	CM46A	52A	54A
2044	UQ2GLO	KQ48G	53A	55A
2052	DJ3JU	EN76H	51A	53A
2055	SM6LZQ	GR10J	53A	52A
2238	DJ9YE	EN14A	52A	52A
2240	SM6DLG	HS33J	53A	53A
2251	LA6VBA	ES26G	53A	53A
2254	LA3EQ	CS29H	52A	52A
2259	OZ1ASL	FO18C	55A	55A
2329	PAØOOM	DN54G	59A	55A
2333	OH6CY	MW7ØH	52A	55A
2342	PA3BRS	CM7ØC	52A	52A
2345	LB8IB	FTØ5J	54A	59A
2350	Y22IC	GN28D	52A	59A
2353	PA2GFL	DM65A	52A	52A
2356	DJ4FY	FM51D	52A	52A

27.9.82

0002	RQ2GAG	MQØ1G	53A	54A
0005	PA3CGR	DM65B	52A	55A
0010	DL3LAL	EN19B	56A	52A
0012	DK3FW	EM69B	55A	55A

1.10.82

2216	OZ7EME/A	GP34H	57A	59A
2217	OH1DP	LU42J	57A	59A
2220	SM7EMQ	GP46G	59A	59A
2221	LA1TV	ET29G	55A	57A

LA9BM (EU32G) contd.

1.10.82

2224	G3BRA	YP2ØD	52A	56A
2231	PAØBLD	CM55J	52A	52A
2246	SMØKHE	JT51F	56A	56A
2253	DL7TY	GM48J	55A	53A
2257	OK1KHI/P	HK29B	52A	55A
2310	DK2PR	EN76G	52A	55A
23	SM5AYY	HS28J	42A	52A
45	LA6X/P	GV41E	51A	52A

2.10.82

0015	GM4ILS	YR24E	53A	54A
25	RR2RBD	MS53A	51A	53A
28	SM3KIF	IU33A	54A	54A
35	DK3FW	EM69B	51A	53A
42	PAØKDV	DN71E	51A	54A
50	UP2AN	MO27B	53A	56A
53	OH1AWW	LU42B	54A	55A
0125	PE1GHV	DM66H	52A	55A
30	SM3JGG	HV6ØH	52A	55A
46	DL3LAL	EN19B	53A	54A

13.10.82

1425	SK5EU	HS22D	56A	57A
51	UK2RBT	MT45A	56A	59A
54	UR2JL	MT45A	55A	57A
1549	LA8LA	FX51C	53A	55A
51	SM5EFP	HT5ØE	56A	59A
57	G4LIZ	ZN19F	42A	55A
1601	OH1AYA	KV4ØE	52A	55A
04	DL8BAB	EN76F	53A	53A
08	DF7OG	FM31J	52A	55A
13	GM4OLD	??	52A	56A
41	SMØNHB	JT71H	52A	53A
45	OZ1EBG	FP7ØE	55A	57A
51	DL7YS	GM46B	52A	53A
54	DL7FQ	FO62E	56A	59A
1705	SM3KIF	IU33A	53A	53A
07	OH1DP	LU42J	53A	55A
2232	UA3MBJ	SS78E	54A	55A
		(1670 km)		
44	Y23SB	FN58B	53A	53A
47	Y37WB	FN57D	52A	55A
58	DL3LAL	EN19B	54A	55A
2316	LA9OM	FT72H	57A	59A
55	GM3ZXE	YQ35G	53A	55A

18.10.82

1430	LA2DH	ET28G	52A	55A
58	SM5KX	IT33A	52A	53A
1530	OY9JD	WV07H	52A	55A
45	LA4B	FU75E	53A	55A
47	LA2SN	ES46D	53A	52A
1605	SM5KWC	IT34H	54A	59A
07	SM6DMH	GQ45C	53A	55A
12	LA1K	FX42C	54A	55A

30.10.82

1430	SM2ILF	KY26E	52A	53A
35	LA3EU	DW24A	55A	56A
38	LA9IX	FY53G	52A	53A
48	LA2RZ	CU38F	53A	55A
52	SM4JEW	GT59B	52A	55A
59	OH3RW	MU24B	53A	55A
1501	SM3FVW	JX72G	52A	55A
14	LA2YT	FU62G	53A	54A
17	SM6NET	GS68C	52A	54A

31.10.82

2213	SM5MGW	HS56B	52A	55A
16	SM7OS	IQ22A	54A	55A
22	SM6CYZ	GQ46J	52A	56A
24	SM6LJP	GS46J	56A	59A
2301	OH5IY	NU23G	53A	56A

1.11.82

1639	SK7JD	IR14F	56A	57A
1718	OH7RJ	NWØ9F	53A	41A
21	OH1AYA	KV49E	56A	57A
35	OH3SE	LV5ØH	53A	59A
40	OH5KE	NU36J	52A	56A
44	G4LIZ	ZN19F	52A	57A
49	UA2FAY	KO13F	53A	59A
1816	SM3GHD	GW7ØE	55A	59A
2102	OH2AI/OHØ	KTØ5G	52A	56A

15.11.82

1512	LA5MT	FW36F	54A	57A

23.11.82

1635	RC2WBH	OP45G	56A	59A
38	RC2WBR	NP75G	54A	59A
44	UP2BFR	LP29B	59A	59A
2233	GM3XOQ	ZT04J	55A	56A
40	GM4IPK	YP05H	54A	54A
2300	UA3RBJ	SS78E	52A	55A

24.11.82

1544	Y31QM/A	GL52G	55A	57A
53	DL8HAV	EN20E	55A	59A
1613	DL7ZM	GM27E	56A	55A
15	OH2AUK	LT08A	56A	57A
21	UQ2GA	MQØ1G	55A	59A
40	UQ2GOI	KQ29H	55A	59A
1714	DF7OG	FM31J	52A	57A
2120	GM4IPK	YP05H	55A	56A
51	G4ITR	YN16J	53A	53A
58	G3UTS	ZO11B	52A	55A
2300	PE1HIX	GM57F	55A	53A
02	PAØOOS	DN63B	56A	58A
05	PAØXLA	DM44H	52A	55A
07	LA3EQ	CS29S	56A	57A
09	PA3BSK	DL04A	54A	56A
12	PA3AIK	CL01J	52A	55A
15	PA3EBV	GM66G	52A	54A
2340	LA6ZV	ET68B	52A	57A

LA9BM (EU32G) contd.

29.11.82

1600	SM4JEW	GT59B	53A	55A	1627	UK2CAU	NO55A	52A	59A
03	OZ3ZW	FO18E	54A	55A	35	DK9CK	EO59G	57A	55A
05	DF5HC	FN22D	55A	53A	48	PA3ALK	CLØ1J	52A	55A
11	DK2PRA	EN76G	52A	53A	50	G3UNU	ZMØ4C	54A	53A
20	OZ1FDJ	GP23H	54A	56A	53	GW3DDH	??	52A	52A
24	UQ2AO	MQØ1A	57A	58A	1715	G4HVC	AM ?	52A	52A

tnx fer fb info, dr om.

HG 8 ET /:KG22j:/ wkd via Aurora on 144MHz in CW:

1982.06.09.	15.15	G4CDC	ZN37c	55a	56a	QTF	310°
	15.19	GW3NYY	XL40b	57a	58a	"	"
	15.23	G8VR	AL42e	58a	59a	"	"
	15.25	ON5UM	CKØ3a	55a	55a	"	"
	15.30	G4FUF	AL33j	57a	55a	"	"
	15.35	PA2VST	CM24j	59a	45a	"	"
	15.41	DF5HC	FN22d	57a	57a	QTF	350°
	15.44	DF7OG	FM31j	57a	57a	"	10°
	15.46	OZ3WU	EP76e	56a	56a	"	"
	15.48	DK2ZF	DN37g	57a	55a	"	310°
	15.54	DK1KO	FN12g	59a	59a	"	15°
	16.02	DJ9YE	EN14a	55a	55a	"	10°
	16.04	DJ9BV	EN40a	57a	56a	"	"
	16.07	GW4GSS	YN75j	57a	55a	"	340°
	16.14	ON5QW	BL8Ø	57a	53a	"	0°
	16.20	OZ1FDH	GP22c	56a	53a	"	350°
	16.28	DKØTU	GM37e	57a	55a	"	30°
	16.38	G6NB	ZLØ6e	56a	55a	"	310°
	16.41	DK1PZ	EL59g	57a	54a	"	300°
	16.44	G3IMV	ZLØ7h	56a	57a	"	310°
	17.08	G3VYF	AL33j	57a	56a	"	290°
	17.36	UA2FAY	KO13f	53a	59a	"	350°
	18.05	G4PBP	YM2Øa	53a	55a	"	310° C?

tnx fer fb info, dr om

SM7GWU (HS75c) wkd via AURORA 144 MHz

82.01.18			
2153	RA1AND	PT12h	54a 59a
82.01.31			
1358	OH6HR	KW47d	54a 57a
1412	SM2CPF	KX11a	42a 55a
1421	SM2LTA	JY02e	55a 52a
1427	OH6UP	KX79a	54a 58a
1618	DF8LC	FN03a	55a 57a
1700	RQ2ggv	LR74e	55a 55a
82.02.10			
1532	UA3LBO	QO21h	57a 55a
1627	ON4YZ	CK53e	53a 51a
1658	DF7DJ	DL39a	57a 57a
1701	DJØVZ	DK43a	54a 55a
1703	PA3BRS	CM70c	55a 51a
82.02.11			
1515	PA2DWH/A	CM45c	54a 53a
1527	GM4COK	YP04b	53a 51a
1536	PAØFHG	CM64d	54a 53a
82.02.22			
1346	SM3KJB	JX54e	56a 54a SSB
1354	OH3TR	LV50g	55a 58a "
1406	SM3HUA	IW30e	58a 57a CW
1411	OH3YY	MU24b	56a 59a "
1420	DDØHR	FN21f	54a 51a SSB
1950	G4HBA	?	52aa52a CW
82.03.01			
2238	RA3YCR	RN52f	57a 58a
2240	OK8EAA	JJ13b	58a 57a
2243	OK1QI	GK70g	54a 59a
2246	OK2RGC	JJ01d	43a 59a
2250	RA3AGS	SP19j	54a 55a
2310	G3LTF	AL11d	55a 55a
2313	G4KLN	ZN23a	54a 53a
2318	G4IGO	YL38f	54a 53a
2321	G3UVR	YM55j	54a 53a
2324	PA2WIV	DM34a	55a 55a
2328	DJØVZ	DK43a	57a 59a
82.03.02			
1412	UO2ABN	NN18e	56a 59a
1453	OK1KKD	HK61e	54a 55a
1458	RA3YCR	RN52f	56a 59a
2038	LA5MK	FX43g	54a 54a
82.04.10			
1516	LA8UU	CT80j	56a 58a
1535	DL8BAB	EN76f	55a 55a
1540	DL8HAV	EN20e	56a 52a
1542	DL5BBL	EM52f	52a 52a
1546	DF9LF	FO61a	54a 55a
1600	OH3OB	LV50g	54a 56a
1603	OH2BGD	MU55f	57a 59a
1605	OH2AUM	MU56f	54a 55a
1645	G3BRA	YP20d	53a 56a
820803			
2143	LA1K	FX42c	54a 52a
82.09.05			
1257	LA1K	EV22e	55a 56a
1302	OH2BBH	MU63e	55a 59a
1306	SM3AKW	JW31h	57a 57a
1308	LA7KY	FT22h	54a 55a
1311	LA1TV	ET49b	57a 57a
82.09.06			
1139	PA3APH	CL03j	58a 55a
1142	PA3CEE	DN75a	55a 55a
1146	RR2RED	KS53a	56a 57a
1150	PA3ESK	DL04a	56a 55a
1153	DF7DC	DL30h	56a 55a
1155	DK2PH	EL03e	57a 57a
1214	PAØFHG	CM74e	54a 55a
1217	DL5AP	FM62e	55a 55a
1223	OK1KGS	HK63f	57a 59a
1225	DL9BAS/A	DN25c	57a 55a
1230	RA3AGS	SP19j	55a 56a
1657	OK2STK	JJ12d	42a 52a
1703	OK1KFA	HK79d	53a 55a
1707	OK1AFN/p	HK70g	55a 59a
1709	OK1MG	HK71a	55a 55a
1711	OK1MUK	HK79c	55a 57a
1713	OK1GA	HJ07a	55a 55a
1715	OK1VKA	HK76g	55a 57a
1720	Y21IF	HL12d	55a 59a
1722	Y31QM	GL83a	53a 55a
1725	OZ9EY	?	42a 52a
1729	UP2ECE	MP22b	55a 57a
1738	OK2TU	IJ13e	57a 58a
1743	G4ISM	AL56h	55a 52a
1748	PA3EPC	CM66b	53a 54a
1751	DK5ZO	EK14b	55a 52a

SM7GWU (HS75c) wkd via AURORA 144 MHZ

82.09.07

1133	OH1CO	LU43g	55a 57a
1204	UX2CAU	NO55a	56a 58a
1803	LA6ZW	FV64j	57a 57a
1806	LA1TV	ET29g	57a 57a
1810	SM3COL	IW06f	57a 59a
1813	OH3NF	NU23j	55a 55a
1814	SM3AST	IW36c	54a 56a
1827	OH1PS	LU46d	55a 57a
1839	PA2VST	CN24j	55a 52a
1853	OH1ZAA	KV38h	54a 55a

82.11.02

1801	OH5IY	NU03d	55a 55a
1810	DF7OG	FK31j	54a 53a
1830	SM3AZV	IX79c	55a 55a
1836	OH1AA	LU42f	56a 53a
1845	LA9EM	EU32g	55a 52a
1854	LA1K	FX42c	55a 55a
1907	SK3MF	IW06f	55a 55a

82.11.23

1625	OH7HJ/5	OV71j	53a 53a
1635	OH3OZ	MU24b	57a 59a
1637	OH1IR	KV78b	57a 58a

82.11.24

1542	UW3GU	TP31a	57a 59a
1547	OK1QI	BK70g	54a 59a
1551	OK2STK	JJ12d	56a 56a
1556	Y61ZF	HL12d	53a 55a
1601	OL7BDQ	JJ24j	58a 55a
1610	DF3XZ	FN21f	57a 53a
1622	RA3LBK	QP77d	55a 57a
1632	UR2RFX	MT45e	56a 57a
1636	OK1DJW	HK70h	43a 55a
1648	UA1WDX	OR12b	57a 59a
1710	HG5KF/1	JH25a	55a 55a
1717	OK2BME	JJ31b	55a 55a
1720	DL7MB	GM47c	56a 56a
1727	DK3GE	EN73d	54a 56a

82.11.29

2049	OH7UE	OW40h	54a 55a

82.12.07

1608	RR2RED	NS53a	54a 56a
1624	RA3YCR	RN52f	55a 56a
1800	OH1AH	LU52j	58a 59a
1802	OH2PH	MU61g	54a 57a
1804	OH3TR	LV50g	55a 59a
1806	RQ2GGV	LR74e	57a 59a
1809	OH2EJ	NU25f	56a 57a
1811	UB5FAZ	NL73a	53a 53a
1820	OH1 R	KV78b	57a 57a
1822	OH2ZL	MU66b	59a 59a
1826	OH2AR	MU55f	55a 57a
1829	DJ1KN	EN75g	54a 53a
1834	OH1EV	LU52c	55a 59a
1837	OH3 D	LV70b	55a 56a
1840	OH7 A	NW10g	55a 55a
1842	OH1 A	KV40f	54a 59a
1859	UC2CA	NN18d	56a 57a
1901	OH2EBO	MU55f	55a 59a
2111	OH6MX	LX24e	55a 59a
2114	OH5A	[illegible] 35e	55a 55a
2116	LA8LA	FK51c	55a 56a
2122	OH1MA	MU44j	56a 57a
2123	UR2QA	NS73a	54a 54a

82.12.08

1655	DL9GS	DL47g	54a 51a
1703	PAØNIE	JN64d	54a 55a
1801	OH3RW	MU24b	55a 57a

82.12.17

1445	GM3ZXE	YQ35g	53a 53a

82.12.21

1545	OH6ZAD	KW	32a 54a
1616	LA1BR	FU15h	57a 58a
1628	UC2ACA	ON13c	55a 56a
1722	RP2PED	MP61f	57a 55a

82.12.22

1506	OH3RX	MU09g	54a 55a
1528	DK9CK	EO59g	54a 51a

82.12.23

1615	UA3DHC	TQ71c	55a 44a

tnx fer fb report and especially
for the tiping.

OHØNC/OJØ (JU56c) wkd via 144 MHz Aurora over 500 km on CW:

820807

13:09	RA3AGS	SP19j	56A	57A	
11	OH5BM	OV47b	58A	59A	
21	OZ1EKI	EP49h	56A	57A	
25	SM2JAE	KZ58c	59A	59A	
41	UA3LAW	PO37e	58A	58A	
45	OH7LJ	NW09f	59A	59A	
54	OH7PS	OX67h	56A	59A	
14:01	SM6QP	GR21h	57A	59A	
06	OZ1FGP	EQ68a	59A	57A	
09	OZ4VV	EQ17a	57A	59A	
11	OZ8SL	GP31e	58A	57A	
14	DK1KO	FN12g	58A	57A	
15:26	UK3AAC	PP76f	57A	56A	
35	UA2FCH	KO50g	56A	53A	
39	UA3NAU	PQ09c	56A	55A	
42	UA3NBI	PQ09c	56A	56A	
46	SM6AOQ	GR41a	57A	57A	
49	UA3OG	PQ09c	56A	59A	
50	UR2MG	NS63a	57A	57A	
52	UR2RMC	NS63a	57A	57A	
16:15	LA9GX	FT33c	54A	55A	
18	LA9CM	FT72h	55A	55A	
20	LA8OW	EU31g	55A	56A	
24	LA5IH	CU47j	55A	54A	
27	UP2BJB	LP06d	55A	55A	

820809

21:11	OZ4VV	EQ17a	55A	55A		
29	SM6AFH	GQ25c	54A	55A		
50	OH7UK	OW39b	54A	59A		
22:15	SM2GGF	KZ02j	58A	57A		
26	LA8YB	FT13a	55A	55A		
* 43	UA1ZCL	RC08c	559	439	1239km	
23:26	SM3FSK/3	GY30b	57A	56A		

* UA1ZCL came thru with T9 sigs.

820810

15:50	OH7RJ	NW09f	58A	59A
16:02	SM2KTZ	KY26b	56A	55A
26	LA3EU	DW41a	55A	55A
31	OZ1RTE	GP30h	33A	53A
35	OZ1EYX	GQ73h	55A	56A
39	OH4OB	NW70g	56A	56A
43	OH7HJ	OW38f	43A	53A

820811

15:39	LA1K	FX42c	59A	57A
41	SM6AEK	GQ25b	57A	57A
46	SM6CMU	FR50b	57A	58A
48	OZ1DOQ	GP34h	56A	55A
51	UR2RDV	NS44e	34A	57A
53	SM7FJE	GQ56b	56A	57A
55	SM6EAN	FR30j	57A	57A
16:06	UP2AN	MO27b	55A	56A
10	OZ9QV	GP22f	55A	53A
13	SM7DLZ	IQ53h	58A	59A
16	UQ2GFZ	NR57a	57A	57A
19	OZ1AUX	FP30h	55A	57A
21	SL2CU/2JZ	36e	56A	55A
24	UQ2GHJ	NR56f	57A	58A
31	OH5BB	OV71c	43A	55A
16:36	DF8XO/OZ	ER59f	55A	55A
40	OZ1CLL	GP23c	57A	57A
45	DJ9YE	EN14A	56A	57A
47	DL5LH	FO51j	55A	55A
17:00	LA3EU	DW41a	55A	55A
02	DK1KO	FN12g	56A	55A
04	GM3XOQ	ZT04j	54A	54A
20	DJ9BV	EN40c	33A	53A
24	OZ1FTU	GP23h	33A	52A
25	DK6AS	FM44d	43A	53A
27	DK3UZ	EN20c	57A	56A
29	OZ5GY	GP22c	54A	54A
36	OZ1FDJ	GP22b	33A	52A
42	SM7WT	GP27c	56A	56A
44	DKØIK	EN40c	55A	53A

820812

14:25	UP2BJB	LP06d	56A	57A
27	OZ10F	EQ78f	57A	57A
29	SK70C	GP27c	56A	57A
31	LA6CU	CU47j	57A	57A
43	SM6AUJ	GQ25b	43A	55A
46	OH5LK	NU37g	56A	59A
55	SM2ILF	KY26e	59A	59A
58	OH6WD	MX80h	56A	59A
59	SM2AAE	KY16h	44A	59A
15:02	OZ3WU	EP66e	55A	55A
09	OZ1FDH	GP22c	56A	53A
10	LA3UL	FT78h	33A	53A
35	SM7LAD	GP48a	55A	55A
37	OH5NM	OV64j	44A	55A
39	LA7KY	FT22h	44A	55A
16:01	OH7EU	NX26g	44A	55A
10	LA9VX	FX02h	57A	51A

OHØNC/OJØ (JU56c) contd.:

In my opinion RSA is wrong. What does this A mean? RST stands for Readability-Strength-Tone. We give an A as Tone-report on Aurora-sigs.
Shame on ops. asking for more than one qso, thus stopping others to get a new country.

tnx for infoand especially for the tiping, Sam
73, Frank

OE1APS (II63g) wkd via Aurora on 144 MHz in SSB:

820906	1437	SM7KNK	HP??	57a	59a	1Ø°
	1446	PE1GHV	DM66h	59a	55a	35Ø°
	1452	ON4AMY	CL76g	55a	59a	35Ø°
	1500	PE1FMU	CM15?	55a	59a	35Ø°
	1505	DD1DA	DL59c	55a	56a	35Ø°
	1523	G4NQC	ZL52c	59a	59a	33Ø°
	1600	G8WPD	ZN51e	59a	59a	33Ø°
	1605	G8KBQ	XL77h	55a	59a	33Ø°
	1626	G8XVJ	YN48f	55a	55a	33Ø°
	1640	DL6FAW/P	EO??	55a	55a	Ø°
820926	1838	OZ1DPR	EP54e	56a	56a	Ø°
821124	1630	SM6JMZ	GQ24a	55a	57a	Ø°
	1640	G8JHL	YN35e	55a	55a	34Ø°
	1645	OZ1GOK	EP76e	53a	54a	35Ø°
	1656	GI8YDZ	WP67b	55a	55a	34Ø°
	1701	SM7MRJ	GP27h	54a	53a	Ø°
	1720	G8XVJ	YN48f	52a	53a	34Ø°
	1812	G6LWI	YN16e	55a	59a	34Ø°
	1815	G4KEX	?	53a	55a	34Ø°
	1826	GI8??	WO57b	32a	hrd	34Ø°

tnx fer info, dr Alfred

UR2GZ(MSØ4b) wkd via AURORA in CW :

820926

1403	UA4UK	VO76e	55a	57a	1417	UA3IDQ	QQ64d	57a	57a
21	UA3PBY	SNØ8a	57a	57a	31	UB5PAZ	ML73a	55a	55a
37	UA3IAR	SQ11f	58a	57a	1500	UA3LAW	PO26g	58a	59a
1512	Y3BZA	HNØ1c	57a	44a	2045	RA1ALN	PT12h	57a	58a
2058	DK3FW	EM69b	55a	55a	2250	SM2JAE	KZ58c	57a	55a

tnx fer info, dr om !

DL 2 OM (DK 49 j) wkd via Aurora on 144 MHz in CW:

830204

1905	SM7EBI	HR12f	59A	59A	35O	2017	OZ 1 FGP	EQ68a	55A	56A	O
1908	SM5CAK	HS36h	55A	59A	35O	2019	SM7LNJ	GP36h	55A	56A	O
1918	SM7JUQ	GP36h	59A	55A	35O	2024	OZ1DOQ	GP34h	55A	57A	1O
2001	GM3WTA	YR68b	57A	57A	35O	2038	EI6AS	WN59g	52A	56A	1O
2010	OZ9QV	GP22f	55A	55A	O	2022	SM5CBN	HS56c	55A	55A	34O

HRD: RQ2GAG, SM1BSA, GM4CXM, GM4ILS, GM3ZXE, GM4JEJ, GM4IPK, PAØRDY, PAØKDV, OZ1FHJ(GP), SM6AEK, OZ1OF, OZ1FDJ, G3IMV, SM4GVF, SM5DFF(IS)

830205

1418	G 4ITR	YN16j	53A	54A	335	1528	OZ1EYX	GQ73h	53A	57A	32O
1420	G.....	YO18j	31A	52A	335	1722	SM5MIX	HS66g	55A	55A	335
1425	GI4...	WOØ4a	31A	51A	335	1738	SM4KVM	HT56d	51A	55A	345
1525	SM6EUZ	GS74j	53A	56A	325	1749	SM4FXR	HT57g	51A	57A	345

HRD: SM1BSA, SM5MIX(HS), GM4IPK, GM4CXP, SM5EVK(IS), GM3WTA, PA2VST, SM4GVF, SM5IDM(HT), SM4IVE(HT), SM5DSZ

DJ4KAB (JO56c) wkd via Aurora on 144 MHz in SSB:

821122

Detected vy strong sun noise between 11.30 and 15.30 UT

821123

hrd several F.Ø's between 16.5o and 17.15 UT mostly 52a

23.15 SM5MIX HS 56a hrd 15°

821124

13.55	DLØIA	IO	52a	b		5°
14.2o	GI8YDZ	WP67b	59a	58a		2O°
15.18	OZ6ZR	FN61c	54a	54a		2O°
16.oo	PAØXLA	DL44h	59a	52a		O°
.15	GI6DOQ	XO32g	58a	56a		3O°
.35	G8XVJ	YN48f	57a	55a		2o°
17.o1	G6OLV	FM69e	57a	55a		2O°
.3o	OZ1IWZ	FN62h	54a	54a		2O°
.33	GM8OBG	IO76c	57a	54a		2O°
18.o7	G6OBK	ZO4Od	55a	56a		25°
.18	G6OZJ	ZP73d	54a	53a		25°
.35	GM4OXM	55a	55a	XP09g		25°

2o.oo last sigs
23.oo-23.15 weak siggs in CW

tnx fer info

56

DF8AE (EM73e) wkd via Aurora

22.9.82

1528	SM6AEK	51a	51a	GQ25b
1640	LA6VBA	51a	41a	ES26g

26.9.82

1325	OZ3GW	52a	53a	FQ21a
1335	GM4JEJ	51a	55a	YQ38g
1339	SM4HJ	52a	52a	HT31c
1341	SM6KIW	55a	55a	FR3Ø0c
1344	LA6ZW	52a	55a	ET29g
1354	SM6AOQ	59a	59a	GR41a
1355	SM6DLG	52a	52a	HS33j
1403	SM6LPG	55a	55a	GS7Øa
1424	LA9TR	51a	52a	FT44g
1430	G4HOZ	52a	52a	YP77d
1433	G6GN	55a	56a	YL48h
1438	G4GUF	52a	53a	AM49b
1442	G3VXM	51a	52a	ZK15d
1447	PA3BLU	52a	52a	CLØ3e
1450	G4HLX	52a	53a	ZL23e
1458	OE3PUW	52a	53a	II73j
1505	F6CEL	52a	52a	CJ41g
1520	HB9QQ	55a	55a	EH45e
1530	OZ1EYE	55a	55a	FQ41h
1532	LA3UL	51a	53a	FT78h
1538	SM4AMP	52a	52a	HT57f
1551	F6EBN	52a	52a	BI12j
1556	F6BSJ	55a	55a	CG24f
1609	G4EUE	52a	53a	ZM33g
1816	LA8SJ	55a	57a	FTØ5j
1820	LAØCX	52a	52a	FT78h
1825	OZ3GW	52a	57a	FQ21a
1833	SM5MIX	52a	57a	HS66g
1900	G3BW	52a	44a	YO33g
2058	SM6CEN	52a	54a	FR4Øb

1.10.82

2232	LA1TV	51a	53a	ET29g
2235	SM5DFF	52a	54a	IS21c
2240	GM4AIO	54a	54a	YR47h
2245	SM6EAN	55a	56a	FR3Øb

1.11.82

1815	SM5CFS	52a	52a	JT24j

2.11.82

1650	LA7KK	52a	55a	FU62j
1655	SMØDCX	55a	57a	IT7Øb

tnx fer info, Rüdiger

DL 2 OM (DK 48 d) wkd via Aurora

on 144 MHz in cw:

820713

1759	DK	3	IK	DJ	66	h	53A	57A	340
1806	G	4	IYA	AL	43	f	55A	56A	030
09	DJ	9	CZ	DL	71	a	56A	59A	"
26	G	4	HVC	ZN	77	e	31A	53A	"
30	G	3	JXN	ZL	39	e	53A	57A	"
34	DF	5	HC	FN	31	c	52A	55A	"
52	GI	4	LKA	XU	21	j	55A	55A	"
44	F	6	EOQ	YI	13	c	53A	59A	025
55	DH	3	AAB	FM	31	h	41A	51A	"
1910	F	6	BSJ	CG	23	f	53A	55A	"

Hrd: GM 3 WCS, PA 2 VST, PA ØBLD, DK 3 FW, PA Ø HIP, DK 1 PZ, G 4 IGO G 3 NSM, G 4 IJE, F 6 DWG, ON 7 EH, G 4 DEZ, G 4 ASR, G 3 IMV, G 4 FUF, GW 3 NYY, DJ 7 YP, PA Ø UOM, GM 4 MOX (?), SM 7 AEU, DK 4 TG, ON 4 YZ, PA 3 CGR, DL 5 QG, DK 7 LZ, DL 8 GP, DF 7 DC, G 3 BW, G 4 MEJ, PA 3 ANV, G 6 GN, G 3 WZT, DF 7 KF, PA Ø CIS, DK 2 PR.

tnx fer info

UA1ZCL(RCØ8c) wkd via AURORA :

820926
15.55 to
16.oo SK4MPI HU 52a hrd 265° AZ 0° EL

821030	1353	UA9XAN	AX39e	52a	58a	AZ 60°	EL 8°
	1400	UA9XEA	AX39c	52a	59a	AZ 55°	EL 0°

tnx fer info, dr om

UA3TCF(WQ14a) wkd via AURORAin CW :

820921	1240	UK4NBY	YT	57a	hrd	1o°	beacon !
	1258	UA3MBJ	SS78e	57a	59a	?	
	2234	SK2KW	KY65c	57a	53a	340°	
	2317	UP2AN	MO27b	57a	56a	330°	
	2328	SMØHAX	JT51c	55a	55a	330°	
821007	1452	UA9GL	CRØ2h	56a	59a	0°	
	1509	UA9FAI	CS8Øa	57a	59a	0°	
	1512	UW4NI	YS	58a	58a	350°	
	1522	UA9FIG	CT25f	59a	59a	0°	
	1522	UK4NBY	YT	54a	hrd	0°	beacon !
	1534	UA3DHC	TQ71c	57a	57a	320°	
	1618	OH3RW	MU24b	57a	58a	340°	
	1628	RA1ASK	PTØ3a	56a	57a	330°	

tnx fer info, dr om

OY9JD(WVØ7h) wkd via AURORA inCW :

820802	0015	SM4GVF	HT76a	53a	55a	45°	
820807	1202	LA3EU	DW41a	41a	43a	45°	
	23	G6WR	YO34g	43a	42a	60°	
	32	GM4JLY	YR81a	43a	42a	70°	
	35	LA5IH	CU47j	43a	52a	50°	
820809	1745	GM3ZXE	YQ35g	53a	41a	45°	
820921	2358	OZ1OF	EQ78g	55a	55a	45°	
820922	0002	SM6AEK	GQ25b	55a	55a	45°	
	40	GM4COK	YPØ4b	55a	55a	45°	
	55	SM5AQJ	JT61c	54a	55a	45°	
821014	0000-0200	SK4MPI		58a	hrd	?	Good AURORA?, but nobody Qrv .
	"	GB3LER		55a	hrd	?	
	0630	SK4MPI		53a	hrd	?	
		GB3LER		52a	hrd	?	
	1730	SK4MPI		55a	hrd	?	
	1905	GM4ILS	YR24e	53a	52a	30°	
821018	1530	LA9BM	EU32g	55a	52a	45°	
	36	OZ2ZB	EQ36a	53a	52a	45°	
	45	OZ9PW	EQ27j	54a	53a	45°	
	1620	GI8YDZ	WP67b	52a	51a	40°	SSB !

OY9JD(WVØ7h) contd.:

821030	1534	OZ4VV	EQ17a	53a	52a	60°	
	1610	GM4JLY	YR81a	31a	51a	60°	
	1720	SK4MPI		557	hrd	80°	nobody QRV
821101	1740	OZ2ZB	EQ36a	54a	52a	60°	
	45	LA6CU	CU43j	52a	51a	60°	
	50	SM4PG	HT51c	53a	55a	50°	
821102	1930	GI8YDZ	WP67b	55a	56a	50°	SSB
	1930-2020	SK4MPI		519	HRD	80°	
821216	1037	GM4IPK	YPØ5h	56a	57a	75°	!!!
821217	1240	GM4IPK	YPØ5h	55a	55a	60°	!!!
	"	SK4MPI		56a	HRD	60°	
	"	GB3LER		58a	HRD	60°	
	"	LA2VHF		52a	HRD	60°	
	"	LA1VHF		51a	HRD	60°	
821222	0048	SMØDCX	IT6Øb	56a	57a	45°	
	57	LA8SJ	FTØ5j	55a	57a	45°	
	0130	SM5CHK	HS36j	54a	53a	45°	
	45	G4KUX	ZO21e	55a	54a	50°	
	0215	GM4CXM	XPØ9g	53a	55a	50°	
	37	OZ1FGP	EP68a	55a	56a	55°	
	0330	GM4IPK	YPØ5h	59a	59+a	60°	SSB

tnx fer info, dr JON

UR2GZ(MSØ4b) wkd via AURORA in CW :

820713									
2025	OH1AU/8	LY69b	57a	56a	2035	UA3LBO	QO21h	57a	55a
2038	RC2WBR	NP75g	56a	59a	57	SM3AZV	IX79c	57a	57a
2143	SM2IZO	KY24b	55a	53a	2351	G3NSM	ZL14c	55a	53a
2356	G4FUF	AL33j	55a	55a	0003	OK2BFH	JJ13b	57a	57a
820807									
1248	OH5BM	OV37b	57a	59a	1251	UK3AAA	PMØ7a	59a	59a
58	UC2ABN	MN29a	59a	59a	1301	UA3QER	RM27a	59a	59a
1305	RA3AGS	SP19j	59a	59a	1307	UK3AAC	PP76f	59a	59a
13	UA3YBL	QN28e	59a	59a	21	UK3MAE	TM75a	59a	59a
23	RA3YCR	RM62g	59a	59a	26	RA3ADK	SOØ3j	57a	57a
33	UK3RAA	UM35a	55a	56a	1420	UA3LCO	QN25h	55a	55a
1435	UA1ASA	OR57j	59a	59a	57	UK3XAM	RO2Øc	57a	56a
1505	UK5SAU	MK59h	55a	55a	1512	UA3XBS	RO2Øc	59a	57a
17	UC2ACA	ON13c	59a	55a	42	UK2CBB	NO55f	55a	55a
820906									
1353	UA3UBK	UR6Ød	55a	55a	1357	UA3AJZ	SP18c	59a	59a
1401	UW3AZ	SQ26a	59a	59a	1402	SM6EAN	FR3Øj	59a	57a
29	Y22SA	GNØ8b	57a	55a	42	DKØTU	GM37e	59a	59a

tnx fer info, dr om !

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

OHØNC/OJØ (JU56c) wkd on 432 MHz Aurora over 500 km on CW:

820807

14:24	SM6CKU	GR41c	57A	57A		14:34	UK3AAC	57A	58A
29	SM6FHZ	GQ02c	57A	55A		15:03	DF5LQ	57A	53A

tnx fer info

OK1BMW/p /HK52b/ wkd via Aurora on 432 MHz in CW:

820925

1422	OZ7IS	GP22j	59a	52a	25°
1432	DF5LQ	EO50j	59a	41a	35°

1414 hrd OZ9FW, 1403 tried PAØWNB, 1556 UA3LAW -bothways NIL
Sorry for the little activity on 432 MHzin such big opening.

tnx fer info, Karel

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432 MHZ AURORA PAØWWM CM63G

06-09-82	1538	DJ6MB	DK16C	56A	57A	45 GRD
06-09-82	1620	DF1OH	EM57J	52A	52A	45 GRD
26-09-82	1339	DF5LQ	EO50J	51A	55A	50 GRD
26-09-82	1354	OZ1EKI	EP49H	51A	51A	30 GRD
26-09-82	1359	G3WOH	YN47F	53A	53A	30 GRD
26-09-82	1402	OZ9FW	GP31B	51A	55A	40 GRD
26-09-82	1409	DL7OY	FJ61E	55A	57A	60 GRD
26-09-82	1413	G3LTF	AL11D	56A	55A	30 GRD
26-09-82	1421	G3WDG	ZM65D	53A	53A	30 GRD
26-09-82	1434	G4CBW	YN50D	55A	57A	20 GRD
26-09-82	1533	DL7ZL	GM47C	55A	55A	50 GRD
26-09-82	1554	DF1OH	EM57J	53A	53A	50 GRD
26-09-82	1600	DL7APV	GM47C	55A	55A	50 GRD

tnx fer info

F6ETI(YH24c) wkd via AURORA in CW :

820926						
1439	G4CBW	YN	52a	55a	35°	641 km
41	G3WOH	YN	53a	53a	35°	636 km
1512	G3LTF	AL	53a	53a	40°	516 km
1607	EI6AS	WN	52a	33a	25°	661 km

tnx fer info

OY9JD(WVØ7h)
I would like to know if it is possible to work AURORA from OY on 70cm.
If there is any LA or GM QRV, give a call when you know there is AURORA.
I am QRV on 432,050 in CW.

RIG : FT 780 R 10 W
21 ele TONNA.

OP : Jon Dam
Sandagota 1
Fr 3800 Argir
Faroe Islands
Tel.: 13365

tnx fer info and gd dx, dr JON.

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432 MHz AURORA report de OZ7IS in GP22j

821013					
2210	SM4DHN	GU78j	56a	59a	40°
821123					
1814	DF6NA	EJ20d	54a	58a	45°
1820	DF1OH	EM57j	54a	55a	45°
1822	DF6LT	FO51c	52a	55a	45°
821207					
1818	SMØCPA	IT60c	57a	58a	30°
2310	SM5QA	IT50f	52a	59a	35°

tnx fer info

DK 5 AI (FL33b) wkd via Aurora on 432 MHz:

821124:

1632	**G3LQR**	**AM67b**	**56a**	**52a**	**QTF**	**Az.360/**	**El.18 Deg.**
1635	**PAØWWM**	**CM33g**	**52a**	**52a**	**"**	**360/**	**16**
1657	**DF1OH**	**EM57j**	**55a**	**52a**	**"**	**20/**	**14**
1710	**PAØFRE**	**CLØ3j**	**55a**	**55a**	**"**	**20/**	**14**
1717	**PAØEZ**	**CM66b**	**58a**	**54a**	**"**	**15/**	**14**
1722	**DK1PZ**	**EL59g**	**57a**	**55a**	**"**	**20/**	**14**
1736	**DF3EE**	**DL75b**	**56a**	**51a**	**"**	**15/**	**18**
1756	**PA3BYI**	**CM27g**	**54a**	**55a**	**"**	**05/**	**14**
1810	**G3WDG**	**ZM65d**	**58a**	**58a**	**"**	**05/**	**12**

Hrd: DF5LQ, DL7QY, OZ7IS

tnx fer info

UA3LBO(Q021h) wkd via AURORAinCW :

820714					
0140	DL7QY	FJ61e	52a	41a	325°
hrd	DF5LQ	EO5Øj	55a		
hrd	PAØOOS/m		54a		

tnx fer info

E S INFORMATIONS

by DK2ZF

U B5 J I N R E O 1 f w k d 1 9 8 2 :

11.o7.82:

1oo9	YU1EU	KE
1o29	DF2YEA/A	EO
1o59	OZ4MM	FP
111o	OZ1EXZ	FP
1111	OZ1LO	FP
1112	OZ1OF	EQ
1113	OZ1LO	FP
1114	OZ6OL	FP
1115	OZ1CTC	EP
1116	OZ1FGP	EQ
1117	OZ1CTC	EP
1118	OZ5GN	EQ
1119	OZ3NH	EQ
112o	OZ1QZ	EP
1121	OZ5GN	EQ
1122	OZ8RW	FP
1123	OZ1FBB	
1124	OZ5GN	EQ
1125	DJ9EV	EJ
1125	OZ9QV	GP
1126	OH1LAA?	
1126	OZ1FAH	GP
1127	OZ5GN	EQ
1128	OZ1ASL	FO
1129	OZ2OE	EP
113o	OZ1BEF	EQ
1131	OH1HR?	
1132	OZ1BEF	EQ
1133	OZ1TG	FP
1134	OZ5GN	EQ
1135	OZ6OL	FP
1136	OZ1IZB	FP
1141	OZ1HOP	EQ
1142	OZ5GN	EQ
1143	OZ1HOP	EQ
1144	OZ5GN	EQ
1145	DL6ZAU	EK
1153	DB6PP	DK
1154	DD2KU	DK

"special than ks" to OZ5GN who called and wkd UB5JIN 7! times in one session, Vlad was unable to work the QRP-OZ stns

16.o7.82:

1635	SMØHAX	JT
1636	Y22HA	GO
1638	SMØLRN	JT
1638	Y22HA	GO
164o	SM5IME	JT
1641	SMØLRN	JT
1642	SM5IME	JT
1643	SMØFFS	JT
1644	SM5AQJ	JT
1645	Y22HA	GO
1646	SMØHAX	JT
1647	SM1HXM	JR
1648	SM5CFS	JT
1649	SMØLRN	JT
1651	SMØDCX	JT
1655	DMØDJW	IS
1656	SM4ANQ	HU
1658	SMØAGP	IT
1659	SMØFMT	IT
17oo	SMØEJY	IT
17o2	OZ1CCI	HP
17o3	OZ1EYN	HO
17o4	SM3LBN	IU
17o9	OK1	HK
171o	DK6AS	FM
1711	Y23FG	FM
1712	Y24MX?	
1716	SMØ	hrd
1717	SM6KEG	GR
1723	SM7QEP	HR
1724	SM6KEG	GR
1725	SM7CAD	HR
1742	SM4ANQ	HU
175O	SM4FXR	HT
1753	SM5CRV	IT
1754	SM1LPU	JR
18o5	SM1LPU	JR
18o5	SM5LXA	HS
18o8	SM5MIX	HS
181o	SM5LXA	HS
1811	SM4IVE	HS
1812	SM7MEW	HR
1813	SM5HAK	
1814	SM4FWY	HT
1815	SM7CAD	HR

during the opening in June and July 1982 Wasil made 172 contacts with 12 countries and 48 QTH locators

- -

Y22ME Jürgen in HM53a wkd the following stations in 1982 :

31.o5.82:

UA6YAF TE

o5.o6.82

1635-194o

EA4QV	YA
EA4CY	XY
EB4DF	YA
EA7AYD	YX
EA1TH	YC
EB4BK	YA
EA4QR	YA
EB4YD	YA
EA2EAG	ZB
EA4AAD	YA
EA7ABG	YA
F6FHP	AE
F1AXP/p	ZC
F9SD	ZD
F1FLX	ZD
F3TE/p	ZD
F6HGB	ZD

o8.o6.83

1445-175o

UB5GAN	QG
UY5HF	QG
UB5GFS	RG
UK6ACN	TE
UA6ACG	TE
UA6YAF	TE
F6FOE	YI
F6FOE	YI
UB5ICR	SH
UA6ALT	UF

o9.o6.:

UB5GHN

o7.o7.82: 164o-181o

UB5JIW	RF	UA6ACG	TE
UK6YAF	TE	UB5GBY	QG
UB5QDM	RH	UB5BZ	QG

U B 5 J I N R E O 1 f w k d 1 9 8 2 :

08.06.82 :

1810	IW5AWM	FC	59	59
1812	IØSNY	GD	59	59
1813	I6WJB	HC	59	hrd
1817	IØXPS	GB	55	55
1818	YU2JL	HD	59	59
1820	YU2CBM	ID	55	55
1821	YU2CTD	HF	59	59
1821	I6DQE	GD	59	59
1822	I5UWT	FD	55	55
1823	YU2SSS	IF	55	55
1824	FC6ABP	EC	59	59
1825	I6DQE	GD	59	59
1826	IW5AWM	FC	59	59
1827	I6CTG	GD	59	59
1828	IW5AWM	FC	59	59

09.06.82:

0906	I4ERN	GE	59	59
0907	I4PAI	GE	59	59
0908	I4MJQ	GE	59	59
0911	I4CIL	GE	59	59
0913	I4XCC	GD	59	59
0915	I4CIL	GE	59	59
0917	I4LEI	GE	59	59
0918	IW4AIG	GE	59	59
0923	IT9MRJ	HY	59	59
0929	9H1FL	HV	59	59
0937	IT9AJZ	GY	59	59
0940	IT9GSF	GY	59	59
0947	IT9GSF	GY	59	59
0948	9H1FL	HV	59	59
0953	9H1CD	HV	59	59
0958	9H1CD	HV	59	59
1001	IT9MRJ	HY	59	59
1005	IT9GSF	GY	59	59
1010	IOLYL	GB	52	52
1022	IW9AJZ	GY	59	59
1025	IT9GSF	GY	59	59
1036	IWØAIJ	GY	59	59
1615	Y22ME	HM	59	hrd!
1710	9H1BT	HV	59	59
1721	IT9ZBY	GY	59	59
1724	GY IT9GSF	59	59	
1727	IT9ZGY	GY	59	59

12.06.82:

1442	IW1AJJ	DF	59	59
1443	IW2BXY	FF	59	59
1444	I1NU	DF	59	59
1444	I3YXQ	FF	59	59
1445	I2MCD	FF	59	59
1445	IW3ESQ	FF	59	59

07.07.82:

1537	SM5BCN	HS	55	55
1539	SM5CBN	HS	55	55
1551	OZ7IG?		55	55
1756	OZ4MM	FP	59	59
1757	OZ1BVW	EP	59	59
1758	OZ1EKI	EP	59	59
1803	DL3LAL	EN	59	59
1806	OZ3WU	EP	59	59
1826	DF5LQ	EO	59	59
1840	DC9DX	FN	59	59
1841	DDØHR	FN	55	55
1842	DD1XF	FN	59	59
1843	DDØHR	FN	59	59
1844	PAØKDV	DN	59	59
1845	DK6AS	FM	59	59
1846	DJ8MT	FM	59	59
1847	DK1KO	FN	59	59
1850	DB8LD	EN	55	55
1851	DHØHAG	FN	59	59
1852	DDØHR	FN	59	59
1853	DF2YEA	EO	59	59
1854	DK9CK	EO	59	59
1855	DK1KR	FN	59	51
1856	DB6LE	EO	59	59
1857	PA3AJG	DM	59	59
1858	PA3AOE	DM	59	59
1859	DB7LD	EN	59	59
1900	DL3LAL	EN	59	59
1901	DB7LD	EN	59	59
1902	DL8HAV	EN	59	59
1903	DB8HS	FN	59	59
1904	DL9BAS/A	DN	59	59
1905	DK2PR	EN	59	59
1905	DC9BI	DN	59	59
1905	DK2ZF	DN	59	59
1906	DD3HF	FN	59	59
1906	DC9DX	FN	59	59
1907	DL7ZL	GM	59	59
1907	Y22ME	HM	59	59
1908	DF4XV		59	59

I4XCC in GD wkd :

8.June 82:

1655	UW6MA	599	599	TH69c
1656	UK6LDZ	599	599	TH65c
1702	RB5IHF	59	59	SH79a
1703	RB5IOB	59	59	SH79b
1752	EA1ED	55	57	VD59h
1759	EA1CR	59	59	XD32d
1807	EA1TA	59	59	VD58b
1815	YO4YT	599	599	OE64g
1822	YO4AUL	599	599	OE64g

30.July 1182:

1207	SM6AEK	59	59	GQ25b
1209	OZ1DKI	59	58	EP54e
1210	LA9DI	59	59	FT62g
1211	SM7DTT	59	59	GP46h
1212	SM7BAE	59	58	GP26d
1213	SM4KWS	59	59	?
1214	OZ1DOQ	59	59	GP34h
1215	SM6AFH	59	59	GQ25c
1215	OZ7HAM	59	59	GP23a
1215	SM6BOC	59	59	GQ25f
1216	OZ1CJF	59	59	GP24f
1216	SM6LIF	59	59	GRØ8j
1216	SM6FZD	59	58	FR3Øa
1217	OZ2VM	57	59	GP2Øf

DF1CF FH23j

5.6.82

1633	EA1CR	59	59	XD32d
1635	EA1KC	59	59	XD32d

8.6.82

1716	EA1ED	59	59	VD59h
1747	EB1MS	59	59	XC01b
1812	EA4QR	59	59	YA44h

18.6.82

1633	EB7NK	55	55	YW28g

26.6.82

0934	EA4QV	55	55	YA42f
0935	EB4DF	55	58	YA42f
0940	EA4AAW	59	hrd	WZ49g

7.7.82

1849	RA3YCR	59	59	RN52f
1853	UA3PBY	59	hrd	SN08a

16.7.82

1627	UB5MCM	599	599	TI14d
1634	UA6LG	599	599	TH
1636	UB5IEP	599	599	TI51c
1640	UK5MDY	599	599	TI23a
1658	UK5ICP	599	599	SH10j
1659	UB5IBX	559	579	TH04b
1728	UA3EW	599	hrd	SM
1831	RA3SFS	599	hrd	TO
1832	RA3YCR	599	hrd	RN52f

15.8.82

1354	EA4AW	58	59	YA42h
1355	EA7AG	59	59	YW18b
1358	EA7CJY	59	59	YW18b
1359	EB7NK	59	59	YW28g

June 9	0910	UB5JIN	59	59	REØ1f
July 11	1039	UA3PBT	599	599	SO69a
	1133	UA3DHC	599	599	TQ71c
July 16	1635	UA3QIN	599	599	TL27c
	1637	UA3QER	599	599	TL36b
	1640	UK5ABN	59	59	RKØ4c
	1703	RB5LIO	559	579	SK61g
July 21	1623	ANØ7KU	57	57	WX5Ød

CT1WW WB63b wkd:

08.06.82:

1715 OK1OA HK 59
1716 OK1MG HK71a 59
1717 DJ3TF FJ50g 59
1720 OK1GA HJ07 59
1721 OK1MBS HK48 59
1722 OK1KKH HJ06 59
1722 DG8NAQ FJ56h 59
1723 DJ9EV EJ71g 59
1723 DG8NX FJ46f 57
1723 DL9RBK GJ21b 59
1723 OK1KRA HK72a 55
1728 OK1MWD HK47c 59
1726 DG9RAF GJ21b 59
1727 OK1MDK HJ07j 58
1728 DL2NBO FK70b 55
1740 YU2CBM 56
1741 YU3TLA HG
1742 YU3HCX HG30b 58
1745 YU3ULM GF 59
1746 IV3AVZ 58
1800 YU3EW 59
1812 OK1AFN IK51b 59
1813 OK1QI 59
1806?OK1VK HJ30g 59
1815 G4DHF ZM19f 59
1816 G8VPC ZM 59
1817 G8NWM ZM19g 59
1820 LA1EKO BQ37g 59
1823 G3IMV ZL07c 58
1824 I4ERN GE 59
1825 I4MKN GE 59
1826 I5HBQ 59
1828 IW4ABF GE 59
1830 DL4RBK FJ50g 59
1832 OK1AIY/p HK28d 59
1834 DF3RL FJ50h 59
1836 OK1MBS 57
1838 G4CLA 59
1840 G3 HH NC

18.06.82:

1557 IC8EGJ HA32g 59
1617 IØAKP GB31 59
1618 IWØAKA GB13a 57
1619 IØEIO GB 59
1620 IW1ARB EE02f 59
1621 IWØAIJ GB11d 59
1625 I8WY HA02f 57
1627 I7ORF IA47h 59
1633 IØHUB/1 55
1713 I8QAF 53
1717 IW9AZV 53

18.07.82:

1343 I4BXN FE60 59

21.07.82:

1652 IWØAKA GB13a 59

04.08.82:

1833 IWØBET/O GB23j 55
1855 YU2RQQ HF 57

15.08.82:

1350 IW4ARD GE63e 59
1353 IW4ANB GE63 59

12.08.82:

1310 I6CXD GD47f 59
1344 I6JVY GD65a 59
1345 PA/KDE CN 59
1346 PAØKDV CN 58
1347 PA3GBM 57

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DF9PY in DK65g wkd :

05.06.82:

1623 IT9IKG GY73e 59 59 1425km
1626 IT9VHS GY74j 59 59 1426km
1627 IT9JTG GY73e 59 591425km
1630 9H1BT HV12b 59 59 1705km
1633 9H1GK HV13h 59 59 1707km
1635 IT9GSF GY77c 59 59 1444km
1636 IT9EWG/9 GY67c 59 59 1431km

08.06.82:

1723 EA7PZ XX06c 59 59 1653km
1812 EA4AUD YA75c 59 59 1370km

DL5MAE in FI60f wkd :

16.07.82:

1634 RB5EHT RI33j 59 59
1636 RB5EGQ RI56a 59 59
1650 UA3PBT SO69a 559 559
1700 UA3PBY SN08a 579 599
1705 UB5ICR SH39h 599 599
1712 UA6LGH TH65a 579 579
1726 UA3RFS UM08j 599 599

F1FHI in ZH63d wkd :

15.08.82:

1004 YU4BMN JE
1009 YU1ICO JE
1012 YU7OQC KF
1013 YU4VPM JF
1014 YU1EV KE
1015 LZ2KBB MD
1016 YU2RJP IF
1017 YU7BJ KF
1017 YU1POA KE
1018 YU7NTU KF
1019 YU2DG JF
1019 YU3TRF HF
1019 YU1NAJ KF
1019 YU7MAU JF
1020 YU3TSB HF
1021 YU4WFM JE
1022 YU1NHG/1 KF
1023 YU3ABL GF
1024 YU3ULM GF
1025 YU1PQM KE
1027 YU1BFM KE
1028 YU2cCB IF
1029 YU7EW KF

F6ETI YH24c

05.06.82:

1620 YU2RKY ID33f 55 59
1623 YU2SHA ID33f 51 59
1623 YU2CBM ID33f 59 59
1626 YU6SCG JC43j 59 59
1627 YU6ZAH JC47j 59 59
1629 YU5CYZ/5 KB28g 59 59
1646 IØAMU GB03f 59 59
1649 IØCUT/p GC65g 59 59
1651 I7ECT HB27c 53 55
1653 IØJU GB03a 52 59
1655 IØNCP GB13j 58 59
/167 IØJZF GD72b 59 59
all contacts made from
portable QTH in YI74b

08.06.82:

1750 ISØPDQ EZ66a 55 59
1754 ISØRH EZ69 52 59
1755 9H1FW HV13h 53 58
1758 9H1BT HV12b 55 59
1759 9H1GK HV13h 55 59
1806 ISØPUD EZ66a 56 59

04.08.82:

1859 IH9ONW FW20b 51 51

15.08.82:

1005 YU1ICD JE37f 52 56
1008 YU4BMN JE37j 55 59
1015 YU4VPM JF72c 55 59
1015 YU4EDO JF72c 53 59
1015 YU1POA KE24j 53 59
1016 YU4WFM JE34j 55 59
1017 YU1EV KE32g 59 59
1017 YU2RJP IF11j 53 55
1019YU1PQM 53 59
1020 YU3TRF HF36c 52 55
1021 YU2CCB JF35c 53 55
1022 YU1BFM KE36b 53 54
1023 YU7NTU KF42d 55 59
1024 YU1AWW KE13j 53 57
1026 YU2DI JF34j 52 57
1027 YU7QED KF34f 52 59
1028 YU2DG JF34j 53 57
1029 YU7EW KF24f 54 59
1029 YU7QDX JF39g 55 59
1030 YU7PEY KF71j 55 59
1033 YU7MAU JF50j 51 59

1331 9H1CD HV03e 55 59
1335 9H1GB HV13a 539 539
1354 9H1I
1414 9H1BT HV12b 58 59
1429 I8ZJZ/9 GX03j 539 589
1435 IT9LOM GX25a 52 54
1435 IT9JLG GY73e 57 59
1437 IT9SGO GY73d 52 55

I6WJB HC42g wkd:

08.06.82:

1657 UK5EDT RI58c 599 599
1659 UK5EAY 559 hrd
1705 TI 539 hrd
1742 UA3QIN TL28c 529 hrd
1745 EA7ABA YA42e 59 59
1752 EB4BG YA54a 59 59
1814 UB5JIZ QF18j 59 59
1822 UB5GFS RG41c 59 59
hrd until 1840!!

18.06.82:

1613 EA7PZ XX06c 57 57
1617 EB4BK YA42f 58 59
1621 EB4YD YA44h 59 59
1627 EA4BPN YA42d 52 54

11.07.82:

1126 UA3MBJ SS78e 599 599

G8MFJ ZL42g wkd :

25.04.82:

15o9 SM3COI IWo6b 59 59
1513 SM2BHK 53 hrd
152o SM2CHI MZo1h 59 hrd

o5.06.82:

1624 I7ECT HB27c 58 59
1628 I7TBF IA46a 59 59
1631 IJ7ET IA4Oa 59 56
1634 I7CVC HB18b 59 59
1639 ISØDKU EZ57a 56 hrd
17o9 IT9IKC GY73e 59 59
1714 9H1 52 hrd
1738 IT9TDN HY68d 59 59
1758 I7REK 46 hrd
18o1 I5KKW FD6Oc 59 59
18o2 IW9ALA/9 GY66b 51 59
18o8 IT9VHF GY74j 59 57
182o FC9RY EC28g 59 59
1825 DD9XI/I 54 hrd
1828 IT9GVH GY 59 hrd
1834 IT9EWC/p GY67c 56 hrd
1848 IK8AIE 54 hrd
1856 IT9JLG GY74e 59 hrd
1859 IT9TKG GY73j 53 55
1912 IT9EWG/p GY67c 55 59
192o IW9ANE/p GY67f 55 hrd
1922 IT9EWG/p GY 59 hrd
193o FC9RY EC 59 nhrd
1944 F1FMS ED 59 hrd
195O end of opening

17.o7.82:

1531 SM2BUD JXo9d 54 hrd
1626 SM2BYC MZo1d 59 55

3O.o7.82:

1159 YU1POA 53 hrd
12o5 YO2BUG KG66f 57 57
12o9 HG8CE KG32c 55 hrd
1211 HG8CE KG32c 49 59
1213 HG8ET KG22j 56 hrd
1218 YU7AR KFo1c 59 59

OE1RKU II63f wkd

o5.06.82:

EA1ED VD59h 1994km
EA1TA VD58b 1999km

OE1RKU II63f wkd

16.o7.82:

UB5LHJ SJ19d 1568km
UB5LNR RJ2Of 1428km
RA4ACO WK78j 2126km
sowie weitere stationen
Berichte nicht brauchbar, da
Uhrzeiten fhlen!!!!!

F1FHI ZH63d

o5.06.82:

1619 YU6NGS JC
1655 I5KKW FD
17o5 YU6SCG JC
17o7 YU2CBM ID
17o9 YU6ZAH JC
1756 I8HAU IY
1813 IT9TDN HY
1827 YU7PXH JF
1832 YU3ULM GF
1835 YU7AR KF
1835 IV3HWT GF

o8.o6.82:

1735 9H1BT HV
174o 9H1CD HV
1746 9H1GK HV

o8.o7.82:

1829 IT9FCA HY

3o.o7.82:

OK3TEH 12o3 JI
12o5 OK2WEE JJ
12o7 UT5DL LI
12o8 UB5DBC LI
121o OK2SSO IJ
1212 OK3YCM/p JJ
1213 OK3RMW/p JJ
1215 OK2KNP/p IJ
1217 HG9KOB KI

15.o8.82:

G4IGO YL38f cont'ed

o5.o6.82:

1736 IW5AVM FC16e 59 59
1736 IWØWWJ GB33j 57 hrd
1737 IØUCM GBo3d 59 59
174o IWØBET/o GB66a 59 59
1742 I8HAU/8 IY31h 57 hrd
1744 IT9TDN HY68b 59 57
1751 IT9KTG 57 hrd
1753 I8HAU/8 IY31h 57 hrd
1754 IT9VHS GY74j 59 59
1755 IT9IKG GY73e 59 hrd
1754 IT9JLG GY73e 59 59
1758 IW9ANO/9 GY67f 59 hrd
1759 IT9EWG GY67c 59 59
18o2 IT9OWA/9 HX32g 55 hrd
18o3 IW9ALA/9 57 hrd
18o4 IT9EWG/9 GY67c 59 hrd
18o5 IT9VHS GY74j 58 hrd
18o6 I2CVC/7 HB18g 55 hrd
18o8 FC9RY FC28g 59 59
181o I7ECT HB27c 59 hrd
1812 IW5AFE 54 hrd
1814 IQ5ARI ED8Oj 59 59
1815 I7MFS EDo1f 59 59
1817 FC 41 hrd
1818 IW5BCU/9 GY78c 59 57
1821 IT9TDN HY68b 59 hrd
1823 FC9RY EC28b 59 59
1823 I1MFS EDo1f 59 hrd
1827 IT9TDN HY68b 59 hrd
183o IØWWJ GB22g 48 hrd
1831 IØAKA GB22b 52 hrd
1832 IWØBET GB66a 59 59
1835 IW5AVM FC16e 59 hrd
1837 FC5FGW EC48g 59 hrd
1843 IT9TDN HY68b 59 hrd
1849 IT9IKG GY73e 59 hrd
1851 IT9OHW/9 HX32g 54 hrd
1853 FC9RY EC28g 59 59
1854 IW9ANO/9 GY67f 59 hrd
1856 IQ5BCU/9 GY78c 59 hrd
1857 ISØCSX/p EA16g 59 hrd
1859 IT9VHS GY73e 59 hrd
19o2 IT9JLG GY73e 54 hrd
19o5 IW9ANO hrd wkd GM-stns!
19o8 ISØCSX/p EA16b 59 hrd
1911 IT9EWG/9 GY67c 55 hrd
1911 FC6CPW EBo4d 54 hrd
192o IW9ANO/9 GY67f 59 hrd
1921 IT9EWG/9 GY67c 59 hrd
1922 IT9VHS GY73e 59 hrd
1933 IT9IKG GY73e 54 hrd
1935 FC9RY EC28g 59 hrd
1936 EN48d 54 hrd
1939 IT9TDN HY68b 59 hrd
1942 I1MFS EDo1f 59 hrd
1943 IT9VHS GY73e 59 hrd
1944 IØYLI 54 hrd
1945 IWØAIJ GB 59 58

1948 end of opening
from 16o6-1948 = abt 228mins!!!

o8.o6.82:

between 17oo and 18oo hrd GW's
working into ISØ I OE YU HBØ
1714 YU2 hrd brief
1756 I GE 52 hrd
1758 IØJFE 53 hrd

2o12 CT4KQ WA21e 59 59 only 1min

23.o6.82:

17o4 144 MHz suddenly open
with Band I and II NOT open

17o5 EA7PZ XXo6c 57 hrd
17o6 EA6FJE 52 hrd
17o9 EA7PZ XXo6c 57 55
1711 band closed

o9.o7.82:

1933 hrd EA's in qsos for 2 mins
1937 to 41 hrd shoert bursts from
EA's and EA9MG in XVo4

17.o7.82:

1549 SM2BLD JXo9d 55 hrd
1551 SM2BLD JXo9d 56 56
1553 faded out

17.o7.82:

16o2 SM2CKR KX12g 59 59
1 min only
1622 SM2MJC KX12g 57 hrd
1625 SM2BYC MZo1h 51 hrd
1632 SM2BYC MZo1h 59 59
1633 SMØDLZ 42 hrd
1639 band closed
1641 SM2BYC MZo1h 52 hrd 1 min

THANKS FOR VERY USEFUL REPORTS
(dk2zf)

G3CHN YK61b:

25.05.82:

1514 SM3COL IW06f 59 59
1517 SM2GHI MZ01h 59 59
1526 SM2CKR KX12j 57 57

05.06.82:

1700 IJ7ET IA46h 59 59
1705 I8HAU/8 IY31h 59 hrd
1706 I2CVC/7 HB18b 59 hrd
1708 IT9TDN HY68b 59 hrd
1713 IW5AVM FC16e 59 hrd
1714 I5KKW FD60d 59 59
1715 IØSNY GD70b 59 59
1716 I2FHW EE17f 59 59
1741 I7TBF IA64c 59 59
1822 IW5BCC FD47d 59
1830 I6DRF GC57b 55 55
1921 I5YMR FD34f 59 59
1925 IØMNI GC51b 59 59
1925 IW5BCC FD47d 58 58
1933 IØUZF GC70f 58 58
1934 I7HCB 58 58
1935 I5CTE FD60d 59 59
1937 IW5ADF FD14b 59 59
1938 IØQWX 58 58
1939 I5ELQ FD68e 59 59
1940 IØUBZ GD72b 59 58
1945 IØRSC GD72b 59 59
1946 I7ECT HB27c 59 59
1947 I4PAI 59 59

08.06.82:

1621 9H1BT HV12b 54 hrd

23.06.82:

1710 EA7PZ XX06c 59 58
1740 EA7BVD XX07d 59 59

28.06.82:

2030 SM5FRI 599 hrd 5secs

09.07.82:

1945 EA9NL 56 10secs hrd

30.07.82:

1216 HGØHO KH55a 59 59

Roger's comment :
Not a good year HI !

DK2PR EN76g wkd :

07.07.82:

1554 UB5GSB QG09d 59 59
1600 UB5EDS RI46g 599 599
1607 UW6MA TH69c 599 599 2274km
1609 UB5ICR SH39h 599 599 2108km
1609 UY5HF QG24f 599 599
1715 UK5IEC 599 599
1756 UA6YAF TE30h 599 599 2425km
1759 UB5QDM RH44h 599 599
1801 UB5GBY QG24h 59 59
1802 UB5GFS RG51c 59 59
1840 UB5GBZ QG24f 59 59
1844 UB5ZI QG 599 599
1902 RB5GBP RG73j 59 59
1904 UB5JIN RE01f 59 59
1908 UB5GHB QG09d 59 59

16.07.82:

1812 UB5MCM TI14d 599 599 2114km

15.08.82:

1146 EA7CSA XX35e 59 59
1149 EA4QR YA44h 59 59
1208 EA4APW YY03a 59 59
1350 EA1BLA VD39e 52 52

Very interesting seems to be the opening of Aug 15th, just at the end of the Perseids shower !

- - - - - - - - - - - - - - - - -

G4IGO YL38f :

05.06.82:

opening started at 1612 UTC
1602 I8HAU/8 IY31h 59 hrd
1603 IT9TDN HY68b 58 59
1606 I8HAU/8 IY31h 59 hrd
1614 IT9TDN HY68b 56 hrd
1621 I7TBF IA64a 59 hrd
1623 I7ECT HB27c 59 59
1625 IJ7ET IA46a 59 59
1625 I7TBF IA64a 59 hrd
1630 I2CVC/7 HB18b 59 59
1636 I7LIT IA30e 59 hrd
1641 IØDKU ? 57 hrd
1659 IT9IKG GY73e 59 hrd
1708 9H1BT HV12b 59 59
1710 IW9ANO GY67f 59 59
1713 dto.
1715 IT9EWG GY67c 59 59
1733 IT9TDN HY68b 59 59

PA0/KDV DN71f wkd:

08.06.82:

1814 EA5YS ZZ67q 59 59
1818 EA3LL AB56b 59 59

07.07.82:

1835 UB5GRB QG09d 57
1837 UB5GBZ QG24f 59
1840 UB5GBY QG24f 59
1843 UB5JIN RE01f 59
1845 UB5GRB QG09a 59 ++
1903 UY5HF QG24f 59
1904 UB5GFS QG24f 59

2001 UB5GBZ QG24f 59

15.08.82:

1015 IT9GSF/9 GX18e 59

15.08.82:

1346 CT1WW WB63b 59

1423 EA6AU BZ 59
1435 EA3CCK/6 BZ44j 59
1458 EA6FG BZ34 53

OK1MBS XHK48a wkd:

05.06.82:

1716 EA1ACD VD58j 59 59
1805 EA4QR YA44j 59 59
1825 EA1CR XD32j 59 59
1830 F2XJ 59 59
1833 F1FHG AE 55 55
1837 F6FHP AE21j 57 59
1840 EA1TH YC48b 59 59
1925 CT4IB VB67b 59 59
1937 F1CCM ZE 59 59
1940 EA2JG YD41g 59 59

08.06.82:

1717 CT1WW WB63b 59 59
1727 EB1MS XC01j 59 59
1737 CT1AUW VA50c 59 59
1740 EA7PZ XX06c 59 59

11.07.82:

0952 RA4ACO WK78j 59 59

16.07.82:

1630 UK5GHB 59 59
1633 UA6YAF TE30h 59 59
1653 UB5IBJ SH10h 59 59
1703 RB5IIT SI55j 59 59

tnx standa fr reports

DL4RBK FJ50g wkd:

05.06.82:

1640 CT4IB VB67c 59
1710 EA1ED VD59h 59
1711 EA1TA VD59a 59
1820 EA1CR XD32d 59
1830 F6FHP AE21g 59

08.06.82:

1830 CT1WW WB63b 59
1835 CT1AUW VA50c 59

07.07.82:

1855 UA3QER TL36b 56
1900 UK5UDX PK53f 59

27.07.82:

1712 UK5IEC TI32f 59
1718 UK5EDT RI58c 57

DJ3TF FJ50g wkd:

08.06.82:

1710 CT1WW WB63b 59
1712 CT1AUW VA50b 56
1714 EB1MS CO1b 59
1724 CT1WW WB63b 59
1740 EB1MS 57
1742 EA1NA 58

07.07.82:

1535 UY5 hrd 549
1601 RB5LKW wkd 59

16.07.82:

1620 RB5EHT RI33j 59
1621 RB5EGQ RI56a 59
1623 UB5IOB TH23b 59
1627 UB5QDM RH44h 599 599
1630 RB5IOJ SH10h 599 599
1632 UK6LDZ TH65c 599 599
1633 UA6LJV 599 599
1634 UB5ICR SH39j 599 589
1638 UA6LT 579
1645 UK5MBY 23e 599
1651 UW6MA TH69c 57
1708 RB5QGL TG15f 55
1711 UA6AKA UF11g 579
1713 UW6MA TH69c 53

A station from BI
wkd E_s (sri but no callsign
on the sheet!!!

09.05.82:

14o5	HG8KCP	hrd	

21.05.82

11o5	HG3NX	hrd	
18oo	YO6CBM/6	NG71d	wkd
1815	YO5TPY	LG18g	wkd
1853	LZ1AG	MC64e	wkd

05.06.82:

18o9	I8HAU/8	IY31h	

Y23FG FM69g

05.06.82:

17o2	EA4QV	YA42f	59	59
1753	EA3AIR	BB41e	59	59
181i	EA7ABG		hrd	
1813	EA4QR		59	hrd
1813	EB4YD	YA44h	59	hrd
1817	EA1TH	YC48b	55	55
1818	EA2AAD?		45	55
182o	EA7EAG		59	hrd
1822	EA7ABG	YA42e	59	59
1824	EB4BK	YA42f	59	hrd
1825	EA4ADF	58		hrd
1829	EB4DF	YA42f	59	hrd
1833	EB3HQ		59	hrd
1843	EA4QV	YA42f	59	59
1845	F6HGB	ZD	59	hrd
19o1	F6FHP	AE	56	hrd

08.06.83:

1722	EA4AUD		45	hrd
1723	EA7ABG		57	hrd
1724	EB4YD		58	hrd
1729	EA7PZ		59	hrd
1732	EA4AUD		59	hrd
174o	EA7PZ	XX06c	59	59
1756	EA4QR	YA44h	59	hrd
18oo	EB5BEB	ZY37h	59	59
18o2	EA5YS	ZZ65j	59	hrd
18o6	EB4KI	YA42j	59	hrd
1811	EA4PR		59	hrd
1813	EA4PR		59	hrd

07.07.82:

1839	UB5GBZ	QG24f	59	hrd
1842	UB5GBZ	QG24f	59	59
185o	UB5GHR	QGo9d	59	59
1853	UB5ECM	QI	599	hrd
1857	UB5QDM	RH44h	599	599
19oo	UB5GEO	PI21b	59	hrd
19o2	UB5QBZ	QI	55	hrd

Y23FG FM59g:

07.07.82

1857	UB5QDM	RH44h	599	599
19oo	UB5GEO	PI21b	59	hrd
19o2	UB5QBZ	QI	55	hrd

11.07.82:

1124	UB5ICR	SH39h	599	599
1127	UK5EDT	RI58c	599	599
113o	UW6MA	TH69c	59	hrd
1133	UB5EGQ	RI56a	57	59
1142	UK5EDT	RI58c	59	59

16.07.82:

165o	UA3QER	TL36b	599	599
1654	UK5ABN	RKo4c	55	57
1658	UA3QIN	TL37a	599	599
171o	UB5JIN	REo1c	59	59
1712	UB5GAN	QG24f	59	hrd
	pause			
18o4	UB5LHJ	SJ19d	559	599
18o9	UY5OE	SK71e	559	599

dks lbr Rolf fer berichte 2ZF

PAØWWM CM36g:

09.05.82:

1219	YO6CBM/6	NG67d	599	599
1242	YO6AFP	MG33j	599	599

HG1YA IH63b:

15.08.82:

1o2o	F1CHQ	AF78c	59	59
1o22	F6LVQ	AE	57	57

ON4YZ CK53e:

3o.07.82:

12o5	HG2ML/m	JH42q	59	59
12o7	YO2BUG	KG66g	57	52
1218	HGØHO	KH18a	59	59

08.08.82:

1815	UC2ACA	ON31c	599	599

14.08.82:

1435	EA6AU	BZ55b	59	57

SM0DCX (IT70b)

820707				
1913	YO4YT	OE64g	559	599
820711				
1115	LZ1KSN	NC	579	599
20	LZ1XS	NC48a	599	599
27	LZ2FA	ND40g	599	599
36	LZ2AB	ND76b	599	599
820716				
1642	UB5GHB	QG09d	599	599
45	UB5QDM	RH44h	599	589
47	UB5GFS	RG51c	59	59
49	UB5GHB	QG09d	59	59
51	UB5JIN	RE01f	59	59
1749	RB5JAX	QE38j	59	59
820717				
1642	GM3JFG	XR30b	59	59

DF9CY in EL02e wkd :

16.43	ea7 ??	zw ?	54	hrd
17.07	ea7ady	??	59	59
18.22	ea5aki	zz39j	59	hrd
.24	ea5aaj	zz69	59	hrd
.26	ea3adw	bb22g	59	59
.28	ea3hq	ab24h	59	hrd
.29	eb3ih	ab29f	59	59
.31	ea3cck	bb13e	59	59
.33	ea5ka	zz	55	hrd
.35	ea3awd	¿	54	hrd
.36	ea3air	bb41e	59	59
.37	f1ccg	bdØ1c	59	59
19.27	ea5aki	zz39j	59	hrd
.29	ea3ayx	ab	57	hrd
.37	ea3bbu	??	59	hrd
.38	ed5hr	??	53	hrd
.41	ea5bpc	zy48a	59	hrd
.45	ea5io	zx26g	59	59

Vy 73's de Lars

OHØNC KU71g wkd and heard in 1982 Es-season

250582
15:18 GI3RXV 56 56 WO18f 1700 km
19 GM3SAN 56 57 XP58e 1555 "
20 GM3WCS 57 57 YQ73c 1452 "
23 GM8OEG 56 59 YQ35e 1410 "
27 GM5DTB 45 53 ZR32f 1289 "
Note how skip shortened in a few minutes
16:53 Hrd DL+F FM-stns around 100 MHz
but no 144 MHz sigs.

250682
15:44 to 17:06 hrd turkish on 90 MHz
and russian (UB5 ?) on 91,75 MHz
No 144 MHz sigs.

080782
16:01 I4JED clg CQ with 559 sigs. 144,295.
came back with QRZ? and faded out.

170782
15:50 GI8Y.. 55 --
51 GM8YJU 59 59 YO05a 1496 km
16:22 GI5MPS 57 58 WO48c 1714 "
26 GM4COO 59 could not copy because of
QRM at his end. No wonder on 144,300.
30 GI8YDZ 59 59 WP67b 1678 km
33 GI8NBW 57 59 WP79g 1673 "
40 GM8OEG 58 59 YQ36c 1394 "

250782
15:12-- I+YU on 100 MHz but nil on 144

Es INFORMATIONS ADDENDUM

by DL7QY

Following reports still from 1982

PA3BIY (CM72c) wkd in 1982: 9.5. 1233 YO6ADW 559 559 NG71d, 5.6. 1824 EA6IFP/p 59 56 CZ01h, 7.7. 1903 UB5ECM 599 599 RI77a, 1908 UK5EFC 599 599 RI46g, 15.8. 1505 EA6CCK/p 55 56 BZ45j.

SM7GWU (HS75c) wkd on 2m via Es on 7th July 82 in CW between 1851 and 1926 following stations: YU4BNM (JF34j), YU2DI (JF34j), YU7AA (JF16e), YU2DG (JF34j), YU4EDO (JF27c), YU2CRS (JF61f), and hrd YO2IS and YU1ICD. On 11th July between 1100 and 1139 GMT LZ1AB (LC27a), LZ1ZB (LC27a), LZ2AR (LD68c), LZ1WL (LC55h) and LZ1TJ/p (LC63c). On 16th July from 1811 to 1817 UO5OBI (OF) and LZ1DJ/p (NC69a).

UA3LBO (QO21h) wkd SSB and CW on 7th July 1982 from 1636 to 1918 RA6HLT (VD09g), RH6HCG (?), UA6AEC (UE06?), UG6AD (WA63j), UA6YAF (TE30h), UA6ALT (UF43c); from 1855 GMT I3LDS (FF28b), I3ZJV (FF19g), I3CLZ (FF28g), I2VUN (MILAN), OE5GDL (GI80c) and OE2CAL in GH. tks fer report Waleriy

YO2IS (KF17e) wkd 1982 via Es: 9.5. at 1255 F6CER 559 (lost in QSB), on 8.6. from 1500 to 1751 GMT RB5LAA (SJ01d), UA4FCK (WN66h), UA4FCW (WN66h), UA3QHS (TL27b), UA3QIN (TL27c), RA3RAS (UM28g), .05 SSB!, UA3RFS (UM08j), UA3PBT (clg CQ) and UA4UK (VO67e). On 9.6. at 1050 4Z4ZQ in (RS), pity that no other DX was qrv, the opening was about 40 min long! On 7.7. between 1612 and 1934 GMT UA3QIN (TL27c), UA3QHS (TL27b), UA3QER (TL36b), UQ2GFZ (NR57a), OH2BDF (MU65d) and OH7RJ lost in QSB.

YO2IS/4 (OD04g) wkd on 11th July from 1220 to 1238 via Es SM4COK (HT56c), OH5LK (MU69c), SM5IXE (IS21c), SM5AKU (HT80f), SM4AXY (HT55c), SM5CNQ (HS35c), Y22QG (FM79h) and SM5CHK (HS63j). On 16.7. from 1705 to 1812: OH2RK (MU51e), OH5LK (MU09j), RR2TEJ (NT71a), OH2NX (MU57h), OH3RW/6 (MV14a), OH2CX (MU65c), OH2MQ/3 (MV63c), UR2CQ (MS53a), and RR2RBD (MS53a), From /p all in CW. tks fer report Szigi

F6CJG/p (BF21j) sent the following Es activity report from 1982: On 16th July from 1727 to 1935 GMT IOSVS (GC51j), IW5AVM (FC16e), IWOAKA (FC13a), IOUCM (GB03d) in CW, I5CTE (FD), IOEIO (GB74c) in CW, EA3ADW and EA3BRC in (BB), I6WJB (HC42g) and IODZR (GB). On 1.8. from 0838 to 1058: I2CVC/7 (HB18b), IODZR/6 (HC21g), IW7ALE/7 (HB08b), I4KLY/0 (GD11f), I5KKW (FD60d) and IOSNY/0. On 15.9. from 1502 to 1527: I7IWN (JA42a) in CW and IH9ONU (GW).

YU2KDE (JF23g) wkd via Es on 144 MHz on 8.6. from 1522 to 1847 GMT UK5IEK CW 599/599 TI32f, UB5IEP SSB 59/59 TI51c, UK5EDT CW 559/559, UW6MA CW 599/599 TH, RB5LAA SSB 55/55 SJ01d, UA6ALT CW 599/599 UF43c, UA6ALO CW 599/599 UF43c, UK5IHE CW 599/599 TI71d, UA3QIN CW 599,599 TL27c. On 7.7.82 between 2000 and 2013 UR2EQ CW 599/599 NT61c, OH5LW SSB 59/59 NU36j, OH5IY SSB 59/59 NU03d. On 9.7.82 from 1907 to 1932 GMT UA3QIN CW 599/599 TL27c, UA3QHS CW 599/599 TL27b, RB5LGX CW 599/599 RK50g and UA3RFS CW 599/599 UM08j. On 16.7. at 1800 UA4FCW SSB 59/59 VN65h. tks fer info Bozo

Sporadic E in Bulgaria 1982

*31.05.82 LZ1AG (MC64e) wkd from 1810 to 1857 GMT: PA3AXY CM46a, F6CER BI34g and PE1EZD

*5.06.82 LZ1AG (MC64c) wkd at 1850 F6FPH/p in AE21g and LZ1CD (MC64d) wkd at 1845 F6FDP.

*8.06.82 LZ2KBI (LD05a) wkd between 1348 and 1452 UA6YAF TE, RA6EAG VE, RB5LGX RK, UA3PBT, UA3PBX SN. LZ1QH (MC64d) wkd from 1737 to 1747 UK3AAC SP19e, UA3DHC TQ31c and RA3AGS (all CW). LZ2XU (MD44e) wkd from 1733 to 1753: UK3DJG TP32g, UA3DHC TQ71c, UK3AAC SP19j, UW3GU, RA3AGS SP19j and UK3DJG. LZ1KSN (NC48a) wkd at 1821 YU3FM and YU3BH HG73a. LZ2FA (ND40g) wkd between 1727 and 1831 UA3PBT SO63a, UK3AAC SP19e, UA3MBJ SS78e, UA3LBO QO21h, I2WSG EE77e, I4JED FE47b, I2ZTI EF37j, I3LDS FF28b, I4BXN FE38c, IV3AVZ GF30f, I2MCD FE, YU3ES GF39e, I3YAK GF30f, IW3AIT DE09j, I3TJQ and I3ZVN FF27b. LZ1LX (MC62c) wkd from 1452 to 1748 UW6MA TH69c, UB5ICR SH39h, UA3DCH TQ71c, UK3AAC SP19e, RA3AGS SP19j, UA3DJG TP32g and UW3GU TP31b. LZ1CD (MC64d) wkd from 1734 to 1829 UK3AAC SP, RA3AGS SP, UA3DJG TP, UA3THC TQ, UA3MBJ SS, OK1AHI GJ and OK1OA.

*7.07.82 LZ1AG (MC64e) wkd from 1859 to 1956: SM4AXY HT55c, SM4EFP HT50e, SM4LMV HT57g, SM4IVE HT68d, SK4BX HT67h, SM5CNQ HS46c and SM5MIX HS66g. LZ1QH (MC64d) wkd at 1905 SM4AXY HT55c.

*9.07.82 LZ1AG (MC64e) wkd from 1818 to 1829 UK3AAC SP19e, RA3AGS SP19j, UA3DJG TP32g and UW3GU TP31a. LZ1QH (MC64d) wkd from 1820 to 1826 UK3AAC SP and UW3GU TP. LZ1KDB (LC59c) wkd at 1811 UK3AAC SP, 1820 RA3AGS SP, 1935 UW3GU TP. LZ2XU (MD44e) wkd from 1810 to 1833 UK3AAC SP, UA3DJG, UW3GU, UA3PBT, UA3PBY and UK3AAC. LZ1CD (MC64d) wkd at 1829 UA3PBY in SN.

*10.07.82 LZ2KBI/p (LD24e) wkd from 1218 to 1250: UG6AD WA, UD6DFD YA, 4X4IX RS and 4X6AG Telaviv.

*11.07.82 LZ1AG (MC64e) wkd at 1122 OH1ZAA KV38h, UP2BAR and at 1132 UP2BJB LP06d. LZ2KBI (LD05a) wkd from 1124 to 1135 OH5IJ NU, OH2AYG MU, OH2BDF MU, UR2RQT MS, OH3ZS MU and UR2GZ. LX2XU (MD44e) wkd between 1125 and 1140: OH1ZAA KV38h, UP2BJB LP06d, RQ2GGS, OH1CO LU43g and OH1AJ LU41j. LZ1XS (NC48a) wkd from 1118 to 1133: SM0DCX IT70b, SM0DJW IS10, SM0AGP IT70b, SM0IO and SM1DIE. LZ1KSN (NC48a) wkd at 1115 SM0DCX IT70b and at 1117 SM0IO. LZ2FA (ND40g) wkd between 0912 and 1140 RA3AGH SP19j, YU3ES GF39e, I3LGP GF24g, YU3BA GF, SM0DCX IT70b, SM1DIE JR54j, SM6DJW IS10d, SM0AGP IT70b, SM5FNU IT23d, SM0IOT, SM5AII IS08d and SM0DME/O IT49f. LZ1LX (MC62c) wkd from 1103 to 1140: OH2TI MU65g, OH2RK MU51e, UP2BJB LP66d and OH1AJ LU41c.

*16.07.82 LZ1AG (MC64e) wkd from 1629 to 1642: UA3MBJ SS78e, UC2AAB NN, UC2ABN NN18e. LZ2XU (MD44e) wkd from 1451 to 1615: UA3DJG PT32g, UA3GU TP31a, ULK3AAC SP19e, UA3UBZ and UA3MBJ SS78e. LZ1KSN (NC48a) wkd at 1750 UA3DJG TP, at 1810 UK3AAC SP and at 1815 UW3GU TP. LZ1XS (NC48a) wkd from 1630 to 1817: UA3LAW PO, OH2TI MU65g, SM4GVI, UR2QA, UR2RQ MS80e, OH2MQ/3 MV63c, OH2CX MU65c and OH2BDF MU65d. LZ1LX (MC62c) wkd from 1452 to 1620: UK3AAC SP, UW3GU TP, UA3DJG TP, UA3XBS SP73c and UA3MBJ SS78e. LZ1CD wkd at 1458 UK3AAC SP and at 1507 UW3GU TP.

*04.08.82 LZ1AG (MC64e) wkd from 1444 to 1720 UG6AD WA63j, 4X4WE, 4X4IX RS65f, at 1635 UG6AD, at 1700 UG6AD and at 1720 UG6AD all 599!. LZ2KBI (LD05a) wkd at 1705 UG6AD WA and LZ1LX (MC62c) wkd at 1452 UG6AD 599 CW.

Two meter Sporadic-E Openings, a disappointment once more? by PA0FTF

Now the sporadic-E season has started again, we should ask ourselves, how could we change the old situation that in spite of a 350 kHz wide 2m SSB-band a concentration of stations on some spot frequencies arise regulary? It is a fact that in Western Europe and also in South Scandinavia the density of amateurstations is much higher compared to that in Southern or Eastern Europe! Due to this, often more then ten stations try to answer a CQ call from South or Eastern Europe resulting in much confusion on both sides. In these pile up's, low power operators have practically no chance and perhaps have to wait until the Es opening ceases. Extremely irritating are "fellows" trying to push through their own call repetitively in an already established QSO even without knowing the callsign of the DX station! How to solve this problem? Calling for more discipline didn't help in the past and won't help in the future. I think the time has come to pick an earlier suggestion from EA3ADW and put it in concrete terms. The solution is: OPERATE SPLITFREQUENCY! This procedure (already proved true on short wave) would, with some modification, function as follow:

1. Stations from SOUTH or EASTERN EUROPE working DX via Es should TAKE THE INITIATIVE and call "CQ ES splitfrequency" in the range from 144.310 to 144.400 MHz but LISTEN for returns in BETWEEN 144.150 and 144.200 MHz. Contrary to previous years, the answers are spread over a range of 50 kHz with the advantage of much less QRM on both sides. Stations equipped with a second VFO or receiver can select easily among the numerous returns from North and Western Europe. Local QRM will also be reduced because of the difference in RX and TX frequency.

2. The word "splitfrequency" should be mentioned as much as possible to let the radio amateurs north of the Alpes know that they have to reply (only!) somewhere in between the frequency range from 144.150 to 144.200 MHz.

3. Keep your answer short and put both calls one after the other.

4. Stations NOT equipped for splitfrequency operation are asked to keep 144.150 to 144.200 MHz free!

5. Take care of the MS frequencies and avoid using the overcrowded 144.300 MHz plus minus 10 kHz in the afternoon and evening hours!

It goes without saying, that in case of low 2m activity (morning hours) Es traffic should be handled in the NORMAL manner (single frequency)! The efficiency of the splitfrequency-mode is quite obvious when Es openings are pointing to aereas like DL, G, OZ or PA causing heavy pile-ups. Investigations have shown, that the majority of equipment used are prepared to operate on two frequencies. Other should be modified. Owners of the FT221(5) will find in DUBUS 4/79 page 262 a suggestion, for the IC211/245E in DUBUS 2/82 page 115. Who can supply us with similar hints for other commonly used sets? Well equipped operators, mainly from the Mediterranean, are invited to take a first step in the forthcoming Es season. Although it is quite clear that it will take years before everyone gets familiar with this new-old technics, but we ought to change it to a better future. This article was already published in DL, F, PA0 in 1982 and present to 14 other countries all over Europe.

MOON BOUNCE BY DL9KR

Sorry about skipping the recent two EME columns but my QRL really kept me extremely busy. As this is going to be unchanged in the foreseeable future a new EME editor - DF7VX - will take over shortly and Hellmuth will certainly do a good job. It has been fun publishing your reports and please keep them coming!

144 MHz:

DF6NA/OHØ: A lot of effort has been put up by Ray notwithstanding some very adverse circumstances such as high winds (which smashed the 432 MHz antenna) and trouble with the equipment. Still, his operation caused lots of commotion on 2m and yielded some impressive results. Equipment: FT101ZD + MMT 144/28 + Tempo 2002, 4 x 11el Flexa (DL6WU), 12m H100 feed line, 1,5dB NF, 600Hz CW filter, rotors KR500 + KR600. Completed or partial contacts with 16.8. K1WHS 0/0, 2o.8. VE2DFO 0/-, 21.8. F6BSJ M/-, K1MNS 0/0, WA4LY$ 0/0, SM7BAE 529/529, W5LUU T/M, W5UN 0/0, KI7D M/-, KR5F 0/0, 22.8. F6BSJ 0/0, DJ5DT T/T, WD5CRK M/-, VE7BQH 0/0, 23.8. N4GJV 0/0, 27.8. F6CJG 0/M, WA4NJP 0/0. Ray hopes to be on next year (83) again.

DF9CY did some listening with a 10el PAØMS yagi into a BF981 + IC202 and 100 Hz filter. Incorporating the ground gain effect at moon set he heard 7.3.82 W6PO 0, K1WHS strong 0, VE2DFO 0, 2.5. K1WHS again very loud, F6DTE 0, 25.4. DK1BM 0, 27.6. WB5LBT 0, YU3USB 0.

DJ5DT completed what is believed to be the first German 2m WAC on 20.1.83 when he worked VK5MC during Chris' short window. Thomas is to be congratulated especially due to the fact that he has been using a maximum of 4 long yagis!

DK6AS used only 2 yagis (vert.) from January through March, thence 4 yagis, 750w out + o,4dB front end. Worked 9.1.82 W7FU 0/0, 11.1. N7NW 0/0, KI7D 0/0. 6.2. VE2DFO 0/0, 5.3. WA9KRT 329/0, K1MNS 0/0, hrd YU1AW. 1.5.82 worked N7NW 429/0, hrd UA1ZCL, WB5ERD, VE2DFO, Y22ME, WB5LUA, SM2GGF, N4PZ, WA1JXN/7, IØLDP, F6DTE, WB6ESQ. 2.5. wkd F6DTE 0/0, K1WHS 339/329, DJ5DT 0/0, WB6ESQ 0/0, hrd OH7RJ, YU3ULM, WBØTEM, KR5F, N7NW, also wkd SM7BAE 0/0. 29.5. wkd W7FU, hrd W7HAH, OH7PI, WA4NJP. 30.5. wkd WA1JXN 429/0, hrd KI7D. 31.5. wkd K7KOT 0/0, hrd WA1JXN. 27.6. hrd SM4IVE, YV5ZZ, UA1ZCL, IØLDP, YU3USB, OH7PI and WB5LBT. 17.7. wkd KR5F 0/0, hrd YV5ZZ, KI7D, WB5LBT, WA1JXN, WA9KRT, W5UN. 18.7. wkd UA1ZCL 0/0, N4GJV 0/0, hrd KB7Q and VE2DFO.

EA3LL is a group consisting of EA3LL, his 2 sons and EA3RU. Their rig: 4 x 21el on 9m booms, 6m spacing, 1 KW out and o,6dB D432 front end. During their first operation in the October part of the EME contest they were plagued by high winds and orientation problems while in the November part of the contest their HV xfmr blew up on Sunday at 0500z!!! 1o.1o. wkd WA8ONQ, WA1JXN, hrd KI7D, YU1AW, K1MNS, OK1MBS, EA3ADW, WA2USY, K3DKI?, F6?, DL7?, WA4?.
6.11. wkd KB8RQ, K1WHS, KR5F, SM7BAE, WA1JXN, W5UN, hrd YU3USB, I2ODI (559), F6CJG, KI7D, WA4NJP, SM2GGF, WB5LBT 519-539 during a sked but no answer, WA9KRT, WA8ONQ. 7.11. wkd DK4XI, YU3USB, F6BSJ, I2ODI, HB9SV, UA1ZCL, K1MNS, hrd DJ5DT, PAØOOM, YU2RGC?, YU1AW, WA8ONQ, SM2GGF, WA9GKQ, WBØTEM, K1FO, WA4LYS. SM2GGF called many times but no answer.
1.1.83 wkd SM4IVE, VE7BQH, Y22ME, DK4TG, SM4GVF, partial W7IUV, W7UN, hrd I1RSQ, SM2GGF, WA8ZHE, WA7BBM, HB9SV 539.

F6CJG worked (all O/O or much better) on 11.7. SM7BAE, 17.7. WA1JXN, 18.7. KI7D, VE7BQH, DK1BM, 15.8. HB9SV, YU3USB, WB7TYU, W5UN, F6FOE, WA4NJP, 7.9. UB5JIN, UA1ZCL, 11.9. SM4GVF, WA9KRT, W5HM, KB8RQ, 12.9. JA6DR, I1RSQ, I6WJB, F6EOQ. During the first part of the contest Guy worked 35 stations during fine conditions but bad rain. He mentions ZS6ALE (1st ZS/F on 2m), W8WW, K2QR, SM4IVE, K1FO and DL6BAG/P.
1.11. wkd W5UN 559/559 and 45/44 SSB signals peaking 25 dB over the noise during 3 minutes, N7WS, K9XY, W9BOZ.
The second part of the contest gave Guy 17 new contacts but then a severe storm hit southern Europe causing widespread damage. F6CJG was lucky to have only his elevation system ruptured. Best DX were: F1HI, WA3USC, K9XY, DJ5DT, OZ1EME, W2CNS, KB7N, W4WD, WØRWH, N6AMG and I2ODI who was peaking 30 dB over the noise. A new antenna system is in the planning stage, possibly with polarization switching.

F1HI (F6DRO + F1HI) had noise problems during the first part of the contest and only heard KI7D with strong signals just before moon set. On 1.11. they installed the elevation system for their 4 x 16el yagis and worked K1WHS O/O, hearing also DK4XI (strong), F6EOQ, UA3MBJ, I6WJB, K1FO, WB5ERD and W5UN.
On 6.11. the day started out well with YU3USB O/O, F6CJG 539/439 when the single 4CX250 PA fired up leaving them to only listen to I4BXN, I2ODI, UA1ZCL, F6BSJ, LA1TN, DL3YB, SM2GGF, SM4IVE, VE7BQH, K1WHS, W5UN, WA1JXN, KI7D and WA8ONQ. They are planning to have more power and are looking for a 4CX1000 plus socket, any help??

HB9QQ heard 14 stations during the October contest and worked on 9.1o. WA1JXN/7, KI7D, 10.1o. F6BSJ, WB5LBT, K1WHS, K1MNS, all O/O or better. Pierre notes mediocre conditions.

OE3XUA, using 4 x 16el yagis, AZ/EL,.worked on 3.4.82 K1WHS, Y22ME, DK4XI, SM7BAE, WA1JXN, SM2GGF, 4.4.82 WB7DTI, N7NW, VE2DFO, K1MNS, F8ZW, YU3USB, UA1ZCL, partial G3POI, YU2RGO, all reports O/O or better. Heard were OH7RJ, KR5G, I1RSQ, F6CJG, DKØTU, OH7PI, G4DZU, LA1TN, WB5ERD, KI7D, F6BSJ, KR5F, SM4IVE, N4PZ, WA3VSJ, UB5JIN, DK1PZ, DK5LA, WBØTEM, WA9ACI, HB9SV. On 22.5. wkd KI7D partial, VE7BQH, later KI7D completed. 15.8. WA4LYS.

OK1MBS, equipped with 4 x 16el yagis, 1 KW and D432 front end worked on 2.1.82 F8ZW, 1o.1.82 WA1JXN, DK4XI, K1WHS, 6.2. WBØVYV, WA9KRT, UA3TCF (first OK/UA EME QSO), 7.2. WA4LYS, K1WHS, W7FU, 28.2. F6AMQ, 4.3. YV5ZZ, WB5ERD, 5.3. N4PZ, 6.3. W8WW, KR5F, W5UN, 3.4. N4GJV, K1WHS, 1.5. UA1ZCL, SM7BAE, K1WHS, 2.5. Y22ME, 19.6. WD5CRK, W7HAH, 9.+1o.1o. UA1ZCL, SM2GGF, K1WHS, SM7BAE, WA4NJP, WB5LBT, WA1JXN, KI7D.

PA2CHR: 4 x 16el, 4CX350A, BF981, heard in February 82 K1WHS, W5HM and WB5ERD, no contacts to date.

UA1ZCL reports working (all O/O or better) on 25.6.82 F6HLD, K1GVM, 26.6. YU1AW, K2IBP, OH7RJ, 27.6. YV5ZZ, 18.7. DK6AS, WA9KRT, K1FO, partial N6AMG, 24.7. JA6DR, W5HM, K2IBP, 14.8. I6WJB, K1WHS, W5UN, KI7D, 15.8. W5LUU, WB5LBT, WB7TYU, KB7Q, VK5MC. Hrd N7CSF, VE7DUA, PAØOOM, HB9SV, RA3YCR, F6EOQ. No contest reports received yet.

UA3LBO: Walerij reports high noise levels out of azimuths 060, 140 and 240° thus forcing him to abandon 2m EME and switching (very successfully, see 432 MHz section) to 70 cm instead. With 8 x 13el F9FT yagis, 1,1 KW and BF981 input he worked on 2.4.82 DK1PZ, hrd UA3TCF, UA1ZCL, SM2GGF, SM7BAE, K1WHS, WA8ONQ. 3.4. wkd K1WHS, UA1ZCL NC, G3POI, DK4XI, Y22ME, SM2GGF, SM7BAE, YU1AW, hrd UA3TCF, F6DTE, N4GJV, SM4IVE, WA8ONQ and

others. 1.5. hrd UA1ZCL, WA1JXN (aurora QRM + QRN), 2.5. wkd DK1PZ, F6DTE, hrd YV5ZZ, ZS5IE, OH7PI, VE2DFO, UB5JIN, UA1ZCL, DK1WB, SM2GGF, WA1JXN, YU3USB. 25.5. QRT 2m EME.

UA3MBJ: Nick uses 8 x 8el yagis, 500 watts out of 2 x GI7B and a KT3115 preamp at 1 dB NF. He worked on 19.5.82 UA1ZCL, 21.5. F6CJG, YU3USB, 22.5. hrd Y22ME M, UA3TCF T, 24.5. wkd VE7BQH, 25.5. wkd SM7BAE, 26.5. hrd Y22ME M, WA9KRT O, 27.5. hrd WA9KRT, DK1BM and wkd DK1FGA, 28.5. wkd KR5F, hrd DK1BM 529, YU1AW, 29.5. hrd WA4NJP, 3o.5. hrd YU3USB 519. Reports not listed are O grade or better.

UA3TCF sends the usual long list of stations heard or worked: 3o.4.82 hrd F6BSJ, LA1TN, VE7BQH, OH7PI, partial contact with SM4IVE. 1.5.82 wkd SM2GGF, K1WHS, hrd SM7BAE, LA1TN, UA1ZCL, F6DTE, WB5LUA, YV5ZZ, OH7PI, VE2DFO, KB8RQ, OH7RJ, WA1JXN, N4PZ, I1RSQ, W5UN, N7NW, VE7BQH, DK1BM, WBØTEM. Partial contact with WA1JOF. 2.5. hrd SM2GGF, DL6BAG/P, F6BSJ, UA1ZCL, YU1AW, K1WHS, YU3USB, I1RSQ, WA9KRT, WBØTEM. 22.5. wkd UA1ZCL, I2ODI, DK4XI, F6AMQ, 28.5. wkd YU3USB, DK1BM 529/529, hrd YU1AW, SM4GGC, KR5F, Y22ME, W7FU, UA3MBJ. 29.5. wkd WA3USC, partial DK4TG + W8WJ, hrd Y22ME, WA8ZHE, DK1BM, YU3USB, KR5F, 19.6. wkd partial DK2BL, G3NSM, hrd WB5ERD, 25.6. hrd UA1ZCL, SM4GVF, KR5F, 26.6. wkd Partial F6BSJ, SM4IVE, hrd WB7DTI, YU3USB, UA1ZCL, F6AMQ. 11.7. wkd partial F6DTE, 17.7. wkd F6BSJ, partial W8WN, 18.7. hrd YU3USB, VE2DFO, 23.7. hrd OK1MBS, DJ5DT, 24.7. wkd KI7D, hrd UA1ZCL, SM4GVF, W5HM, F6BSJ, 25.7. wkd W5UN, 26.7. hrd UA1ZCL.

YU1AW: Drago activated his 12m dish on 2m EME and wkd on 13.8.82 W5UN, OH7PI.

YT3A is a new station on 2m EME and has worked KI7D and WA1JXN by means of 16 x 4el, 1 KW, GaAsFET front end.

YU3CAB worked on 14.8. KI7D, 15.8. YU3USB, partial WA1JXN, 12.9. WA1JXN.

YU3ULM worked on 1.4.82 N4GJV, 27.5. I2ODI, 26.6. KY4Z.

YU3USB worked an impressive list of stations: 18.7.82 PE1AGJ, W5HM, WØRT, N4GJV, SM4GVR, F6EOQ, WA9KRT, 24.7. F6BSJ, 25.7. W5UN, WA9KRT, 26.7. DK1BM, 8.8. OZ1EME, 13.8. YU3ULM, SM2GGF, 14.8. W5LUU, DJ5DT, K1WHS, WA9KRT, HB9SV, KI7D, WA1JXN, 15.8. F6CJG, HB9SV, I6WJB, I1RSQ, W5UN, YU3CAB, 11.9. WA9KRT, KI7D, VE2DFO, K9HMB, W6PO NC, hrd SM7BAE, F6FOE, SM4GVF, OH7PI, HB9SV, WB5LBT, I1RSQ, OZ1EME, W5HM, 9.1o. SM2GGF, F6BSJ, F6CJG, OH7PI, UB5JIN, UA1ZCL, N4GJV, OZ1EME, WA9KRT, DJ5DT, KI7D, WA1JXN, WA8ONQ, SM7BAE, DK4XI, WA4NJP, 1o.1o. Y22ME, WBØTEM, W5UN, K1WHS, WA4LYS, SM4IVE, DL6BAG/P, SM2ILF, YU3ZV, Feoq, WB5LBT, K1FO, hrd F6AMQ, HB9SV, UA3TCF, OK1MBS, PE1AGJ, I1RSQ, YU1AW, YU7AR, SM4GVF, DK3FW, DL3YB, DL8GP, VE2DFO, VE7BQH, K1MNS, K1BKK, K9XY, KY4Z, WB5ERD, WB8PAT, 3.11. ON7RB, 5.11. I6WJB, DKØTU, YU3ZV, 6.11. wkd I2ODI, I6WJB, F1HI, LA1TN, SM4GVF, K1WHS, K1GVM, WØRWH, K9XY, KR5F, VE2DFO, VE7BQH, N6AMG, G3POI, I1RSQ, 7.11. wkd HB9SV, DL8DAT, EA3LL, DL3YB, OK2TU, F6EZA, UA3TCF, PAØOOM, OK1MBS, YU1AW, K2QR, WA9KGQ, WA4MVI, W7HAH, W7IUV, N7WS, hrd WA8ZHE, YU7AR, DKØTU, F6FOE, JA6DR, F8ZW, K2IBP, WA7JUO, I4BXN.

YU7AR worked on 14.8.82 F6BSJ, KI7D, SM2GGF, 9.1o. K1WHS, KI7D, WA8ONQ, OH7PI, WA1JXN, SM2GGF, SM7BAE, 6.11. W5UN, 7.11. YU3ZV, 4.12. K1WHS, YU3USB.

YU3ULM update: Wkd 13.8. YU3USB, 14.8. W5UN, 15.8. WB5LBT, 12.9. K1WHS, 9.1o. WA1JXN, 1o.1o. KI7D.

Recent standings of YU EME stations:

Two way EME

Call	144 MHz QSO	144 MHz STN	144 MHz DXC	144 MHz CON	432 MHz QSO	432 MHz STN	432 MHz DXC	432 MHz CON	1296 MHz QSO	1296 MHz STN	1296 MHz DXC	1296 MHz CON	ACT	ANT
YU1AW	128	69	18	3	381	108	25	WAC	8	5	5	2	++	12m DISH
YU1EU	2	2	2	1	-	-	-	-	-	-	-	-	-	4xYUØB
YU1EV	1	1	1	1	26	11	6	3	-	-	-	-	+	16xFR2Ø
YU1OFQ	-	-	-	-	1	1	1	1	-	-	-	-	swl	128el.col
YU1PKW	-	-	-	-	7	7	7	4	-	-	-	-	+	YU1AW
YU2CMZ	2	2	2	2	7	7	6	4	-	-	-	-	-	4x16/16x23
YU2RGC	-	-	-	-	215	83	23	WAC	5	4	4	2	++	32xFR2Ø
YU2RGO	11	3	3	2	-	-	-	-	-	-	-	-	+	4x16Tonna
YT3A	2	2	1	1	-	-	-	-	-	-	-	-	+	16x4el.Lup
YU3BA	6	2	1	1	-	-	-	-	-	-	-	-	+	4x4el.Lup
YU3CAB	5	5	3	2	-	-	-	-	-	-	-	-	+	4xFR12
YU3UAB	1	1	1	1	-	-	-	-	-	-	-	-	+	4x16Tonna
YU3ULM	33	23	7	3	-	-	-	-	-	-	-	-	++	4x2Øel.LY
YU3USB	130	98	20	2	-	-	-	-	-	-	-	-	++	24x2Øslot
YU3ZV	24	18	9	2	-	-	-	-	-	-	-	-	++	8xYUØB
YU7AR	51	24	7	2	-	-	-	-	-	-	-	-	++	4xYUØB

Listeners

Call	144 MHz STN	144 MHz DXC	144 MHz CON	432 MHz STN	432 MHz DXC	432 MHz CO	ANTENA
YU1AIN	1	1	1	-	-	-	4 x YUØB
YU1AWW	2	1	1	-	-	-	4 x YUØB
YU1BB	1	1	1	-	-	-	2 x YUØB
YU1MS	1	1	1	-	-	-	1 x YUØB
YU1NAJ	8	5	2	-	-	-	2 x 17 el.
YU1OAM	1	1	1	-	-	-	K8AT
YU1OFQ	-	-	-	18	11	3	128 el.col
YU1OYK	2	1	1	-	-	-	4 x 16 Ton
YU2DG	1	1	1	-	-	-	11 el.Yagi
YU2RGK	3	2	2	-	-	-	4 x 5 el.Ya
YU2RIZ	-	-	-	12	?	?	16 x FR 2Ø
YU7AA	3	2	2	-	-	-	4 x 16 el.T
YU3UKM	2	2	2	-	-	-	4 x 4 el.Lu

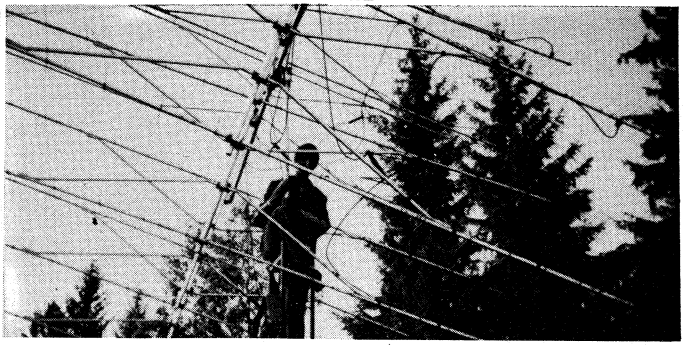
432 MHz

DF9CY: Shortly after putting up 4 x 21el F9FT yagis which are moved by the "Armstrong" system, Chris heard on 18.7. DL9KR 339, later some echoes from DL7ZL and N9AB, on 24.7. hrd YU1AW 329. Preamp was an S3o3o. Chris plans a better preamp. How about some transmitting??

DJ6MB is meanwhile radiating a substantial signal. Uwe worked on 14.8. JA9BOH and YU1AW, 9.9. JA4BLC, 1o.+11.9. wkd DF7VX, JA9BOH, Z25JJ, VE4MA, K2UYH, OK1KIR, WB5LUA, hrdZL3AAD, HB9SV, DL2CJ, W1UHE, G4CBW, OY5NS, SM3AKW, DL9KR, K5AZU, DL7ZL. 9.+1o.1o. wkd Z25JJ, YU1AW, N9AB, WBØTEM, F9FT, F2TU, K3NSS, JA6CZD, OH6NU, SM3AKW, HB9SV, DL9KR, I5MSH, JA4BLC, JA9BOH, hrd VK5MC, K2UYH, VE4MA, YU2RGC, OE9XXI, DF7VX, HB9BPQ I2COR, JA6AHB, JA6ZHR. 6.+7.11. wkd DL7YC, OH6NU, YU2RGC, N9AB, K2UYH, I5MSH, W6ABN, F9FT, YU1AW, Z25JJ, JA6CZD, W7FU, N4GJV, DL9KR, hrd DK5AI, OE9XXI, F2TU, JA9BOH, DF7VX, WBØTEM, I2COR, HB9SV, K3NSS, VK6ZT. After the contest Uwe's standings are 24 different stations in 10 countries.

DF7VX has recently completed his 70cm WAC using only 4 long yagis!! Very few stations have worked all continents with such a modest antenna system, I only know of HB9BPQ. Congratulations!

DL4EA/P sends the following report: "Early in the morning of October 8 DF3EE/P (Hans), and I travelled to the /P-QTH of Karl, DB8EU, near the OK-border (GJ73c).
After a hard 8-hour-trip we arrived in deep darkness, meanwhile Karl (+XYL and daughter) who had arrived shortly before, had heated up the very cold shack and brought in parts of the rig. After correcting the antenna system, which was standing into the sky after a hard storm, we started to operate and wkd YU1AW, Z25JJ, JA6CZD, I5MSH, F9FT, K3NSS and DL9KR. We also heard YU2RGC, I2COR, N9AB, WBØTEM, N4GJV,



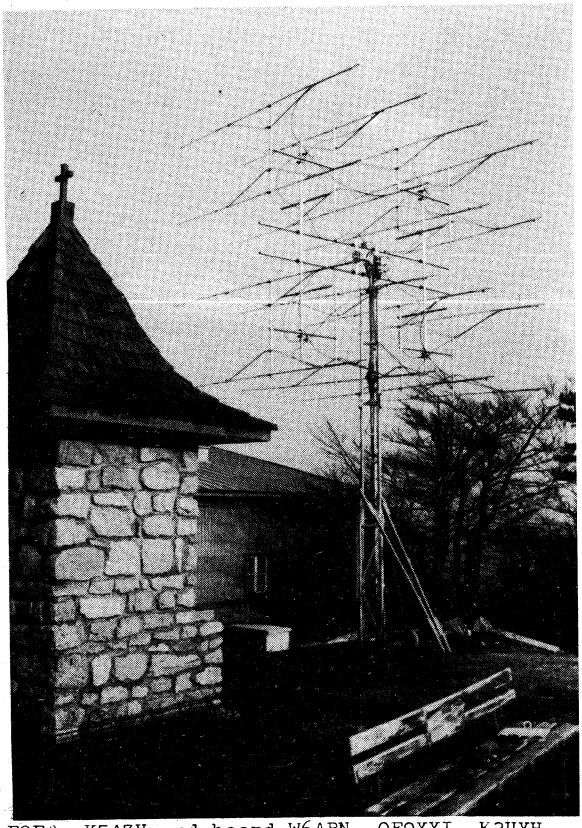
K2UYH, F2TU, JA6DHA?, SM3AKW, OK1KIR, OE9XXI, DL7ZL, DJ6MB, DFØEME. The rig was about 500 watts and 16 x 21el, preamp + converter at the antenna feed. We want to do the same job again in 1983, but only if Karl DB8EU promises to learn CW finally..."

DL9KR's log shows at the end of 1982 159 different calls worked in 31 Maidenhead locators, 35 countries, 38 US states.

DFØEME worked 19 stations during the contest but had their PA arc over in the humid atmosphere of the shack.

OE3XUA wkd on 3o.4. W6ABN, 1.5. DL9KR, OK3CTP, JA6CZD, YU1AW, F9FT, 2.5. DL7YC, SM3AKW, G4EZN, Z25JJ (first OE/Africa), YU2RGC, I5MSH, HB9SV, I2COR, K4QIF, SMØERR, K2UYH. Heard K3NSS, W6ABN, W7GBI, OK1KIR, W5FF, OE5JFL, K8WW, N9AB, W5HUQ, DFØEME. I had the pleasure of sharing a bottle of red wine (or more) with one of OE3XUA's operators, Walter OE1WWA, joined by DL7YC at my home in September.

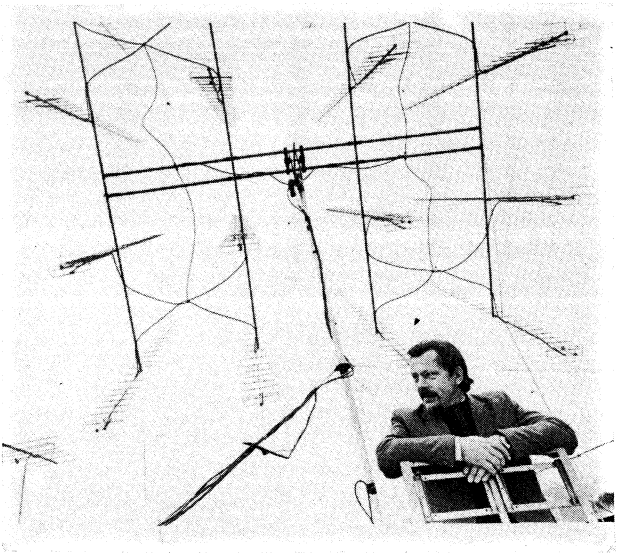
Below: The beautiful QTH of OE3XUA



OE9XXI: Worked on 12.4.82 ~~XX~~ N9AB. Hrd WB5LUA, W7GBI, DL9KR, YU1AW. Peter reports many more contacts in K2UYH's newsletter but the group primarily concentrated on the construction of their new 6m dish during the construction of which Peter OE9PMJ broke one leg. But everything was worth the effort as Peter reports in the 1296 MHz section!

OK1KIR worked from May to August 82 N9AB, SM5BFK, YU1AW, JA9BOH, I5MSH, YU2RGC, OH6NU, W6ABN, DK5AI, OE9XXI, OE5JFL, K2UYH, JA4BLC, OH6NM. The September weekend yielded (after a power increase by a 3-phase supply): ZL3AAD, VK5MC, HB9SV, JA7BMB NC, Z25JJ, WØMDL, DJ6MB, W6ABN, WA4ZTK, WB5LUA, YV5ZZ. Hrd OE9XXI, SMØDJW, YU1AW, I5MSH, G3LTF, G4CBW, DL9KR, K2UYH, DL2CJ, OE5JFL, W7GBI, SM3AKW, K5AZU, VE4MA, N9AB, K3QCQ, KL7WE. On Friday before the October part of the contest VK6ZT was worked and DJ6MB, YU1AW, Z25JJ, VK5MC, OE9XXI and OH6NM heard. During the contest they wkd Z25JJ, YU1AW. OH6NU, F2TU, SM3AKW, N9AB, K9HMB, WBØTEM, DFØEME, I5MSH, F9FT, K5AZU and heard W6ABN, OE9XXI, K2UYH, N2CB, KD6R, K9KFR, G3XGS, W5HUQ, K3NSS, VE4MA, YV5ZZ. In November the PA cooling was problematic and the driver stage failed thus reducing the power output. However, worked were during the contest G3LTF, YU2RGC,

HB9BPQ, K2UYH, HB9SV, K3NSS, K3QCQ, VE4MA. Hrd KL7WE, DL7YC, UA3LBO, W1JR, W6ABN, WBØTEM, YU1AW, F9FT, OH6NU, N9AB. 432 MHz contest totals 32 hrd, 20 wkd, 15 mult. - During the December skeds weekend full output was available again and wkd were JA9BOH, G4DGU, GW3XYW, HB9G, K9HMB, W5HUQ, KL7WE (first OK-KL7), KD6R, W6ABN, K3QCQ. Heard VK5MC, VK6ZT, YU1AW, UA3LBO, N4GJV, SM3AKW, YV5ZZ, WBØTEM, DL9KR, Z25JJ, K3NSS, YU2RGC, WB5LUA, DL7YC, K8WW, K2UYH, ON4DY, I5MSH, G3LTF, ZL3AAD. So at the end of '82 63 calls in 22 countries have been worked via EME on 70cm.



UA3LBO: On Nov-07 Walerij gave his long expected debut on 70cm starting a regular operation from the USSR (UK2BAS had been on 70cm for one day only in 1979). He really got going with 16 long yagis, 450 watts output, a 1,5 dB front end and about 2 dB of cable loss. At least the elevation control is done manually and high winds don't help either. Walerij worked for a starter I5MSH, YU1AW, K2UYH, N9AB, SM3AKW, F9FT, YU2RGC, JA6CZD, W5FF, Z25JJ and heard more than 30 stations. On 8.11. wkd DL9KR and DL7YC. During the December skeds weekend wkd DK1PZ, DK5AI, DJ6MB, ZL3AAD, YU1AW, OH6NM NC, YU2RGC, WB5LUA. Hrd YV5ZZ, G4DGU, VK5MC, SM3AKW, I5MSH and on SSB YU1AW 5 3/4! Later in December G3LTF, G4EZN and DL9KR were worked. The output has been increased to 1,5 KW via 1,5 dB cable loss, front end is now a 3SK48.

YU1AW: Drago's signal reports are always outstanding. With me, SSB copy is usually feasible. So, there are very few Ms or Os in his signal exchanges. 559 or 569 is the rule!!! Worked on 17.7.82 OE9XXI, SMØDJW CW and SSB, DL7ZL, OE5JFL CW and SSB, DL7QY, W6ABN, DL9KR, WØRAP, KD6R, 24.7. DL6WU, W5HUQ, 13.8. DL7YC, DL7ZL, 14.8. F2TU, OK1KIR, DJ6MB, JA9BOH CW and SSB, VK6ZT, HB9G, OE5JFL, OH6NU + OH6NM CW and SSB, K3QCQ, W6ABN, W1UHE, K5AZU, G4CBW, 15.8. SMØDJW, GU3YGF/P, 11.9. HB9G, G3WDG, OE9XXI, W5FF, W6ABN, hrd OK1KIR, Z25JJ, I5MSH, SM3AKW, W1UHE, K5AZU, DL9 KR, K2UYH, DL2CJ, 8.1o. DL4EA/P, DF3EE/P, OH6NM, 9.1o. HB9SV, OH6NU, Z25JJ, DJ6MB, F2TU, HB9BPQ, OE9XXI, OK1KIR, G3XGS, SM3AKW, DL6WU, N2CB, N9AB, K2UYH, K8UC, K9HMB, YV5ZZ, VE4MA, K3QCQ, WB3ESS, W7GBI, K9KFR, DFØEME, ON4DY, WBØTEM, K5AZU, F9FT, KD6R, G3HUL, K5FF, W5FF, I5MSH SSB, G3WDG, G4KGC, YU2RGC, I2COR, WA4ZTK, W5UKQ, W6ABN, K4QIF, 5.11. OH6NU, DL7YC, DJ9DL, DJ6MB, DF7VX, DF3EE, SMØDJW, DK5AI, JA7BMB, JA9BOH, 6.11. JA9BOH, DL7YC, JA4BLC, G4DGU, DK1PZ, UA3LBO, N4GJV, K8WW, K3NSS, W5HUQ, WØPUF, VK6ZT, DJ9DL, VK5MC, JA6CZD, KL7WE, DJ6MB, 3o.11. DL3UZ, 3.12. DL7YC, YU2RGC SSB, DL7YC SSB, G4DGU SSB, UA3LBO, JA4BLC SSB, DF7VX SSB, F2TU SSB, DK1PZ, 4.12. W7FU, W7GBI SSB, N4GJV, K9HMB, G3LTF, many others heard.

144 MHz update on YU activities:

YU3ZV, 8 x YUØB, 600w, BF981, worked on 9.1o. K1WHS, YU1AW, 1o.1o. W5UN, YU3USB, WA1JXN, SM7BAE and heard WA4NJP, KI7D, WBØTEM, HB9SV, WA8ONQ, OH7PI, F6CJG, K1WHS, SM2GGF, K1BK, K1FO, KB8RQ, WA7BBM, UA1ZCL, DL3YB, WB5LBT, DL6GAR/P, DK4XI, DJ5DT, VE2DFO, I1RSQ, W7HAH, YU7AR. 3o.1o. wkd F6EOQ, 6.11. wkd YU3USB, I4BXN, KI7D, I2ODI, SM2GGF, 7.11. VE7BQH, YU7AR, WA4NJP, 8.11. DL8DAT, K1WHS and heard DL3YB, WA8ZHE, K9XY, KD9Z, WA7JUO, G3POI, DJ5DT, DK4XI, YU1AW, HG1W, OH7PI, VE2DFO, OH7WJ, WA9KRT, WB5LBT, WBØTEM, WA8ONQ, KB8RQ, OK2TU, F6BSJ, W7FU, LA1TN, HB9SV, W7IUV, YU2RGO. 26.11. wkd YU1AW, UA1ZCL, W5UN, YU3USB, SM2GGF, 27.11. wkd DF9MV/P, LA1TN, 5.12. wkd K1WHS, hrd W7FU, DL8DAT, G3POI, SM7BAE, OZ6OL.

YU3USB wkd 26.11. DJ5DT, UA1ZCL, UA3TCF, OK1MBS, YU3ZV, W5UN, 27.11. YU1AW CW and SSB, F6EOQ, DL8DAT, KE5C, DK4TG, W7IUV, WA8ZHE, 28.11. K1WHS, SM2JAE, K5OKG, 4.12. VE7BQH, YU7AR, 5.12. K1WHS, WB8PAT. Hrd DJ5MS, OZ1EME, WA4CQT, SM2GGF, SM7BAE, SM5CFS, SM5FRS, KI7D, DL8DAT, KR5F, VE2DFO, W7FU, LA1TN, I6WJB, K1GVM, DK4XI.

YU1AW wkd 9.1o. SM2GGF, YU3ZV, F6BSJ, SM7BAE, 1o.1o. OH7PI, JA6DR, SM4GVF, UA3TCF, WA8ONQ, DJ5DT, WBØTEM, WA9KRT, WA1JXN, KI7D, 6.11. SM4IVE, I2ODI, W5UN, G3POI, K9XY, WA4NJP, DK4XI, DL3YB, 7.11. OZ1EME, F6EZA, DK1WB, YU3USB, UA1ZCL, 13.11. SM5CFS, 26.11. YU3ZV, 27.11. YU3USB CW and SSB, OK1MBS, DL8DAT, 28.11. WA9KRT, W5UN, K1WHS, 4.12. UA1ZCL.

1296 MHz:

DFØEME worked during the October part of the contest K2UYH, WB5LUA, SM6CKU, OE1XCS, VE7BBG, SM4DHN, OK1KIR and G3WDG. They are still using linear polarization but a circular feed is ready to be installed weather permitting.

DL7YC has trimmed his 2m dish to perfection and is receiving about 8dB of sun noise. Manfred has worked a number of stations, most of them on random. Detailed report to follow.

DJ5BV has achieved several contacts with his group of loop yagis.

OE9XXI: OE9PMJ reports that the group has successfully constructed a 608cm dish, f/D o,66, 16-rib-design similar to YU1AW, all aluminum, dish weight 60 kg net, circular feed of own (excellent) design + quad hybrid coupler according to DL7YC. Sun noise 16 dB, ground noise about 6 dB. These figures tell about a "cold" system. During the first echoe test on 6.11.82 the first GaAsFET gave up on them. After midnight a couple of signals were heard, thence the second FET "died". Their last FET (an MGF1200) was put into the preamp just in time to make the initial contact with VE7BBG on 7.11.82 at 0900. "O" reports were exchanged for the first 23cm QSO OE/VE when this third GaAsFET was killed at 0915. The problem turned out to be a faulty connection to the antenna relay coil. Now they pulled an MGF1400 out of the 70cm preamp and carried on to work K2UYH (first OE-USA on 23) and SM6CKU. So they averaged one GaAsFET per QSO!!! PA is a DK1UV design 4 x 2C39, about 140 watts at the feed. On 5.12. they worked G3WDG, DFØEME, OK1KIR, WB5LUA, SM6CKU 559/339, VE7BBG 559/O and K2UYH 559/449 and heard W7GBI 339.

OE1XCS: While putting together a 3m dish, OE1ERC took a 5m fall from a ladder, severely hurting one leg and ruining the dish plus feed. In spite of these problems new construction work is underway and OE1XCS will be operational again by the time you read this.

OK1KIR: From May to August they worked VE7BBG and SM6CKU several times. During the September skeds weekend contacts were made with VK5MC M/O, G4KGC M/O, K2UYH 339/449, PAØSSB 449/439, GW3XYW M/M, SM6CKU 339/349, W7GBI O/O, K2UYH 339/44SSB, VE7BBG 34/33 SSB (first two-way SSB QSO). Hrd G3WDG. In October: SM6CKU 339/339, G3WDG O/O, K2UYH 449/449, WB5LUA O/339, VE7BBG O/O, W7GBI O/O, DFØEME O/O, K4QIF M/? NC, hrd VK5MC T, SM4DHN O. In November: DJ8QL M/O, WB5LUA O/O, G3WDG O/O, G4KGC M/O, G3LTF 449/449, OE9XXI M/O, W7GBI M/M. Hrd DJ5BV T, OZ9CR, K2UYH, VE7BBG O. Contest score on 1296 15 hrd, 11 wkd, mult. 8. In December: OE9XXI O/O, W7GBI O/O, DFØEME O/O. Hrd YU1AW T, G3LTF, WB5LUA, VE7BBG, K2UYH, SM6CKU and DL7YC.

YU1AW put fine mesh into the inner part of the big dish thus obtaining a flat dish of approx. 6m effective diameter on 1296. Heard were on 18.7.82 WB5LUA M, K2UYH O, W7GBI M, 15.8.82 DJ4AU M, W7GBI M, WB5LUA M. A YD1270 cavity amp was constructed, output about 200w. Preamp is a GAT6. On 12.9.82 the first contacts were made with PAØSSB O/M, K2UYH M/M and VE 7BBG O/M. Partials with SM6CKU and G3WDG. Hrd DJ4AU, WB5LUA, GW3XYW, W7GBI, SM6CKU SSB. 1o.1o. wkd K2UYH, o7.11. wkd SM6CKU, G3LTF, VE7BBG, all O/O. 5.12. wkd K2UYH M/M.

Erratum: OK1DKW sends the following correction to his article on Doppler Shift in DUBUS 4/82: "In the example the given time should read 1120, not 1020, to correspond with the time of culmination."

Below 11m dish at F1JG waiting to be attached to mount.

GOOD LUCK ON EME, 73!
Jan DL9KR

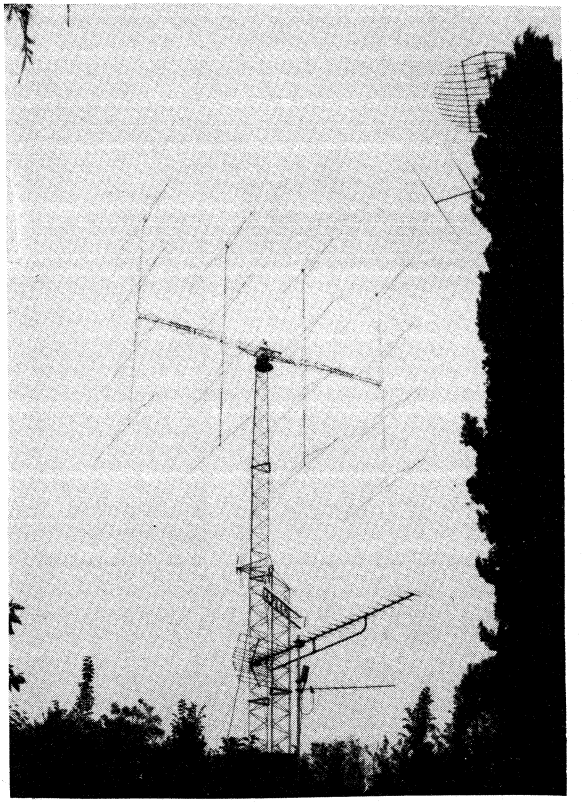
MOON BOUNCE ADDENDUM

by DL7QY

Activity Report from 4U1ITU (written by G3NAQ)

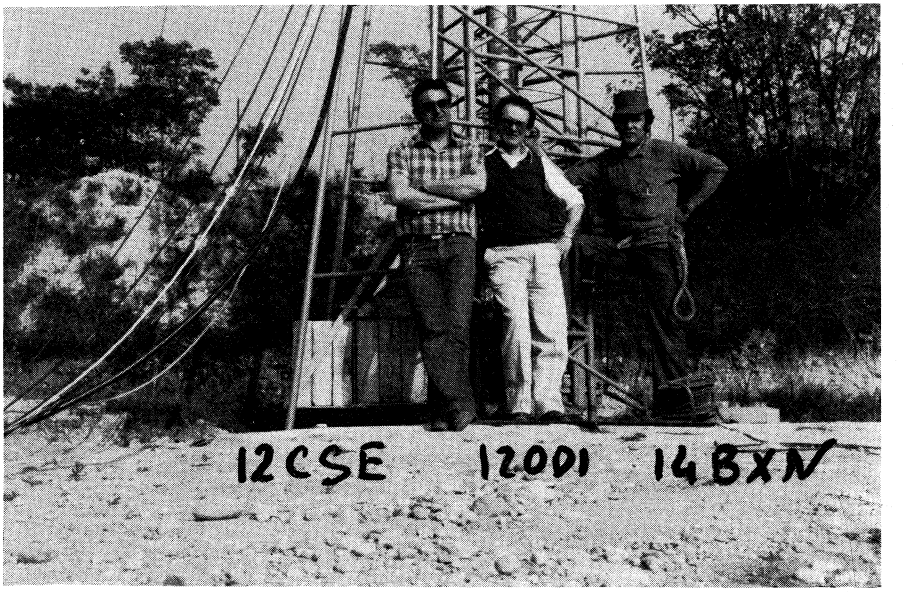
Here is an update on the activity at 4U1ITU. Encouraged by K1WHS who is trying for DXCC on EME, I have had the project of putting the "country" on 2m EME for 1 1/2 years. Thanks to the donation of four 19 el. "Boomers" by Cushcraft Corpn. this has become possible. I don't count the QSO made with K1WHS on 6. March 1982 with only one 19 el as being EME capability, because subsequent attempts with various stations produced very little. However, we errected the four antennas for the EME contest weekend in November, although no stations were worked that weekend. This was due to two reasons: the high level of QRM and even jamming (yes!) during the CW contest, and a small but significant error in the azimuth direction indicator. However, the reflections from I2ODI were heard consistently (as well as his direct signal, even over the Alps). It is hoped that coincidences such as that of the EME and European CW contest will be avoided in future!
Since then I (under the callsign 4U1ITU of course) have worked (27 November) SM7BAE, (4 December) WA1JXN, W5UN, (5 December) VE7BQH, KI7D (the latter from a call), all with o/o reports. Other EME stations were heard calling (WA9KRT called me, not wkd). Equipment is a Tempo 6N2 for transmit, with a 3SK88 pre-amp mounted at the phasing harness for receiver. We have had some mechanical problems with the antenna, in particular the KR500 seems not to be able to hold against a strong wind. I expect we will have to have it down for improvements in the spring, when I hope to upgrade the pre-amp to a GaAs-FET. Meanwhile I will try to satisfy anyone writing for skeds. The ITU is however not the best QTH for EME; there is a very high noise level (being in the centre of Geneva) which confines the operating to high elevations and very late night or very early morning. There is 35m feeder from the shack to the antenna, which is supported by 6m Westerntower on the roof of the old (5 story) ITU building. The new 18 story tower block of the ITU is located due west.
I have the ambition to put the call on 70cm EME also. At the moment the club equipment consists merely of a Microwave Modules transverter, my 50 watt 3CX100A5 pa, and a 19 el Tonna, but I am putting the finishing touches to a K2RIW pa. The H-frame designed not only to give rigidity, but also with the correct spacing for mounting four 432 MHz antennas. But we have to look for another gift, as the IARC is rather poor, and there is very little interest in VHF/UHF amongst the members. If people write to the club for a sked, I request that they enclose a SAE the first time, as the call is very much sought after, and we get much correspondance. The address is very simple: 4U1ITU, PO Box 6, CH-1211 Geneva 20, Switzerland. Best 73's, Geoff G3NAQ

F6BSJ was active until the 7.11.82 via moon. A big storm in the evening of 7.11. had bend the vertical mast of the 8x 16el and we have to repare the antenna. Before this date of bad luck, we have made 171 QSO with 90 different stations in 24 countries. The WAC is now complete and we have QSO'd 21 US states. During the last ARRL EME contest 57 QSO with 26 multiplies and 22 new stations: UB5JFR, ZS6ALE, OZ1EME, NA4NJP, SM2ILF, DL6BAG/p, DK3FW/p, HB9QQ, YU5ZZ, W8WN, WA2GSX, K2QR, W7IUV, EA3LL, PA0OOM, OK2TU, OK1MBS, KB7N, K1MNS, W2CNS, WA4MVI, N7WS - all with o/o reports. One incomplete KP4EOR O/? perhaps a QSO in the next contest?! Some "firsts" 5.5.82 VK5HC o/o and 22.8.82 DF6NA/OHO o/o. We are planning to make some tests on 1296 MHz with a 2.2 m dish.



I2ODI, Orlandi Alessio sent his activity report 6/7. November. Orlandi worked the following stations on 144 MHz:YU3USB, F6BSJ, UA1CZL, I6WJB, F6CJG, LA1TN, KB8RQF, WA8ONQ, SM7BAE, K1WHS, SM2GGF, WA4NJP, SM4IIT, OH7PI, W1RWH, WB0TEM, WA9KAT, WB9CAS, W5UN, K0UD, VE2DFO, WA1JXN/7, WA8ZHE, W5HM, WB5LBT, K9XY, DJ5DT, WA1AOV, YU1AW, Y22ME, YU3ZK, K1MNS, SM4GVS, VE7BQH, F5PO, KI7D, YU3ULM, WB8PAT, WB9ACI, K1GVM, WA7BBM, N6AMG, W1HFO, OH7WJ, JA6DR, DK4XI, HB9SV, F6EZW, EA3LL, PA0WTU, PA0OOM, OK2TU, OZ1EME, OK1MBS, WA4CQG, KR5F, UA3TCF, W4LYS, WA9KGQ, W2CNS, DK1BM, F8OP, DL3YB. Orlandi uses on 144 MHz a 16 x 20 el yagi array and 2kW output.

For skeds write to:
Alessio Orlandi
I2ODI
Via Brigoni 13,
Castiglione/stiviere
MANTOVA/ITALY



F6ETI (YH24c), Phillip writes about his first 144 MHz EME success. He uses 2x 16 el yagi and 250W rf. In frqnt a 3SK97. On 9.10.82 he heard K1WHS 529, WA1JXN/7 519 and SM2GGF 519. On 10.10 K1WHS with o report.

OK1MBS, Standa wkd 144 MHz via moon: 26.11.82 W5UN, YU3USB, SM2GGF. On 27.11. YU1AW and on 28.11 ZS6ALE (compl. WAC now), 4.12. KY4Z/6, N7WS, K1WHS and JA6DR. 5.12. W5UN, WB7DTI, N6AMG, WB7YU and WB8PAT. 30.12. SM5FRH. 1.1.83 SM4IVE and WA2GSX. 2.1. WA8ZHE, LA1TN, WB3JHP, WA3USC, WA1JXN, KY4Z/6 and SM2GGF. tks fer info Standa

Kurzbericht von HB9QQ: EME auf 144 MHz, folgende Stationen konnten gearbeitet werden: 26.12.82 WA4MJP o/o random, 27.12. HB9SV 439/429 random, 29.12. SM5FRHo/o random, VE7BQH o/o random, WA1JXN o/o random. Am 32.12. K1WHS 439/429 random. 2.1.83 W8WN o/o sked, YV5ZZ o/o sked (46. Land), KB8RQ o/o random und WA8ZHH o/o sked NC RRR missed.

Y22ME, Juergen schreibt.....ich bin nun etwa 1 Jahr via EME qrv. In dieser Zeit konnte ich etwa 150 QSO's mit 74 Stationen aus allen Kontinenten, 19 DXCC Laender (total 56 auf 2m), durchfuehren. Am 5. ARRL- und 6. ARRL -EME- Kontest habe ich teilgenommen und jeweils 32 QSO's gefahren. Dank Hilfe einiger anderer EME-OM's, speziell VE7BQH, kamen die skeds im letzten Jahr zustande und brachten auch QSO's mit 30-40 Stationen mit 4 Antennen. Wenn auch nicht alle skeds zum Erfolg fuehrten, so kann ich mit meiner Ausruestung zufrieden sein. Da die Entwicklung nicht stehen bleibt, sind noch einige Veraenderungen geplant. Gegenwaertig arbeite ich mit folgender Ausruestung: TX 2x 4CX350A 1kW rf out. RX: MGF1200. Ant: 8x 13el F9FT (Eigenbau). Die komplette Anlage ist Eigenbau. Im Oktober wurden folgende neue Stationen gearbeitet: WA3USC, WA0LSH, WA4NJP, K2QR und VK5MC. Im Novemebr: KB7N, I2ODI, WA8ZHE, OK2TU, WA2GSX, SM4GVF, WA4MVI und K1FO. tke fer info Juergen

LA9BM, Leif writes:..on Nov. 6. 1982 I wkd my 1st EME-QSO with K1WHS on random. Dave was 539 and I received 429 on 144.030 MHz. Also heard I2DOL, WA8ONQ and DK1DM?. 9.10. hrd SM7BAE and 10.10 K1WHS. My equipment: 400 W and 16 el yagi F9FT and BF981 preamp. tks fer info Leif

UA3TCF (WQ14a) wkd EME on 144 MHz: 15.8.82 JA6DR, KR5F, hrd I6WJB, HB9SV, SM7BAE, K1WHS, WB5LBT, G3POI, I1RSQ, DK4XI, W5UN, WA1JOF, UA1CZL, WA1JXN and KI7D. On 16.8. hrd VE7BQH. On 11.9. wkd: W5UN, hrd: I1RSQ and ZS6ALE. On 12.9. wkd: I6WJB, HB9SV, KB8RQ, hrd: Y22ME, F6AMQ, F6EOQ, F6BSJ, WA9KRT, W7IUV and PA0OOM. On 18.9. wkd:F6EOQ, hrd: VK5MC.

UA1ZCL (RC08c) wkd on 144 MHz via EME: 9.10.82 SM2GGF o/o, OK1MBS m/o, ZS6ALE o/o, YU3USB o/o, F6BSJ o/o, OH7PI o/o, OZ1EME o/o, F6CJG o/o, WA1JXN/7 o/o, VE2DFO o/o, KI7D o/o, SM7BAE o/o, KY4Z o/o, W5UN o/o, VE7BQH o/o, SM4GVF o/o, 10.10 DK4TG o/o, WA2GSX o/o, WA4NJP o/o, WB0TEM o/o, DJ5DT o/o, K1WHS o/o, WB5LBT o/o, DK3FW/p o/o, K2QR o/o, WA8ONQ o/o, SM4IVE o/o, DL6BAG/p o/o, DL3YB o/o, 30.10 I6WJB o/o, K1WHS 319/539, 5.11. DK0TU m/o, I4BXN 529/529, I2ODI o/o, LA1TN o/o, W5UWB m/o, W8WN o/o, WB8PAT o/o, W7IUV o/o, DJ5MS m/o, WA9KRT o/o, N7WS o/o, 7.11. KB8RQ o/o, WA8ZHE o/o, YU1AW o/o, EA3LL o/o, HB9SV o/o, DK4XI o/o, Y22ME o/o, K1FO o/o, KB7N o/o, F6FOE m/o, 13.11 W5UN 419/419. Hrd HB9QQ and ON7RB?

UHF UHF UHF UHF UHF UHF UHF UHF UHF UHF UHF UHF UHF UHF UHF UHF UHF UHF

UA3LBO (QO21h) "QRV 432 MHz EME" Ant: 12 x 22el UA3LBO (l=3.9m, S= 4x4m), Preamp: BFT66, TX 1kW, Coax loss 1.5 dB. Sunnoise 1.-30 October

continued on page 88

+VHF+NEWS+SKEDS+COMMENTS+SUPPLEMENTS+

DUBUS affairs 4/82 by DL7QY

Bis zum 18. Mrz. 1983 sind leider nur 18 Stellungnahmen zu dem Thema "QSO Listen im DUBUS Info" eingegangen. Die eingegangenen Stellungnahmen ueberstreichen ein breites Spectrum von Meinungen. PA0XMA meint "Alles so lassen, aber die Grenze von 2m nach >800km Entfernung und 70cm nach >500 km verlegen. Vielleicht etwas mehr AURORAL-E und Troposcatter Berichte bringen." DG4GAN meint "Bloss die QSO Listen nicht verkleinern." DD0QT schreibt: voelliger Wegfall von 2m Berichten und 70cm Verbindungen nur >600 km bringen. Ein Hinweis auf eine "freiwillige Selbstkontrolle " der Berichterstatter waere wuenschenswert. DL1CF schreibt:"Die vielen Seiten mit AURORA und TROPO QSO's unterhalb von 800 km sind fuer die meisten OM's uninteressant, ebenso alle Daten von MS QSO's. Die DUBUS Infos werden durch die Schwemme an Arbeitsberichten abgewertet. Folgende Vorschlaege fuer QRB Begrenzungen der Berichte: 2m >800km, 70cm >500km,23cm >200km, 13cm und hoeher keine Einschraenkungen." DC7OH schreibt folgendes: Lasst das DUBUS so wie es ist. Technische Abhandlungen sind genug enthalten. Ich finde das DUBUS in jetziger Aufmachung gut. DL3NQ meint:"2m Tropo wird wohl nicht mehr wichtig sein. Ab 1296 MHz doch schon! Aurora, MS, EME sowieso." DF9CY schreibt:...die technischen Artikel sollten etwas zahlreicher werden, 144 MHz Berichte weglassen und 70 cm Berichte nur > 1000 km. Microwaves sollte man belassen und EME ist wohl in letzter Zeit etwas zu kurz gekommen. DL6SAQ schreibt: Ich finde die Mischung aus Listen und technischen Berichten gut gelungen und ich wuerde es bedauern, wenn die techn. Artikel weiter zurueck gedraengt wuerden. Zu den Listen sollten die Einsender noch einen Steckbrief ihrer Station beifuegen." SM5MIX writes: ...I will say it is very interesting to see what other Amateurs have worked via Tropo, Es and MS, and the info abt MS can be to help for you during the next showers. DL3LAZ schreibt u.A....ich habe die DUBUS-Hefte nicht abonniert um mir auf fast 3/4 der Seitenzahl Selbstdarstellung und Selbstbeweihraeucherung irgendwelcher Moechtegern DX'er ansehen zu muessen..... SM1BSA writes:...abt DUBUS I think it is very good as it is now. But try not to make this lists longer then they are and it is important to keep them as fresh as possible, not more then 4-5 month old. If possible try to repeat the complete beacon list more often. Anyway, you are doing a great job with DUBUS. I wish it could be published every month!! OH0NC schreibt: ....ich lese die QSO Listen in DUBUS mit grossem Interesse um zu sehen was andere Stationen gearbeitet haben in der selben Oeffnung wo ich gearbeitet habe. Allerdings sollten die km Begrenzungen erhoeht werden auf 2m >800km, >70cm 600km, 23cm >400km und 13cm >250km. I2FHW schreibt :...I am very happy abt DUBUS Info but it is very important to get the Contest informations from every Country. DB7KB schreibt: ..Ich bin sehr enttaeuscht ueber den Inhalt der DUBUS Info weil nur etwa 10% technische Berichte enthalten sind. PA0EZ meint" ..die langen Listen scheinen mir sinnlos, da nicht nur seltene Verbindungen beschrieben werden. Mehr technische Berichte und interessante DX Verbindungen sind wuenschenswert". ON5GF writes:...you must continue on the same publication contents and presentation. DL7YS schreibt: ...QSO Listen sollen so bleiben; es ist immer wieder interessant zu vergleichen, wie es in anderen Teilen Europas "ging". Davon abgesehen kann man auch sehen, wer in welchem Feld qrv ist (fuer evt. Tropo Skeds wichtig). Bei AURORA sollte in jedem Fall QTF angegeben werden, weil die Berichte sonst nicht auswertbar sind. OZ8SL writes: ...first of all I will say, that I appreciate very much the work of the group is doing in

collecting and printing the activity reports from many parts of Europe. I think that DUBUS is the only magazine in the world, where one can find so much informations about the activity on our VHF-, UHF- and SHF-bands, and I certainly hope, that you will not give up bringing the reports. In my opinion it is of great value, that one can follow what is going on on the bands all over Europe, compare the results achieved in other countries during openings, and none the least because one can see if there is any activity from rare countries or QTH squares. To many amateurs DUBUS is the only source to get this informations. As an example I cI feel that DUBUS in the early 70's contributed very much, through the reports, to draw many amateur attention to be existece of sporadic E-propagation, and also, to amateurs in central- and southern Europe, the existence of aurora-backscatter as well on 144 MHz and 432 MHz. So keep on doing your valuable work, please.

A.d.R. Aufgrund der eingegangenen Meinungen werden die DUBUS Informationen etwa so bleiben wie sie bisher waren. Die QRB Grenze fuer 2m Berichte wird auf >700 km und bei 70cm auf >500 km gesetzt. Weiterhin werden wir uns natuerlich bemuehen den technischen Teil des Heftes etwas zu vergroessern.
Vy 73 de DL 7 QY

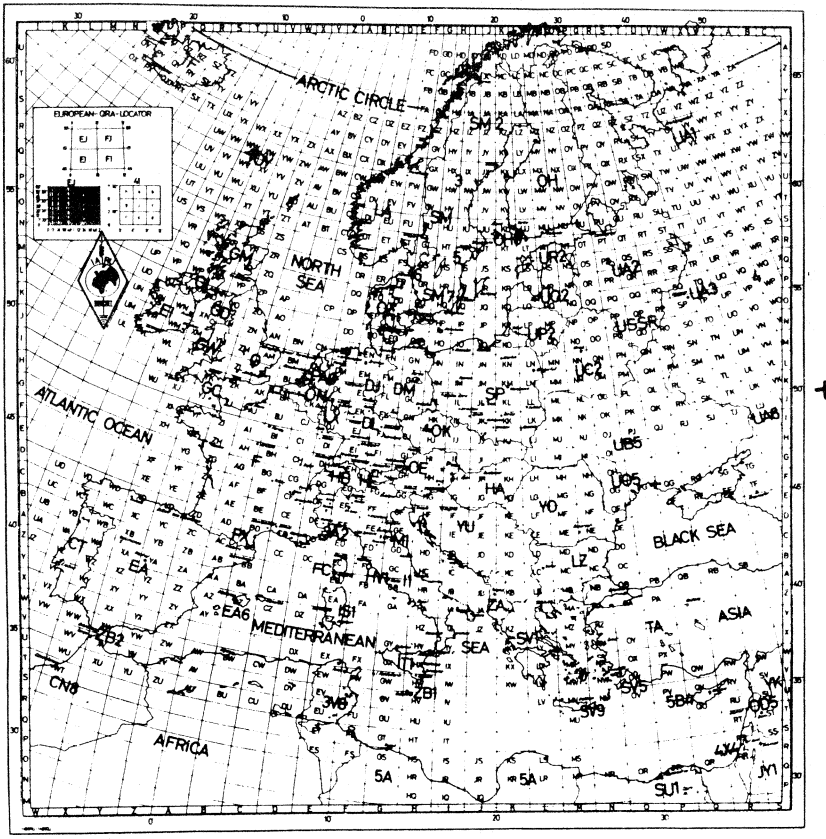
Notice Regarding "European Top-List"

For quite some time now, more and more operators have asked to see the stations using EME in the Toplist noted as such. One hears more and more "The competition is distored by high power and enormous antennas". The opinion of the opposition is, that those who have an above average system should be able to profit from it. To be fair to both sides, as from DUBUS No. 1/84, the following rules will be adapted: Only squares inside Europe will count. They apply to the QTH map shown and the following modes of communication will apply: Tropo, Aurora, Es, Ms and EME. Stations which are known to me as EME OP's, and are already in the Toplist, will be in issues 1-4/83, noted with remark *=EME OP. I ask all EME OP's to with draw their "EME outside Europe" squares, and to inform me of their resultant score. In future editions the remark *=EME OP will then be removed. I hope with this new rules, that every operator in the Toplist will then be represented fairly.
Vy 73 de DL 7 QY.

Mitteilung zur "European Top-List"

Seit einiger Zeit bitten mich immer mehr Funkamateure DIE Stationen in der Topliste besonders zu kennzeichnen, welche ihre Felder mit Zuhilfenahme von "Erde Mond Erde" Verbindungen sammeln. Immer haeufiger heisst es "der Wettbewerb werde verzerrt" durch uebermaessig hohe Leistungen und Antennengebilde. Die Meinung der Gegenseite haelt dagegen, wo ein uebergrosser Aufwand soll auch ein dementsprechender Erfolg erzielt werden. Um beiden Seiten gerecht zu werden wird ab DUBUS Heft 1/84 folgende Regelung in Kraft treten: Es duerfen nur noch Grossfelder innerhalb Europas gewertet werden. Es gilt die nachfolgend abgebildete QTH-Kenner Karte, wobei folgende Ausbreitungsarten gewertet werden: Tropo, Aurora, Es, Ms und EME. Saemtliche mir bekannten EME Stationen, welche bereits in der Topliste vertreten sind bekommen in den DUBUS Heften 1-4/83 den Vermerk *=EME OP. Ich bitte alle EME OP's ihre "EME outside Europe" Felder abzuziehen, und mir ihren gueltigen Stand mitzuteilen. Bei neuer Mitteilung wird der Vermerk *=EME OP geloescht. Ich hoffe allen Beteiligten an der Topliste mit dieser neuen Regelung Rechnung getragen zu haben.
Vy 73 de DL 7 QY

Die nachfolgende QTH Kennerkarte zeigt den Gueltigkeitsbereich (+10 Felder vom auesseren Rand zugezaehlt EA6/UA9 usw. Randgebiete) fuer die Top-Liste.



F6BSJ's comment to the Top list.....it will be interesting to separate the squares worked via EME and to precise that only European squares are possible. The square out of Europe don't count because we cannot have precisions above location of the station. With F8OP we have discussed a long time above some degradation of the spirit in the Top-List. For my side I wished to put me outside but after the discussion, Georges said to me with the moderation of his age:"in the Top-list there are some joker but it's not a reason to put you outside." We have heard some good joke on the VHF net: --.."I am at the cross of 4 squares and in one QSO, you have now 4 new squares worked.."...In Es I have maid 2 UA6 stations but I have not understand completely the call and the square, can you help me...?yes it's UA6XX and YY and in XX73a and so on ....ye!"Very well 2 new squares....-some other discussion also abt MS with new shortened procedure. Perhaps some OM can recognized his QSO's....please be FAIR-PLAY. For my side, for a complete QSO in Tropo and Es, I need the complete 2 calls, the report, the locator and the rogers, in EME and MS the 2 calls, the reports, the rogers for the report and the rogers. If don't finish a QSO, I try an other time and if it's too difficult, I try to IMPROVE my station.

(Perhaps it's too hard for certain and it's more easy to shorten the procedure...). For the EME, why not a top list with the Mainhead locator? WA1JXN in the Lunar Letter had this idea and we think that it's a good way to separate the squares worked via EME. But it's easy to criticize.....A.d.R tks for your opinion.

DC7OH, Eric berichtet: Vom 6.8.1983 bis 14.8. fahren DL7YW und DC7OH zu einer Expedition nach Italien in die Grossfelder JZ und JA. Das Call wird DL0IV/p/I7 sein. QRV sind wir in MS und Tropo auf 144 und 432 MHz. MS skeds bitte nur auf "VHF-net", jeden Morgen von 1000 GMT an. Ausruestung 2m: FT221R, 2x 16el. Tonna, 4CX250 PA, 500W output. 70cm: Microwave Transverter 432/28 MHz. 4x 19el. 6WU und 50W PA. Stationen die ueber 3500 km von JA71f oder JZ01h entfernt sind bitte schriftlich melden bei: Eric Dieterle, DC7OH, Gerstnerweg 1, D-1000 Berlin 49. tks fer info Eric.

G8KBQ (YL77h) John Moxham writes:...I very much enjoy MS working and am willing to keep any skeds should anyone like to work YL square via this mode. I would also be very interested in trying MS skeds, again on SSB, on 432 MHz during any of the bigger showers. By the time of the next Persieds shower I will have a 4 yagi array and a YL 1110 amplifier ready for MS tests on this band. The equipment I use on 144 & 432 MHz is as follows: 2m FT221R, a homebrew 4CX250B amplifier-300W feeding a 14 el. Parabeam at 20 metres, with LDF4 feeder. 70cm: Trio TS120V + Transverter 28/432 MHz, with a 3SK97 front end feeding a 4CX250R amplifier again home brew with 250W output into 2x 19 el F9FT yagis at 25 metres fed with LDF4 Heliax. For any sked write to: John Moxham, G8KBQ, 22 Whiting Rd. Glastonbury, Somerset, BA6 8HP, Great Britain. tks fer info John.

OK1VAM, Jan sent the following OK DX record table:
145 MHz: T OK1IDK/p-SM2GHI 1843 km 8.11.78, A OK3TEG/p-GM4ILS 1806 km 6.9.82, MS OK2KZR/p-UA9FAD 2741 km 11.8.81, Es OK2BFH-EA7PZ 2393 km, EME OK1MBS-VK5MC 15490 km 15.5.81, 433 MHz: T OK2STK/p-G3AUS 1577 km 30.10.82, A OK1BMW-SM6FHZ 743 km 25.7.81, EME OK1KIR/p-ZL3AAD 18220 km 10.9.82., 1296 MHz: T OK1AIY/p-G3AUS 1350 km 3.10.80, EME OK1KIR/p-VK5MC 15560 km., 2304 (2320) MHz: T OK1AIY/p-G4BYV 1028 km 30.1082, 5.7 GHz: T OK1VAM/p-OK1WFE/p 303 km 25.9.82, 10 GHz: T OK1KDO/p-DL8RHA/p 374 km 31.1082, 24 GHz T OK1KDO/p-DJ4YJ/p 71km 24.10.82

From I0PSK we got the A.R.I VHF UHF SHF Contest Information for 1983: 8./9. January ROMAGNA 8.Jan. 18/01 VHF * 9. Jan. 06/13 UHF-SHF. 5./6. Feb. EMILIA 14/14 VHF. 5./6. March INTERNATIONAL 14/14 VHF-UHF-SHF. 9./10. April LARIO 9.Apr. 16-24 144-432-1296(RTTY)&16/22 10-24GHz. 10.Apr. 06-12 1296-2304-5760 & 06/12 10-24 GHz. 23./24. Apr. LAZIO 15-23/07-11 VHF. 7./8. May INTERNATIONAL 14/14 VHF-UHF-SHF. 21. May CALL AREAS 14/23 VHF. 4./5. June FIELD DAY ALITALIA 13-22/05-11 VHF-UHF and HF. 19. June ALPE ADRIA MICROWAVE 07/17 UHF-SHF. 25./26. June CITTA' DI MESSINA 14/14 VHF-UHF and HF. 2./3. July INTERNATIONAL 14/14 VHF-UHF-SHF. 17. July FIELD DAY TORINO 07-11/12-16 VHF. 7. Aug. ALPE ADRIA VHF 07/17 VHF. 13./14. Aug. FIELD DAY FERRAGOSTO 15/11 VHF-UHF-SHF. 3./4. Sept. INTERNATIONAL IARU REGION 1 14/14 VHF. 1./2. Oct. INTERNATIONAL IARU REGION 1 14/14 UHF-SHF. 5./6. Nov. MARCONI MEMORIAL DAY 14/14 VHF (CW). 3./4. Dec. VECCHIACCHI MEMORIAL DAY 16-23/06-11 VHF.

THE 9H FALCON CONTEST

Organized by the 9H VHF UHF SHF Group. Participation: Open to all Radio Amateurs. Duration: From 0001z on 1st June to 2400z on 15th June. Frequency: 144-146 MHz. Activitiy: All modes and all types of propagation are valid. Contacts via satellites and repeaters are not valid.
Logs: a) The competing stations must log a minimum of ten (10) 9H stations in order that they may be eligible to take part. The same 9H stations may be logged more than once, provided the contacts are established on different dates. b) Reports exchanged must include RS/RST serial number starting from 001, as well as the QTH locator. c)Logs are to reach: The contest manager 9H Falcon Contest, PO Box 144, Valletta, MALTA, by not later than the 1st of July. d) Log data must include date, time in GMT, call sign both reports together with the serial numbers. QTH locators and qrb points. e) Points are calculated at one point per one km. Note (1): Contacts under 500 km are not valid unless such a contact takes place between different countries. Awards: 1) The decision of the awards manager is final. 2) 1st classified Trophy & Diploma & one week's free stay for two persons in MALTA, 2nd classified Diploma, 3rd classified Diploma. 73's de 9H1CD Henry for 9H VHF UHF SHF GROUP.

CALLSIGN: _____ QTH LOC: _____

BAND	NUMBER OF SQUARES WKD	TROPO ODX in km	AURORA ODX in km	MS ODX in km	ES ODX in km
2 m					
70cm					
23cm					
13cm					
9cm					
6cm					
3cm					
1,3cm					

144 - Mhz Field-Aligned Irregularities Scatter Propagation

The attention of the IARU Sporadic-E Propagation Coordinator has been drawn since a few years by reports coming,during the sporadic-E season (May to August)particularly from the Southern European section (Spain, France,Italy,Yugoslavia and more scatteringly from Hungary and Greece), dealing with an off-path propagation mode in the 144-Mhz band.It seems after the reports already received that :

1)- The off-path bearing may sometimes go up to ... degrees;

2)- The signal level is always on the low side,the signal itselv showing a kind of fluttery note similar to that of auroral signals.

3)- Stations equipped for either E.M.E. or sattelite work,that is to say those having high transmitter output power and high-sensitivity low-noise receivers as well as high gain antennas,would be drawing the most advetages from that propagation mode.
Stations with lower equipment performance would certainly able to work through this propagation mode but with a lesser probability.

4)- Tilting the antenna may bring,after the reports received a 10 dB increase in signal level which would give a supplementary advantage to stations equipped with elevation rotation capability but which would also be a valuable advantage for low-power stations by increasing their receiving propability.

Althogh stations located in the southern European sector haveindicated that antennas were to be aimed toward the Alpine range,it seems that this range has nothing to do with that propagation mode which would be a field aligned irregularities(F.A.I.)mode similar to auroral propagation.

Reports already received indicate that FAI propagation takes place to -ward the end of the afternoon and throughout the evening,some reports indicating still FAI activity as late as 2300 UT.It seems also that due to the fact that both sporadic-E and FAI seasons coincide,some lat 144-Mhz openings which had been tagged as sporadic-E(or at least the late part of them)were in reality FAI openings.

Although until now,only 144-Mhz stations located in the Southern European sector have been the only ones to report FAI openings,it seems that this propafation mode would not be restricted to that sector and could then happen anywhere in the European area.

It remains however to see if both sporadic-E and FAI propagation modes are connected and at which level,preliminary studies having indicated that there can be either sporadic-E and FAI propagation during the same day,or sporadic-E without FAI propagation or again FAI with no Es propagation.In that context,eventual correlation with magnetic activity would prove interesting,due to the fact that a high magnetic activity seems to be detrimental to sporadic-E activity.It remains to see if such a negative correlation holds also for FAI activity.

The most consistent batch of data received by the coordinator relate to both 1980 and 1981 sporadic-E seasons.In view of a more de -tailed study of FAI activity it is asked to amateurs using the 144-MHz band during the sporadic-E season to indicate clearly in their reports, together with the usual data :

- Call signs,QTH locators,Times UT of QSO's

the following data :

- Bearing of stations contacted(as exactly as possible).Indications such as,for example,E or SE are not suffieient and are of no use whatsoever ;
- For stations equipped with elevation rotation capability,an indication of the elevation angle of the antenna during the contacts would be quite useful ;
- Signal level (dB/noise)as well as an eventual fading ;

A FAI report sheet similar to the sporadic-E report form already in use in I.A.R.U. Region 1 has been drawn which will be used with advetage by the amateurs.

Report from European amateurs would constitute a valuable contribution to the present work of C.C.I.R. Study Group 6 in VHF sporadic-E propagation.

Please note that an important lot of reports is always needed in that kind of work in order to be able to assess in a valuable manner such a propagation mode and also that the more reports received in the more accurate the study will be.

S.CANIVENC F8SH
VHF Sporadic-E Propagation Coordinator
I.A.P.U. Region 1 Division
Member Interim Working Part 6/8 C.C.I.R.
Corresponding member R.S.G.B. P.S.C.

Attention :
- I.A.R.U. Region 1
- R.S.G.B. P.S.C.
- Dubus Group

PROPOSAL FOR DISCUSSION AND DECISION AT THE VHF WG MEETING:

SUB-REGIONAL MICROWAVE CONTEST

DARC proposes to shift the Sub-regional Microwave contest from the third weekend of June to the first weekend of June.

The international established contest time from 1400 UTC on the Saturday to 1400 UTC on the Sunday should be retained.

The new contest date should be firstly appointed in 1984.

Reasons:

At the Region 1 Conference of Scheveningen 1972 it was agreed in principle that a sub-regional microwave contest should be held on the third weekend in June each year.

This contest has been carried-out by DARC since several years, but with only little success. There are two main reasons for this:

1. The contest date of the Microwave Contest on the third weekend is very disadvantageous, because only two weeks later the Sub-regional VHF/UHF/SHF Contest is running. For a lot of amateurs it is impossible to participate in both contests in such a short time, especially if they are planning portable expeditions outside their normal location. So, many microwave operators renounce to work in the Sub-regional Microwave Contest.

2. At the moment, the Sub-regional Microwave Contest has been published and carried-out only in very few countries. Therefore the activities on the several bands above 1 GHz were low during the event. Based on these facts, the microwave stations in neighbouring countries were missing.

The Sub-regional Microwave Contest set up in 1972 can reach its essential significance only, if all member societies of the European part of the Region 1 implement this competition on all allowed microwave bands above 1 GHz.

Also, it is necessary to shift the date to the proposed first weekend of June, in order to achieve a greater time interval between successive contests.

PROPOSAL FOR DISCUSSION AND DECISION AT THE VHF WG MEETING:

144 MHz CW operations during strong AURORAS

During the past super aurora openings (e.g. 19th dec. 80, 5th mar. 81 and 25th july 81) the CW part of the 144 MHz band was extremely overcrowded by stations from most of the european countries. The SSB part of the band between 144.150 and 144.500 MHz was also used by many stations.

Many contacts could not be completed due to severe QRM. Amateurs from southern Europe or with low power had great difficulties to make any contacts. On the other hand, the section between 144.500 and 144.845 MHz was practically unused.

After checking his logs from the late 60s DK2ZF found out, that about 30 or 40 stations only used the band, even during strong auroras. these stations were operating between 144.000 and 140.900 MHz.

But now, in the 80s with much more CW-activity, only a very overcrowded 150 kHz segment is used for CW.

In cq-DL 12/81 VHF-editor DK2ZF has asked for comments about a second CW-section (144.500 - 144.845 MHz) during super openings.

All replies indicated that this proposal could be very useful if more amateurs would know about it.

This would allow amateurs from southern parts of Europe and low power stations to make more contacts via Aurora.

With the installation of the beacon DKØWCY in mid 1983 on 10.144 MHz transmitting Aurora infos in CW, the number of amateurs using the aurora mode would further increase.

Therefore DARC make the following proposal:

> A footnote should be included into the 144-MHz bandplan:
>
> DURING SUPER AURORA OPENINGS, CW STATIONS SHOULD ALSO OPERATE BETWEEN 144.500 AND 144.845 MHZ.

SITUATION REPORT: THE 2.3 GHZ BAND IN DL

After some uncertainties about the 2.3 GHz band in DL were cleared up by our new PTT regulations (1981), the 2.3 GHz bandplan could be expanded at the Region 1 Meeting in Brighton 1981 to include a new DX subband at 2320 MHz provisionally.

This new bandplan was the basis for our national bandplan which includes all modes of operation, and which was denied with our PTT.

This fact had a great impact on the activities on 2.3 GHz in DL. During the near past a lot of good technical papers regarding the construction of preamps, conerters, mixers and transmitters were published and kits were announced.

During band openings and UHF contests about 100 stations active on 2320 MHz could be counted.

During the year 1982 dayly fixed lined could be tested over distances of about 350 km between northern and southern parts of DL - with a certainty of 98%.

Some stations carried on EME test with good results.

We hope that these result will bring a further boom for this interesting band.

DL5FAU

AURORA INFO BEACON DKØWCY ON 10.144 MHz

In Norden (DN37g/JO33ON, 90 km west of Bremerhaven) a new beacon has been installed and is operating with 30 watts into a dipole using A1A-keying.

DKØWCY is intended to serve as an aurora indicator. When aurora progagation on VHF is observed in northern Germany the beacon will send a corresponding message. This should help amateurs in more southern parts of Europe to participate in a program to study aurora propagation.

In a first step the beacon keeper DK2ZF (or his wife DD1HY) will switch to an appropriate message, after being alarmed by other amateurs who already observed aurora effects.

Later, as a second step, it is planned to use a magnetometer to measure the geomagnetic field activity and to calculate the k-figures by microcomputer and to transmit these values continously.

The construction of the magnetometer system will take some time and a certain date for the beacon to run automatically, cannot be given yet.

Please note, that since the 30m band is allocated to radio amateurs on a secondary, non-interference basis, the frequency might to be shifted if nessecary. DKØWCY is permitted to operate between 10.140 and 10.145 MHz.

Operation hours: from early afternoon to late evening.

The beacon has to be keyed in A1A only, making it difficult to provide an automatic reception and alarm detecting system. However, it is planned to use different lengths of a continous carrier, e.g.:

- 20 seconds dashes means: no aurora observed or not probable due to low k-figure,
- 10 seconds dashes means: aurora is reported or high geomagnetic activity - aurora effects probable.

DK2ZF's telephone number is 49 (W-Germany)-4931 (aera code)-15884

DKØWCY is a contribution of German radio amateurs and DARC to the worldwide activities in the World Communication Year 1983, declared by the United Nations and the ITU.

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continued from page 78:

1982 10.5 dB (bw=3 kHz). wkd:5.11.82 I5MSH o/o, 6.11. YU1AW o/o, K2UYH o/o, N9AB o/m, SM3AKW o/o, F9FT o/m, YU2RGC o/o, JA6CZD o/o, ZE5JJ o/m. 8.11.82 DL9KR 539/449, DL7YC 559/o. tks fer info Waleriy

DF3EE arbeitet via moon mit 4 x 21 el F9FT, TX: 750W rf und RX: MGF1400 (Eigenbau). Wkd on 432 MHz 5.11.82 YU1AW, 6.11. K2UYH und am 7.11. F9FT (random). Hrd: 5.-7.11. JA6CZD, I5MSH, Z25JJ, K3NSS und HB9SV. tks fer info Hans

DL7APV, Bernd ist jetzt auch auf 432 MHz EME qrv mit 4x 21el yagi F9FT, 450W output und MGF1412. Wkd: 25.2.83 YU1AW o/o, G3LTF o/o, DL9KR o/o und SM3AKW o/o??. Hrd JA6CZD o, OH6NM o, K3NSS o und K5AZU. tks fer info Bernd

OE9XXI (OP.OE9PMJ) wkd on 432 MHz via the moon 4.12.82 N9AB, hrd: WB5LUA, W7GBI, DL9KR and YU1AW.
ON 1296 MHz wkd:5.12.82 G3WDG o/o, DFOEME o/o, OK1KIR o/o, WB5LUA 449/o, SM6CKU 559/339, VE7BBG 559/o and K2UYH 559/449. Hrd: W7GBI 339. tks fer info Peter

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*****************************************************************************
*                                                                           *
*        EUROPEAN - VHF - UHF - SHF - AMATEUR - BEACON - LIST               *
*                                                                           *
*                BY : D L 7 R U * DEADLINE : 22.3.1983                      *
*                                                                           *
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CALL	FREQUENCY	QTH	OUTPUT	ANTENNA	QTF	ASL	KEY
DL0UB	144.850	GM47b	5W	4xDIPOLE	OMNI	80m	F1
DL0PR	144.910	EO54c	150W	6el.YAGI	N/S	100m	A1
DK0OE	144.915	DK12f	1W	10el.YAGI	NNE	165m	F1
DL0UH	144.940	EL68f	1ERP	V-DIPOLE	OMNI	385m	A1
DL0NF	144.966	FJ47e	20mW	DIPOLE	OMNI	630m	F1
DL0SG	144.975	GJ77j	15W	4x4el.YAGI	OMNI	1310m	A1
DL0RW/A	431.996	GJ12d	1W	2xDOUBLE QUAD	NW/SW	825m	A1
DB0AH	432.015	FN65j	3W	DIPOLE	OMNI	118m	A1
DB0AC	432.015	DJ55j	15W	4x11el.YAGI	OMNI	380m	F2
DL0BQ	432.050	EJ23d	0.2W	DISCONE	OMNI	?	A1
DK0OE	432.087	DK12f	1.5W	19el.YAGI	NNE	165m	F1
DJ4WG	432.455	FJ21g	5mW	11el.YAGI	NE	265m	A1
DB0QO	432.540	EM71e	2W	ROHRSCHLITZ	OMNI	?	A1
DK0WZ	432.585	EJ20j	5W	12el.YAGI	NW	?	?
DB0KI	432.666	FK68b	2W	4x4el.YAGI	OMNI	690m	F1
DL0UB	432.850	GM47b	5W	4xDOUBL. QUAD	OMNI	80m	F1
DB0TW	432.860	EM73e	20mW	?	OMNI	433m	F1
DB0YI	432.900	EM80b	1W	BIG WHEEL	OMNI	480m	A1
DB0AD	432.913	DK20d	1W	11el.YAGI	W	290m	F1
DL0UH	432.940	EL68f	0.3ERP	V-DIPOLE	OMNI	385m	A1
DB0LB	432.945	EI06d	0.2W	CORNER DIPOLE	N/S	367m	F1
DF0ANN	432.966	FJ47e	1W	CLOVER LEAF	OMNI	630m	F1
DL0SG	432.974	GJ77j	7W	4x11el.YAGI	OMNI	1310m	A1
DF0AAD	432.990	FO64a	10ERP	BIG WHEEL	OMNI	250m	F1
DL1XV	433.143	GH25c	10W	11el.YAGI	?	?	?
DB0FB	1295.990	EH11h	4W	DIPOLE	N/S	?	A1
DB0FT	1296.010	EK63h	2W	4 SLOT. AERIAL	OMNI	880m	F1
DJ2LF/A	1296.024	DL38j	?	?	?	?	?
DF5EO/A	1296.025	DL02e	0.8W	DOUBL. HELICAL	OMNI	170m	F1
DK0OE	1296.100	DK12f	300mW	15el.YAGI	NNE	165m	F1
DB0AJ	1296.180	FH19a	10W	6el.GROUP	N/W	?	A1
DL0UB	1296.850			WILL BE QRV IN THE NEXT TIME			
DB0OJ	1296.854	DL48a	350ERP	4x15+15 el.YAGI	W	218m	F1
DB0JC	1296.895	EK08f	1.5W	4el.SLOT.WAVG.	OMNI	620m	F1a
DB0AN	1296.900	DL08b	1W	BIG WHEEL	OMNI	100m	F2
DB0MP	1296.900	GH22h	0.2W	CORNER REF.	NNW	1560m	?
DB0JB	1296.919	EI03a	1W	BIG WHEEL	OMNI	?	?
DB0VC	1296.920	FO51	10W	2xBIG WHEEL	OMNI	230m	F1
DB0AD	1296.925	DK20d	1W	DIPOLE	W/E	290m	F1

DL0UH	1296.949	EL68f		WILL BE QRV IN THE NEXT TIME			
DF0ANN	1296.966	FJ47e	2W	4xDOUBL.QUAD	OMNI	630m	F1
DB0LB	1297.040	EI06d	0.2W	?	?	367m	F1
DB0KI	1298.000	FK68b	0.15ERP	4xDOUBL.QUAD	OMNI	690m	F1
DB0FT	2304.016	EK63h	2ERP	8el.COLLINEAR	N(S)	880m	F1
DB0VC	2304.035	FO51	5W	BIG WHEEL	OMNI	230m	F1
DC8EC/A	2304.136	FI79g	4W	6el.GROUP	NW	580m	F3
DL7QY/A	2304.139	EJ80b	0.2W	2el.YAGI	NE	450m	A1
DB0MP	2304.920	GH22h	0.5W	28el.YAGI	NW	1560m	A1
DC6MR	2320.900	DL48a	0.5W	DIPOLE	N	315m	F1
DF0ANN	2320.965	FJ47e	0.5W	4xDOUBL.QUAD	OMNI	630m	F1
DB0MP	3456.115	GH22h	80mW	12el.GROUP	NW	1560m	A1
DL7QY/A	3456.209	EJ80b	50mW	2el.YAGI	NE	450m	A1
DC0DA	3456.360	DL38e	120ERP	DISH 0.7m	N	220m	F1
DB0MP	5760.192	GH22h	50mW	6dB HORN	NW	1560m	A1
DL7QY/A	5760.348	EJ80b	10mW	HORN	N/E	450m	A1
DC0DA	5760.600	DL38e	8.5ERP	DISH 0.7m	N	220m	F1
DB0MP	10000.345	GH22h	20mW	10 dB HORN	NW	1560m	A1
DB0JX	10000.350	DL63a	10mW	GAIN 10dB	OMNI	115m	F2
DL7QY/A	10000.628	EJ80b	10mW	HORN	N/E	450m	A1
DB0MP	24192.805	GH22h	0.5mW	15 dB HORN	NW	1560m	A1
EA3XS	144.152	BB22e	20/150W	16 el.YAGI	NE	?	?
EA1VHF	144.867	VD59e	25W	5 el.YAGI	N	?	A1
EA6VHF	144.917	BZ	25W	5 el.YAGI	NE	150m	A1
FX0THF	144.895	AI46h	30W	2xTURNSTILE	OMNI	246m	F1
FX3THF	144.905	YI13d	30W	2x9el.YAGI	E	80m	F1
FX8VHF	144.955	AF79h	20W	BIG WHEEL	OMNI	450m	A1
FX1UHF	432.830	BI21b	10W	4xBIG WHEEL	OMNI	160m	F1
FX4UHF	432.870	ZD52c	10W	2x6el.YAGI	NNE	900m	F1
FX1SHF	1296.870	BI14b	10W	ALFORD SLOT	OMNI	160m	F1
GB3SIX	50.020	XN49f	100ERP	4 el.YAGI	W	58m	F1
GB3CTC	70.030	XK46d	40ERP	2 el.YAGI	NE	320m	F1a
GB3WHA	70.040	AL71d	16ERP	2 el.YAGI	NW	168m	F1a
GB3BUX	70.050	ZN61a	20ERP	2xTURNSTILE	OMNI	460m	A1a/F1a
GB3ANG	70.060	YQ35c	100ERP	4 el.YAGI	SSE	370m	A1a
GB3CTC	144.915	XK46d	40ERP	3 el.YAGI	NE	320m	A1a
GB3VHF	144.925	AL52j	50ERP	2x3el.YAGI	WNW/NNW	275m	F1a/F1b

GB3LER	144.965	ZU65f	50ERP	4 el.YAGI	NNE	107m	F1a
GB3ANG	144.975	Y035c	20ERP	4 el.YAGI	SSE	370m	F1a
GB3WHA	432.810	AL71d	25ERP	2x8+8el.YAGI	NW/E	165m	F1a
GB3SUT	432.890	ZM31b	60ERP	2x8+8el.YAGI	N/SE	270m	F1a
GB3EM	432.910	ZN32b	50ERP	8+8el.YAGI	SE	600m	F1a
GB3CTC	432.970	XK46d	5ERP	4 el.YAGI	NE	320m	F1a
GB3ANG	432.990	Y035c	100ERP	9 el.YAGI	SSE	370m	F1a
GB3BPO	1296.830	AM77j	700ERP	2x32SLOT.WAVEG.	W/E	85m	F1a
GB3AND	1296.870	ZL63b	50ERP	STACK.SLOTS	OMNI	85m	F1a
GB3DUN	1296.890	ZL08e	2ERP	HB9CV	N	263m	F1a
GB3IOW	1296.900	ZK34a	100ERP	ALFORD SLOT	OMNI	250m	F1a
GB3CLE	1296.910	YM48h	10ERP	2x15+15el.YAGI	N/SE	573m	F1a
GB3MLE	1296.930	ZN32b	50ERP	CORNER REFLECT.	SSE	600m	F1a
GB3EDN	1296.990	YP04g	25ERP	2xCORN.REFLECT.	NW/SE	117m	F1a
GB3NEW	2304.010	ZL63b	5ERP	?	E	85m	F1a
GB3LDN	2304.050	AL41a	25ERP	?	NW/NE	?	F1a
GB3UOS	3456.000	ZN42c	4ERP	SLOT.WAVEGUIDE	N/S	400m	F2
GB3IOW	10100.000	ZK34a	0.15ERP	SLOT.WAVEGUIDE	OMNI	250m	F2
GB3LBH	10100.000	AL31c	1.5ERP	WAVEGUIDE	OMNI	45m	F2/F3
GB3ALD	10120.000	YJ30h	1ERP	SECT.HORN	NNE	90m	F2
GB3LEX	10400.000	ZM24d	?	SLOT.WAVEGUIDE	?	?	F2
GB3XGH	10400.000	YN67b	1ERP	?	OMNI	?	F2
HB9HB	144.865	DH66c	10W	10 el.YAGI	NNW	1300m	F1
HB9W	144.875	EH43d	36mWERP	HALO	OMNI	490m	A1
HB9F	432.984	DG40c	15ERP	CORN.REFLECT.	N/S	3573m	F1
HB9F	1296.945	DG08c	15ERP	2xCORN.REFLECT.	NE/SW	937m	F1
I1O	144.180	DF58c	20mW	DIPOLE	N/S	625m	A1
IS0A	144.810	EA08a	16ERP	TURNSTILE	OMNI	?	A1
I0A	144.825	GB12d	32ERP	4xBIG WHEEL	OMNI	50m	A1
I1G	144.830	DF58c	10W	BIG WHEEL	OMNI	625m	A1
IT9G	144.840	GY67c	400ERP	?	?	?	?
IV3B	432.070	GF30h	3ERP	?	?	?	?
I5B	432.122	FD25h	80ERP	?	?	?	?
I2B	432.192	EF16g	70ERP	2x10el.YAGI	SE/SW	400m	A1
I1H	432.370	DF58c	20ERP	3 el.YAGI	N/S	625m	A1
I1I	1296.105	DF58c	0.4ERP	SQUARE CORNER	S	625m	A1
LA5VHF	144.855	JD25e	60W	4x10el.YAGI	SSW	?	A1

LA1VHF	144.860	ET13e	25W	?	OMNI	1820m	A1
LA2VHF	144.870	FX43g	20W	9 el.YAGI	NNE	?	A1
LA4VHF	144.890	CU47a	300W	?	N	100m	A1
LA1UHF	432.860	FT05g	10ERP	BIG WHEEL	OMNI	380m	F1
LA2UHF	432.870	FX43g	15W	19 el.YAGI	NNE	?	A1
LA3UHF	432.880	ES71a	7W	15 el.YAGI	S	10m	A1
LA4UHF	432.892	CT57d	5W	DIPOLE	OMNI	50m	A1/F1
LA2SHF	1295.985	FX43g	0.2W	?	OMNI	?	A1
LA1UHG	1295.995	FT63g	3W	BIG WHEEL	OMNI	75m	F1
LX0LX	144.138	DJ31b	7W	TURNSTILE	OMNI	380m	F1
LX0LX	432.417	DJ31b	7W	13 el.YAGI	S	380m	F1
LX0LX	1297.252	DJ31b	5W	24 el.YAGI	S	380m	F1
LZ2F	145.980	ND40f	25ERP	?	OMNI	295m	?
OE3XXA	144.126	II71d	0.5W	?	OMNI	?	?
OE3FO	144.955	GI77a	15W	5+5 el.YAGI	NW	700m	F1
OE3XAA	432.378	II71d	1ERP	4 el.YAGI	NNE	?	?
OE3XMB	432.400	HI08b	100mW	9 el.YAGI	NW	1246m	A1
OE3XMB	1296.350	HI08b	100mW	10 el.GROUP	NW	1246m	A1
OH2NUA	144.300	MU52j	0.5W	TURNSTILE	OMNI	?	A1
OH8VHF	144.800	MZ79h	40W	16 el.COLLINEAR	N/S	240m	A1
OH6VHF	144.900	KW59f	50/100W	2x6 el.YAGI	N/SW	220m	A1
OH2NRA	432.300	MU65g	5W	TURNSTILE	OMNI	20m	A1
OK0EA	144.952	HK18d	4mW	2xDIPOLE	N/S	1450m	F1
OK0EB	144.963	HI12a	1W	BIG WHEEL	OMNI	1083m	F1
OK0ET	144.992	KI18a	1W	3 el.YAGI	W	981m	F1
OK0EA	432.960	HK18d	4mW	2xDIPOLE	NW/SW	1450m	F1
OK0EA	1295.975	HK18d	1W	2x10el.YAGI	NW/SW	1450m	F1
ON4VHF	144.985	CK23e	2.5W	BIG WHEEL	OMNI	?	F1

OY6VHF	144.885	WW76d	60ERP	4 el.YAGI	SE	350m	A1
OY6UHF	432.885	WW76d	30ERP	5 el.YAGI	SE	350m	A1
OZ7IGY	144.930	FP39b	50ERP	BIG WHEEL	OMNI	96m	A1
OZ2UHF	432.450	EP03c	6W	BIG WHEEL	OMNI	?	F1
OZ7IGY	432.930	FP39b	50ERP	BIG WHEEL	OMNI	94m	A1
OZ2ALS	432.982	EP79c	5W	2xMALT.CROSS	OMNI	?	A1
OZ3UHF	1296.060	FR43j	0.25W	HB9CV	SE	95m	A1
OZ7IGY	1296.930	FP39b	5ERP	BIG WHEEL	OMNI	95m	A1
PA0DSW	433.040	CM35	0.5W	MALT.CROSS	OMNI	10m	A1
PA0EHG/A	1296.875	CL48	4W	GAIN 6dB	OMNI	61m	F1
PA0QHN	1296.920	CM53j	4W	GAIN 6dB	OMNI	20m	F1
PA0ZM/A	1296.975	DM65h	5W	GAIN 20dB	NE	34m	F1
PA0QHN	2320.920	CM53j	2W	GAIN 6dB	OMNI	20m	F1
PA0MS/A	10368.045	CL48	50mW	GAIN 21dBi	NW	56m	F1
PA0DBQ	10368.100	CM72	40mW	GAIN 20dB	W	75m	F1
PE1BLE	10368.200	CM55	10mW	GAIN 14dB	SSW	35m	F1
SK2VHF	144.875	JY69h	30W	2xCLOVER LEAF	OMNI	300m	A1
SK2VHG	144.890	?	60W	16el. YAGI	S	480m	?
SK7VHF	144.920	GP38c	30W	2xCLOVER LEAF	OMNI	190m	A1
SK1VHF	144.950	JR51d	10W	2xCLOVER LEAF	OMNI	60m	A1
SK4MPI	144.960	HU46d	100W	4x6el. YAGI	N	510m	A1
SK3UHF	432.855	IW40b	10W	4xDOUB.QUAD	OMNI	180m	A1
SK6UHF	432.925	GR41d	10W	CLOVER LEAF	OMNI	75m	A1
SK4UHF	432.960	HT55j	60W	4x10el.LOG.PER.	N/SW/SE	285m	A1
SK5UHF	432.975	IU79g	25ERP	BIG WHEEL	OMNI	90m	A1
SK6UHI	1296.800	GQ45d	10ERP	CLOVER LEAF	OMNI	220m	A1
SK0UHG	1296.835	IT60h	15ERP	2xHELICAL	OMNI	30m	F1
SK7UHG	1296.920	HR21j	2ERP	BIG WHEEL	OMNI	350m	A1
SK6UHG	1296.925	FR29g	10W	4xBIG WHEEL	OMNI	35m	A1
SK4UHG	1296.960	GU79d	4W	2x15el.YAGI	S	450m	?
SK6UHJ	2304.800	FS58f	1W	2x? el.YAGI	S/SW	80m	A1
SK6SHG	10368.800	FS58f	10ERP	20dB HORN	?	80m	A1

SP8VHA	144.430	LL53d	1W	DIPOLE	OMNI	?	A1
SP9VHI	144.935	JK80c	50mW	CROSS DIPOLE	OMNI	200m	A1
SP3VHG	144.945	HL08j	6W	2xDIPOLE	OMNI	240m	A1
SP6VHF	144.966	HK29d	0.15W	2 el.YAGI	NE	1602m	A1
SP2VHC	144.980	JD51b	28W	CLOVER LEAF	OMNI	?	A1
SP6VHF	431.998	HK29b	60mW	2 el.YAGI	NE	1602m	A1
SP9VHB	432.093	JJ19f	5W	DIPOLE	N	944m	A1
SP8VHA	432.290	LL53d	1W	?		?	A1
SP9VHB	1296.280	JJ19f	5W	6 el.REFLECT.	N	944m	A1
UB5SAY	144.007	MJ72d	5W	V-DIPOLE	OMNI	300m	A1
UK5EAS	144.050	RI56	0.2W	GROUNDPLANE	OMNI	?	A1
UK0FAI	144.090	LO144LA46	.5W	V-DIPOLE	OMNI	?	A1
UP2WN	144.136	MP72j	3W	?	?	?	A1
UK3MBQ	144.156	SR08e	3W	2xDIPOLE	OMNI	130m	A1
UK5UDX	144.177	PK52f	5W	DIPOLE	N/S	169m	A1
UK4NAU	144.185	YS60g	3W	DIPOLE	NNE/WSW	120m	F1
UK4NBY	144.199	YT45f	5W	9el.YAGI 12dB	NNW	?	A1
UK3TAA	144.250	VQ60g	0.5W	V-DIPOLE	OMNI	?	A1
UK5JAA	144.250	RE13a	1W	TURNSTILE	OMNI	1000m	A1
UK5GAA	144.270	QG	5W	DIPOLE	N/S	?	A1
UK5YAB	144.500	MI60e	5W	DIPOLE	?	?	A1
UK2CAU	144.942	NO55a	0.2W	DIPOLE	N/S	?	A1
UK5UBZ	145.002	PK52c	2.5W	V-DIPOLE	OMNI	187m	A1
YO2KHP	144.957	KF17f	2.5W	TURNSTILE	OMNI	80m	A1
YO3KAA	145.900	NE41j	0.2W	DIPOLE	OMNI	80m	A1
YU3VHF	144.506	HG76a	2W	CROSS DIPOLE	OMNI	1219m	A1
YU7VHF	144.940	JF69	1W	?	?	?	?
YU3UHF	432.507	HG76a	?	LOG.PERIODIC	?	1219m	A1
Y41M	144.932	GL53g	0.2ERP	2xDIPOLE	OMNI	232m	A1
Y41B	144.984	FN28f	10W	2xBIG WHEEL	OMNI	?	F1
Y41N	432.030	GK05g	0.1W	DOUB.QUAD	NW/SE	360m	A1
ZB2VHF	50.040	XW64g	20W	5el.YAGI	WNW	117m	A1
ZB2VHF	144.145	XW64g	15/35W	8el.YAGI	NE	117m	A1

5B4CY	50.500	QU14g	35W	5el.YAGI	WNW	2000m	A1
5B4CY	144.139	QU14g	40W	6+6el.YAGI	NW	2000m	A1
9H1VHF	144.830	HV03f	1.5W	TURNSTILE	OMNI	?	A1

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*                                                                           *
*                    SUPPLEMENTS SEND TO : CLAUS NEIE                       *
*                                  DL7QY                                    *
*                          D-7181 RUDOLFSBERG 24                            *
*                                                                           *
*                     OR DIRECT TO : ANDY GROSSMANN                         *
*                                  DL7RU                                    *
*                            FREDERICIASTR.16                               *
*                            D-1000 BERLIN 19                               *
*                                                          PRINT : DL7UM    *
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BEACON NEWS

LX1GR teilt mit: Seit Maerz 1982 ist in LX KEINE Bake qrv! Neue Baken sind geplant wie folgt: LX0VHF 144.902 MHz, LX0UHF 432.902 MHz und LX0SHF 1296.902 MHz. Die 2m Bake soll auf jeden Fall im ersten Quartal 1983 qrv werden.

Die Bake OE5FO ist qrt- bitte aus der Liste streichen!

G4FRE reportes: New beacon: GB3MHX 10368.830 MHz AM77j, 1W ERP 1.2m dish E 60m asl F1. (Previously on with call GB3BPO #2, GB3BPO #1 is still at this moment on 1296.830 MHz).

IX1A (DF15b) is qrv since 30.11.82 on 144.845 MHz, 1W output Ant. 5el. Please send reports of reception to: IX1RPJ, Joyevsaz Robert, PO Box 190, I-11100 AOSTA. tks fer info Robert

New beacon QRV in Sweden
SK7UHH on 432.940 MHz in IQ23j, 25W ERP (Aurora Warning) in QTF 30 and 2.5W ERP omni (Tropo Warning) A1.
From November 82 SK7UHH is QRV permanently. During July to Sept. the beacon was qrv with 1W ERP (omnidirectional) for test purpose. The result was very promising from the spectular QTH on the island of Oeland. Best report during this test period came from UA1ZAO, Alex in Murmansk. QRB around 1550 km!
The beacon is now qrv again with a permanent set up. Antennas are one 17 ele CUE DEE yagi and two stacked clover-leafs. So far only 2.5 W output but during early -83 a final amplifier will added to increase the power to 500 W ERP in QTF 30 and 50W ERP omnidirectional. Hoping the 500 W ERP will turn out to be a good Aurora warning.
We are very interested in reports both on tropo and aurora. On VHF net please call SM6CEN or SM6EAN for information. Written reports to SM6EAN or SK7CA.

EUROPEAN VHF TOP LIST 144 MHZ

NR	CALL	QTH	WKD	TROPO	AURO	MS	ES
1	Y22ME	HM	420	1577	1579	2293	2157*
2	DK6AS	FM	418	1460	1885	2510	2260
3	SM7AED	GQ	411	1522	1600	2274	2186
4	SM7FJE	GQ	407	1642	1600	2241	1761
5	PA0RDY	CM	374	1499	1959	2262	2295
6	DK5AI	FL	368	1565	1510	2275	2282
7	F6CJG/P	BF	357	1748	1892	2510	2836
8	SM5CHK	HS	350	1262	1753	1991	2060
9	UA3LBO	QO	344	1804	1939	2273	2467
10	DF3XU	FN	332	1643	1808	2106	2222
11	SM5BEI	JU	331	1525	1777	2702	2455
12	PA0OOM	DN	328	1405	1986	2310	2215
13	SM0FFS	JT	327	1820	1580	2030	2190
14	OZ1FDH	GP	327	1581	1762	2271	2287
15	DJ5MS	GI	323	1260	1509	2102	1930
16	SM4IVE	HT	322	950	1940	2026	2122
17	OH7PI	NW	316	1902	1715	2151	2272*
18	I6WJB	HC	315	2224	1500	2214	2374
19	DK1KO	FN	315	1625	1745	2124	2194
20	HG1YA	IH	314	1612	1534	2183	2885
21	OZ1EYX	GQ	314	1420	1602	1839	2350
22	DL1MF	GH	313	1530	1512	2085	1899
23	SP2DX	JO	313	1464	1730	2337	----
24	PA2VBT	CM	313	1459	1803	2572	2221
25	DK3UZ	EN	308	2131	1910	2021	3100
26	OK1KKH/P	HJ	307	1370	1518	2082	2146
27	OZ9FW	GP	305	1328	1618	1954	1963
28	UR2RQT	MS	302	1210	1840	2172	1900
29	OZ1EKI	EP	301	1450	1777	2088	2273
30	DK4TG	DL	301	1410	1730	2440	2000
31	DL4EA	DL	300	1468	1723	2078	2247
32	DL7QY	GM	293	1402	1751	2353	1845
33	UR2EQ	NT	288	1541	1840	2240	2245
34	SM7GWU	HS	287	1585	1770	2099	2007
35	OK3AU	KI	285	1608	1637	2065	2236
36	SM0HAX	JT	283	1700	1640	1650	2240
37	I4BXN	FE	279	1600	1520	1916	2670
38	G3POI	AL	278	1500	1566	2113	2000
39	Y23FB	FM	277	1560	1375	2010	2082
40	PA3BIY	CM	276	1480	1850	2000	2296
41	F6DWG	BJ	276	1400	1613	2143	2448
42	DF6NA	EJ	276	1156	1120	2080	1709
43	I3LGP	GF	275	1000	1387	2020	3150
44	I3TJQ	GF	275	1000	1250	1950	3120
45	G3NSM	ZL	272	1489	1667	1872	2231
46	LA2PT	FT	272	1438	1660	2020	2427
47	SM5CUI	IT	271	1590	1600	2190	----
48	PA0FTF	CK	270	1500	1800	----	2900
49	ON5QW	BL	270	1430	1625	2080	2150
50	YO2IS	KF	269	1380	1775	2040	2360
51	Y23ZI	FL	268	1785	1280	1925	2075
52	SM3BIU	HX	268	1460	1890	2260	2250
53	YU2IQ	HE	268	1210	----	1955	3462
54	Y21PL	GL	266	1760	1360	2110	1960
55	SP5JC	KM	266	1740	1740	1980	1861
56	PA0KDV	DN	265	1475	1610	2051	2236
57	OH3TH	LV	265	1355	1669	2217	2069+
58	DF1OH	EM	264	1564	1671	2242	1961
59	DK2PR	EN	264	1445	1515	1940	2425
60	OZ1DOQ	GP	263	1353	1590	1879	2260
61	SM4COK	HT	261	1440	1570	2080	1940
62	SM7WT	GP	260	1590	1680	1930	2180
63	I4EAT	FE	260	1550	1420	2240	2500
64	PA0WWM	CM	260	1303	1839	1997	2212
65	G4DSC	ZO	259	1485	1485	1942	2285
66	DK1PZ	FL	257	1567	1364	1867	1866
67	OH2BBF	LT	257	1388	2000	2125	2144
68	OZ1FTU	FP	257	1282	1558	1903	2315
69	EA3LL	AB	256	1995	----	2155	3215
70	UB5JIN	RE	256	1709	1497	2500	2826
71	DJ9CZ	DL	256	1650	1862	1925	2015
72	SM2CKR	KX	256	1630	1660	2310	1810
73	SM3AKW	JW	256	1598	2078	2142	2504
74	F6BSJ	CG	256	1510	1220	2105	2705
75	UR2BZ	MS	253	1577	1794	2141	2174
76	YU3ES	GF	251	1167	1004	2074	2483
77	YU1EU	KE	250	1680	----	2200	2380
78	DF1JC	DL	249	1270	1830	2348	2007
79	LX1GR	DJ	249	868	1104	2206	1409
80	F1FHI	ZH	248	1739	1292	2125	2467
81	OE3XUA	HH	248	1610	1240	2160	1785
82	SM5DRV	HR	248	1330	1410	1810	----
83	YU7EW	KF	246	1868	1172	1930	2425
84	SM0DJW	IS	246	1340	1810	1840	2160
85	HB9ET	KB	245	1445	1845	2000	2279
86	F8DP	CG	242	1228	1196	2028	2720
87	ON4YZ	CK	241	1530	1510	----	2110
88	PA3AOU	DM	241	1392	1673	1763	2193
89	ON6UG	BL	241	1089	1013	2640	3296
90	OZ6OL	FP	239	1800	1700	----	1800
91	G4IGO	YL	239	1358	1770	1956	2198
92	SM4AXY	HT	238	1714	1760	1880	1960
93	OZ8SL	GP	238	1476	1305	----	2188
94	SM7GEP	HR	238	1467	1768	1695	2043
95	OH0JN	JU	238	1451	1856	2108	2198
96	YU7BCX	KF	237	1868	1172	1956	2425
97	SM3DCX	IV	237	1300	1850	1990	----
98	PA3BBA	CM	236	1300	1436	1907	2311
99	DF6OB	FM	234	1421	1349	1877	2013
100	SM5BSZ	JT	233	1830	1720	1890	2080
101	DL7ZL	GM	232	1401	1254	3200	3800
102	SM5FRH	HT	231	1580	1690	1650	----
103	SM4GGC	GT	231	1286	1815	1856	1670
104	OZ3ZW	FO	230	1763	1863	1415	1958
105	OZ1CLL	GP	230	1369	1969	1448	2208
106	SM5CNQ	HS	228	1698	1751	1909	1843
107	UA3TCF	WQ	227	930	1974	2498	2332
108	OK1FM	GJ	226	1843	1438	2200	1827
109	SM3COL	IW	226	1784	1693	2122	2367
110	F6CTW	BI	226	1677	1714	2230	2420
111	SM6CKU	GR	225	1530	1560	1470	1790
112	YU3CAB	HG	225	1463	1530	2165	3356
113	SM3UL	IV	225	1275	1521	2110	2363
114	G8FUF	AL	224	1810	1410	2466	1800
115	GJ4ICD	YJ	223	1620	1100	2050	2090
116	DK8VS	DJ	223	1350	1080	2240	3230
117	G3CHN	YK	222	2656	2138	----	2358
118	PA0HWM	CK	219	1268	1209	1845	3103
119	SM0IOT	JT	218	1300	1700	1820	2100
120	DF2ZC	DK	218	1090	1686	2004	2009
121	UC2AAB	NN	217	1350	1850	1980	2280
122	Y24QO	GM	215	1250	960	1846	1840
123	DL7YW	GM	213	1299	1106	1895	2170
124	SM5EJN	IT	212	1770	1630	2240	1920
125	SM5AQJ	JT	212	1380	1580	1930	----
126	DK3XT	FN	211	1350	1430	1800	1990
127	YU2KDE	JF	209	1731	1077	2074	2196
128	SM5CNF	HS	208	1660	1730	1850	----
129	DF5DL	EL	208	1389	1596	2003	2020
130	PA0XMA	DM	208	1285	1330	2300	1930
131	I1DMP	DF	208	1001	930	1864	2718
132	LA9BM	EU	207	1612	1670	1892	2165
133	SM0BYC	IT	207	1380	1710	1890	2390
134	OZ3GW	FQ	207	1340	1580	----	2338
135	YU1EV	KE	206	1650	----	2165	2200
136	F6CER	BI	206	1500	1350	1700	2300
137	PA3BSK	DL	206	1387	1698	1290	2148
138	UA3MBJ	SS	205	1200	1764	2573	2150
139	I4XCC	GD	205	1070	1782	2275	2270
140	Y59UN	GK	204	1790	1220	1920	1630
141	OK1MBS	HK	204	1465	1470	1371	2133
142	SM4ARQ	HT	202	1750	1590	1950	1930
143	Y23PA	GO	202	1168	1150	1710	----
144	PA3GER	CL	201	1327	1249	2100	2118
145	DK2LM	EJ	201	1014	1098	1956	1981
146	SM3FGL	IV	200	1563	1680	1955	----
147	LA8AK	DS	200	1325	1722	1797	----
148	OZ1ASL	FO	199	1339	1675	1680	2323
149	Y24TN	GK	195	1790	1310	1920	1630
150	OE5JFL	GI	193	1503	1155	1964	1823
151	HB9KDQ	JH	192	1307	----	1849	2195
152	SM5AGM	JT	191	1930	1740	----	2000
153	OK1KHI/P	HK	191	1635	1156	----	----
154	PA0BAT	DL	191	1078	1377	2498	2042
155	UR2RDR	MS	189	1200	1750	1600	2100
156	DL7AN	GM	188	1310	1140	1936	1845
157	PA3AHD	CM	188	1279	1586	1940	1879
158	DK3LL	FO	187	1525	1187	1875	1812
159	DL1JF	FO	185	1325	1775	----	2062
160	G3LQR	AM	184	1776	1772	2150	2077
161	SM4FXR	HT	184	1280	1430	1760	----
162	SM5FND	HT	181	1445	1601	1616	2060
163	G3SEK	ZL	179	1560	1681	1872	2154
164	SM0DFP	IT	178	1830	1590	2030	----
165	SM5LE	JT	178	1440	1470	2190	----
166	UB5WN	PK	178	1376	1270	2410	1457
167	DL2OM	DK	178	1270	1712	2104	2039
168	PA2CHR	CL	177	1370	1108	1695	2137
169	PA0CSL	CM	176	1528	1610	1750	1960
170	RR2TEJ	NT	176	1422	1760	----	2070

DEADLINE IN 1983 (1)1.3 (2)1.6 (3)1.9 (4)1.12

EUROPEAN UHF TOP LIST 432 MHZ

NR	CALL	QTH	WKD	TROPO	AURO
1	DL7QY	FJ	177	1368	1618*
2	DL7YC	GM	169	1225	----*
3	DF3XU	FN	165	1607	1057
4	SM3AKW	JW	151	1190	919*
5	OZ7IS	GP	149	1387	1000
6	DK5AI	FL	146	1162	798*
7	DL7ZL	GM	144	1305	1249*
8	PA0EZ	CM	132	1310	1028
9	F1FHI	ZH	130	1892	----
10	SM6CKU	GR	129	1293	660
11	DK6AS	FM	127	1360	620*
12	DJ9DL	DL	126	1274	615*
13	G3LQR	AM	125	1471	873*
14	OZ9FW	GP	125	1348	1026
15	PA0FRE	CL	122	1400	815
16	Y22ME	HM	121	1285	874
17	OK1CA/P	HK	120	1267	----
18	DB6BX	DM	119	1398	----
19	PA0WWM	CM	119	1342	726
20	DB6NT	FK	116	1505	----
21	PE0AGO	DM	116	1382	----
22	Y23FG	FM	115	1560	680
23	UA3LBG	QO	115	1426	1612*
24	OK1AIB/P	HK	113	1267	----
25	SM7BAE	GP	113	1220	850*
26	OH3TH	LV	113	1199	943+
27	DK0NA	FK	112	1096	----
28	SM5BEI	JU	110	1325	1016
29	DF3EE	DL	110	1267	1019
30	SM5CPD	IT	110	1230	640
31	ON5FF	BL	110	1170	736
32	OH0NC	KU	109	1545	920
33	SM5DWC	IT	109	1400	810
34	SM0FFS	JT	109	1380	740
35	SM0FZH	JT	106	1900	957
36	OZ2OE	EP	106	1432	750
37	F6GNR	ZH	105	1894	----
38	SM6FYU	GQ	105	1441	706
39	DL4EA	DL	105	1265	1009
40	OK1KHI/P	HK	102	1424	----
41	GJ4ICD	YJ	102	1340	803
42	DK2NH	FN	101	1607	805
43	SM0DFP	IT	101	1410	830
44	OK1KIR/P	GK	101	1331	----*
45	DC7QH	GM	100	1231	509
46	DJ6MB	DK	99	1253	921
47	DL7AN	GM	99	1240	----
48	DC9CSA	GM	96	1171	----+
49	PA3AOH	DL	96	1054	530
50	G3COJ	ZL	95	1465	812
51	DL7APV	GM	95	1308	850
52	OZ7LX	FP	93	1315	720
53	PA3BSK	DL	93	1129	----
54	DK1PZ	FL	93	1018	----
55	OK1AIY/P	HK	92	1351	----
56	PA2DOL	CL	92	1088	----
57	GBKBQ	YL	91	1327	----
58	SM0DYE	JT	91	1205	845
59	F9FT	CJ	90	960	----
60	PA0JOZ	CM	89	1156	----
61	SM6HYG	FS	87	1410	600
62	DD2EK	DL	86	1284	----
63	G3UBX	YM	86	1101	----
64	G3PBV	YK	85	1572	----
65	Y23PA	GO	85	1102	----
66	OZ3GW	FQ	85	1090	620
67	F1BUU	ZE	84	1250	----
68	OZ3ZW	FO	84	1237	613
69	Y22HA	GO	83	1414	----
70	F6CER	BI	83	1350	500
71	DL6NAQ	EK	83	1253	----
72	ON5GF	CK	83	1115	----
73	ON7HP	??	83	799	----
74	DL7ACG	GM	79	1279	----
75	ON4YZ	CK	78	1460	----
76	DF1JC	DL	78	1270	----
77	DB5AQ	FL	78	1050	----
78	PA0VV	CM	77	1180	----
79	DG1NZ	FJ	77	1146	----
80	DL5FAU	EK	76	1120	----
81	Y22EN	GK	75	1395	----
82	PA2DRV	CL	75	1147	----
83	OZ1EKI	EP	75	1044	527
84	DJ6XV	DL	75	927	508
85	DL6WU	EJ	74	1305	740*
86	DL7HR	FI	74	1256	980
87	DC9BU/A	EK	74	1253	----
88	OE3XUA	HH	74	1215	----
89	OH2BBF	LT	74	1164	773
90	SM4IAZ	HT	73	1055	1134
91	SM7GEP	HR	72	1428	533
92	G4LRT	ZM	72	1394	----
93	Y23BD	GM	72	1150	----
94	DF7VX	EL	72	1105	658
95	DF2YQ	DL	72	1077	475
96	GBHVY	YK	71	1500	----
97	G4BEL	AM	71	1175	----
98	UR2EQ	NT	71	1160	907
99	SM5CUI	IT	71	1150	1260
100	Y24BO	GM	71	1066	838
101	SM0CPA	IT	71	1060	800
102	SM7CFE	HQ	70	1420	----
103	DF5JJ	DL	70	900	----
104	DF1OH	EM	68	1188	910
105	SM5CUL	IT	68	1150	1260
106	Y24QO	GM	68	1100	----
107	DG4GAN	EI	66	1504	----
108	SM7GWU	HS	66	1192	628
109	OZ9SW	EQ	65	1050	----
110	SM7FMD	HR	64	1594	----
111	DG4BB	EN	64	1194	----
112	G3WSN	AL	63	1385	----
113	DL0SP/P	GM	63	1150	----
114	DF6NA	EJ	63	1102	----
115	LA8AK	DS	62	1188	748
116	UP2BBC	LP	62	1125	807
117	SP9FG	JJ	61	1327	----
118	F6CJG/P	BF	61	1170	----
119	SM5DSN	IT	60	1470	670
120	OK1KTL/P	GK	60	993	----
121	ON6UG	BL	60	970	420
122	DK8VS	DJ	60	920	----
123	SM5LE	JT	59	1560	710
124	G8SFM	YL	59	1255	----
125	DL7RU	GM	59	1231	----
126	HB9AOF	DG	59	820	----
127	DJ9BV	EN	59	752	----
128	F6HLD/P	CG	58	1545	----
129	DF3CK	FH	58	1144	867
130	PE0DOL	CL	58	1033	----
131	DF1EQ	DL	57	811	----
132	PA3BGL	CN	56	1250	----
133	I6GQA	GD	56	813	----
134	DK3UC	FN	55	1380	600
135	G4MUT	ZL	54	1197	----
136	HB9MIN/P	DH	54	1100	----
137	PA0JME	CL	54	1046	----
138	PA0XMA	DM	54	980	485
139	PA2HJS	CK	54	832	----
140	PA2CHR	CL	53	980	----
141	DK1KO	FN	53	920	----
142	PA0JTA	CL	52	920	----
143	DL0SO/A	DL	52	888	----
144	SM4AXY	HT	51	1330	550
145	SM6FHZ	GQ	50	1010	800
146	SM3IVE	HT	50	938	703
147	HB9QQ	EH	49	1080	----
148	PA3BBA	CM	49	1028	----
149	Y21PL	GL	49	828	----
150	YU3CAB	HG	49	684	----
151	SP1DSU	HN	48	1340	730
152	UR2NW	LT	48	1060	675
153	SP5JC	KM	46	1120	866
154	UR2RQT	MS	46	853	853
155	G4FRE	AL	45	1140	----
156	DL2OM	DK	45	780	639
157	SM3COL	IW	45	621	455
158	OE3PQU	HI	44	1120	----
159	OZ1FDH	GP	44	1033	822
160	F6ECI	BI	44	880	----
161	I2FUM/2	EE	44	875	----
162	SM2CKR	KX	43	1215	820
163	DC9VA	DJ	43	920	----
164	DC7OH	GM	42	1079	----
165	SM0AGP	IT	42	740	410
166	SM4DHN	GU	41	1240	1030
167	DL7WC	GM	40	795	----
168	GM3ZSS	YR	38	1400	----
169	HB9MIO/P	DH	38	1010	----
170	DK0IK/P	DO	38	800	----
171	DL0UL/P	EI	38	676	----
172	HG1YA	IH	38	631	----
173	OE5XPL	HI	37	1176	----
174	F6BSJ	CG	36	1525	----
175	HG2KML	JH	36	600	----
176	UR2AO	MT	35	1131	----
177	UR2GZ	MS	35	1035	----
178	UR2RGM	MT	35	820	----
179	DL7YW	GM	35	724	----
180	YU3USB/3	GG	35	632	----
181	UA3MBJ	SS	34	1200	800
182	ON5QW	BL	34	960	----
183	F6EAS	ZI	34	630	----
184	SM3UL	IV	34	585	674
185	DK2PR	EN	33	1200	----
186	SM3BIU	HX	33	920	720
187	DF1EO	DL	33	767	----
188	UR2RIW	LS	32	1100	----
189	DB9SB	EJ	32	853	----
190	SM5EVK	IS	32	740	----
191	UR2RIC	LS	31	673	----
192	EA3LL	AB	30	1315	----
193	IW5AVM	FC	30	752	----
194	OK3AU	KI	29	1172	----
195	OE1KTC	II	29	808	----
196	YO2IS	KF	28	1020	----
197	GBMFJ	ZL	28	941	----
198	OZ1CFO	ER	27	779	----
199	OH2BWL	MU	26	1220	980
200	UR2QA	NS	26	803	----
201	DB6AV	EI	25	788	----
202	UR2JL	MT	25	405	----
203	OE3PUW	II	22	495	----
204	UR2QY	LT	21	650	----
205	UA3TCF	WQ	21	591	903
206	OY7O	WW	19	1560	----
207	DF2CA	EN	19	680	----
208	OE3RRA	II	18	890	----
209	OE3CEW	II	17	562	----
210	OE1WEB	II	12	600	----
211	OE1APS	II	12	497	----
212	OE6IWG	HH	11	335	-- -

VHF - UHF LISTENER:
G 15556
2M:270 1556 1758 2601 2711

NL-213
2M:400 3000 3400 4000 3800
70CM:125 1520 1280
23CM: 62 1220

WKD = NUMBER OF WORKED SQUARES
+ = OP. HAS DIED
* = EME OP

THE LIST IS PUBLISHED CONTINUOSLY. DATA COMPILED ABOVE BASE ON UNCONFIRMED CLAIMS BY THE OPERATORS.

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DEADLINE IN 1983 (1)1.3 (2)1.6 (3)1.9 (4)1.12

EUROPEAN SHF TOP LIST

1296 MHZ

NR	CALL	QTH	WKD	TROP
1	PE1CHQ	DM	79	1200
2	PA0EZ	CM	78	1261
3	DF3XU	FN	74	1277
4	G3LQR	AM	72	1232
5	PA0FRE	CL	70	1337
6	PA0WWM	CM	70	1298
7	PE0AGO	DM	70	1196
8	DL7QY	FJ	65	1261
9	HB9AMH/P	DH	64	1264
10	PA2DOL	CL	62	1027
11	DB6NT	FK	61	1105
12	G4BYV	AM	61	1027
13	DK3UC	FN	60	1223
14	DK0NA	FK	59	1096
15	OK1AIY/P	HK	55	1350
16	OK1KIR/P	GK	55	1208
17	OZ7IS	GP	55	1205
18	F1FHI	ZH	54	1345
19	ON5GF	CK	54	1010
20	DL4EA	DL	54	906
21	DK6AS	FM	51	990
22	DL6NAQ	EK	50	1253
23	DB6BX	DM	50	845
24	OZ2OE	EP	49	985
25	DC9BU/A	EK	45	1253
26	G4LRT	ZM	45	1152
27	SM0DFP	IT	45	1057
28	SM6CKU	GR	44	820
29	OH0NC	KU	43	1537
30	F6CER	BI	43	1350
31	DL7YC	GM	42	1040
32	DK2NH	FN	42	805
33	DK5AI	FL	41	868
34	DF1EQ	DL	41	762
35	PA2DRV	CL	40	1314
36	HB9RG	EH	40	820
37	DC7QH	GM	38	1216
38	DL5FAU	EK	38	740
39	SM5DWC	IT	37	1060
40	PA3BSK	DL	37	821
41	SM6ESG	GR	36	980
42	SM0FFS	JT	35	1040
43	SM5BEI	JU	35	877
44	DK1PZ	FL	34	865
45	OZ3ZW	FO	34	798
46	DL3NI	DL	33	724
47	DL0SO/A	DL	33	642
48	HB9RG	EH	32	820
49	LX1DU	CJ	32	600
50	G4BEL	AM	31	1025
51	SM6HYG	FS	31	1018
52	G3COJ	ZL	31	963
53	PA2HJS	CK	31	690
54	DJ9BV	EN	31	672
55	DF3EE	DL	30	752
56	DD2EK	DL	29	845
57	DC0DA	DL	29	738
58	OK1CA/P	HK	28	656
59	DG4BB	EN	27	741
60	LA8AK	DS	26	900
61	DF3CK	FH	26	899
62	DL3NQ	EJ	26	730
63	DL7ZL	GM	25	1112
64	DL7APV	GM	25	1023
65	UR2EQ	NT	25	588
66	PA0VV	CM	24	622
67	SM5CPD	IT	24	610
68	PA0JME	CL	22	867
69	DF1EO	DL	22	756
70	I2FUM/2	EE	20	779
71	OK1AIB/P	HK	20	656
72	SM0DYE	JT	20	485
73	DL7AN	GM	19	814
74	DK0IK/P	DO	19	758
75	DL9GU	EJ	19	678
76	G3PBV	YK	18	996
77	SM0FZH	JT	18	780
78	ON6UG	BL	17	700
79	OE3PQU	HI	17	530
80	OK1KTL/P	GK	17	467
81	DL0UL/P	FH	17	307
82	DG4GAN	EI	16	580
83	HB9MIO/P	DH	15	675
84	SM3AKW	JW	14	808
85	DJ8QL	EJ	14	778
86	I4XCC/6	GD	14	425
87	F6HLD/P	CG	13	740
88	HB9AOF	DG	13	369
89	OZ3GW	FQ	12	760
90	PA3AOH	DL	12	465

2320 MHZ

NR	CALL	QTH	WKD	TROP
1	PA0EZ	CM	31	779
2	PE0AGO	DM	27	730
3	DL7QY	FJ	25	1018
4	DB6NT	FK	24	529
5	G4BYV	AM	22	1027
6	DK0NA	FK	22	527
7	G3LQR	AM	21	924
8	OK1KIR/P	GK	21	866
9	DL5FAU	EK	20	582
10	PA0FRE	CL	19	864
11	OK1AIY/P	HK	16	1028
12	PA2DOL	CL	15	781
13	DK3UC	FN	15	661
14	DL3NQ	EJ	14	595
15	PA0WWM	CM	13	523
16	DF1EQ	DL	13	461
17	DL3NI	DL	13	448
18	DC0DA	DL	13	429
19	DC3QS	DM	13	419
20	DL7YC	GM	12	634
21	G4LRT	ZM	11	1022
22	PA2DRV	CL	11	776
23	PA0JGF	DM	11	444
24	DF3CK	FH	9	418
25	PA2HJS	CK	9	388
26	PA0JME	CL	9	262
27	SM6HYG	FS	8	1018
28	SM6ESG	GR	8	880
29	DJ8QL	EJ	8	463
30	LX1DU	CJ	7	300
31	DF5QZ	DL	6	468
32	DF3XU	FN	6	416
33	DB8NC	FK	6	405
34	OK1KTL/P	GK	5	235
35	DC8UG/P	DK	5	230
36	I2FUM/2	EE	5	166
37	DK5AI	FL	4	275
38	DL9GU	EJ	4	269
39	OK1AIB/P	HK	4	243
40	OK1CA/P	HK	4	243
41	ON5GF	CK	3	320
42	SM5CCY	HS	3	82
43	SM5DJH	HS	3	80
44	DK2NH	FN	2	89
45	DD2EK	DL	2	87

3456 MHZ

NR	CALL	QTH	WKD	TROP
1	DC0DA	DL	10	429
2	DB6NT	FK	9	529
3	PA2DOL	CL	9	528
4	DK0NA	FK	8	528
5	DL7QY	FJ	7	565
6	G3LQR	AM	7	427
7	DC3QS	DM	7	419
8	PA0JME	CL	5	220
9	PA2HJS	CK	4	388
10	PA0JGF	DM	4	376
11	DF1EQ	DL	4	118
12	G4AGN/P	ZN	4	115
13	G4BYV	AM	3	464
14	DF5QZ	DL	3	68
15	PE0AGO	DM	2	134
16	PA2DRV	CL	2	123
17	DF5JJ/P	DK	2	80
18	DK3UC	FN	2	63
19	DB8NC	FK	2	60
20	DJ6TA	DK	2	42
21	G4LRT	ZM	1	26
22	DL3NI	DL	1	19
23	DD2EK	DL	1	10
24	DD0QT	DL	1	7
25	DL7YC	GM	1	5

5760 MHZ

NR	CALL	QTH	WKD	TROP
1	DB6NT	FK	6	528
2	DL7QY	FJ	5	171
3	PA2DOL	CL	4	529
4	DK0NA	FK	4	528
5	HB9AJF	EH	3	217
6	DB8NC	FK	3	59
7	G3LQR	AM	2	241
8	F0GOH/P	DH	2	109
9	DJ7JF/P	DH	2	95
10	DC0DA	DL	2	58
11	OK1VAM/P	HK	1	303
12	HB9MIN/P	DH	1	176
13	HB9MDP/P	EH	1	54
14	DF5QZ	DL	1	38

10368 MHZ

NR	CALL	QTH	WKD	TROP
1	I6ZAU	GD	17	832
2	I3CLZ/3	FF	13	571
3	YU3JN/3	GF	13	563
4	I4XCC/6	GD	12	563
5	I4CHY/4	FE	11	633
6	I3ZJL/3	FF	11	572
7	IW4AKY	FE	11	570
8	I4QIG/4	FE	11	440
9	YU3URI	HG	10	344
10	DJ4YJ/P	EH	9	358
11	I4BER	FE	9	340
12	YU3TAL	GF	9	322
13	I2BBH/2	EE	9	237
14	DL3NQ	EJ	8	395
15	HB9MIN/P	DH	8	310
16	I4AOR	FE	7	320
17	I4ZTO/4	FE	7	290
18	PA0EZ	CM	7	262
19	DJ7FJ/P	DH	7	243
20	PA2DOL	CL	7	217
21	HB9AJF	EH	7	204
22	DL7QY	FJ	7	171
23	I4FKD/4	FE	6	260
24	HB9MDP/P	EH	6	205
25	F0GOH/P	DH	6	184
26	IW3QCV	GF	5	290
27	G3LQR	AM	5	258
28	HB9MIO/P	DH	5	217
29	PA0JME	CL	4	220
30	DB6NT	FK	4	171
31	DK7GN/P	EI	4	166
32	OE3XUA	HH	4	77
33	SM0DFP	IT	4	60
34	OH2BWL	MU	4	57
35	ON6UG	BL	3	174
36	DG4BB	EN	3	132
37	YU3CAB	HG	3	107
38	DF1EQ	DL	2	74
39	DL0SO/A	DL	2	65
40	DF1EO/P	DL	2	63
41	DJ6TA	DK	2	51
42	OE1WEB	II	2	50
43	PA0FRE	CL	2	10
44	DJ6XV	DL	1	110
45	DB8FP/P	EK	1	62
46	SM0DYE	JT	1	60
47	OK1KTL/P	GK	1	42
48	SM5CPD	IT	1	32
49	I2DZQ/2	EF	1	27
50	DL0UL/P	FH	1	24
51	DK3UC	FN	1	17
52	LA8AK	DS	1	16

24192 MHZ

NR	CALL	QTH	WKD	TROP
1	DJ7FJ/P	EH	5	170
2	HB9MIN/P	DH	3	110
3	DJ4YJ/P	FH	2	243
4	F0GOH/P	DH	2	89
5	DK0NA	FK	1	34

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