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VOLUME 33 NUMBER 9 NOVEMBER 1985 PRICE $1.50

PICTURED IS MARK SPENCER, WA8SME/DA1OY, AUTHOR OF CoCo RTTY

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RTTY JOURNAL

DEE CRUMPTON, N6ELP
Owner-Editor -Publisher
Post Office Box RY
Cardiff-by-the-Sea, CA
92007-0179

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BUSINESS OFFICE
1155 Arden Drive
Encinitas, CA 92024-5105
Tele: 619-753-5647

Postmaster send form 3579 to:
P.O.B. 179, Cardiff, CA 92007

ISSN:0033 - 7161

SUBSCRIPTION RATES

USA	$10.00 per year
CANADA,MEXICO surf.	$ 9.00 per year
CANADA,MEXICO air	$11.50 per year
FOREIGN Surface	$10.00 per year
FOREIGN airmail	$15.00 per year

All monies to be paid in US funds.

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DX

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Hi DX'ers! Just returned from the Biloxi, Mississippi Hamfest; and a great gathering it was. Many of the gang from Florida, Louisiana, Tennessee, Alabama and Texas were in attendance, and what stories were swapped. Much of the rhetoric, if properly spread, could make a thriving farm out of a Kansas dust bowl and it wouldn't surprise me if next year vegetables are growing on the sandy beaches of the Mississippi Gulf Coast. Yours truly won a Hustler 5 band trap vertical which was promptly sold to a fellow RVer for his motor home. The hamfest site is equipped with full hookups for the attending RV owners and the majority of them use that type of antenna when parked (The sea gulls sure do steer clear of this area 'cause they don't stand a chance trying to fly through the maze of aluminum that crowds their air space). Many of the RV'ers had their RTTY gear with them and were having a great time. You just haven't experienced it until you try RTTY mobile and working DX on the road. Don't try it while you are the driver however, it could be dangerous to your health!

PROPAGATION

On the upswing? Somewhat....as very slow improvement is forecast by the sun watchers. As of this writing, a very low level of solar activity continues with erratic conditions predicted through the first days of November. There will be some days of improvement during the period however, twenty meters will remain almost completely a daytime DX band with fifteen meters marginally useful to the lower latitudes. Dusk to dawn DX is available on 40 and 80 meters but is difficult due to high QRN levels at most locations.

QSLing PROBLEMS

Many of you, in your correspondence, mention difficulties experienced with various DX stations and their QSL habits. I feel, for the most part, DX stations do the very best they can under the circumstances. They cannot be expected to return a card that you have asked for unless you have provided funds to them for that return. Consider the DX station that comes on frequency and works scores of stations, it becomes an impossibility for most of them to return QSL's even if you have sent yours direct to them. The exception to this is the DX station that needs and wants your card for WAS, WAC, DXCC, WPX, etc., and does not mind spending the money to get it. I have found that many do not QSL 100 percent, but it is generally through the bureau. If you really need the card, send the operator sufficient funds, preferably in the form of IRCs, and odds are you will get that coveted QSL post haste. There are a few DX stations that refuse to send a card under any circumstances, so be prepared for those disappointments also.

DX AWARD

With the popularity of RTTY and Packet use in chasing that ever elusive DX, it seems proper for all awards issuing institutions to recognize the digital mode and update their thinking as far as endorsements are concerned. Jim Sladek, WB4UBD (TI9TTY's QSL manager), wrote about a recent request to CQ magazien with regard to this. Jim reported that the response of the Awards Manager was: "Maybe when they reprint the stickers (endorsement) in the next few months, I can get them to add RTTY to the awards program". A general coverage periodical has to recognize that to be accepted it must cover all facets of this hobby. Why do the supporters of these magazines have to plead and beg for something that should be obvious to the operating management? I know their first response is "numbers" and the question of profit arises, but the need is there and you can let them know it by voicing your opinion to them. Let's band together and get this settled now with a few lines to the management at CQ magazine from each of you, especially the awards seekers. [ED note: how about QST for RTTY non-endorsements also?]

DX REPORTS

From W1DA comes word on the following that were worked or heard in the immediate past:

YO4KCA	14087 MHz	18 Sept.	1102UTC
EA8OD	14090	16 Sept.	1103
OD5NG	14082	15 Sept.	1907
OD5NG does not QSL.			
HL9AV	14088	15 Sept.	1200
VU2VIM	14093	15 Sept.	1130
DU1DBT	14090	12 Sept.	1134
A4XYF	14097	11 Sept.	1125
EA9EB	14092	09 Sept.	1057

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EA9EB	14092 MHz	09 Sept.	1057UTC
EA9NP	14092	09 Spet.	1049
WA9PCI/9Q5	14095	07 Sept.	2335
TU2AA	14092	07 Sept.	1819

N1BNK reports the following activity. There is no frequency, time nor date information given, but note the packet activity! HP1AZO, JA1DSI, 9H1EL, SP7EWL, UZ2FWA, HA2VB, SP3CUG, EA9MY, CT4KO, PAØADC, and TR8DX all RTTY Baudot. Packet follows: DL1WX, LA6OCA, G4TZI, LA6CV, SV7JS and DL1MI.

I8AA, Ros, in a very nice QSO informs us of Kerguelen activity from three operators active on the island. FT8XA is the main operator on RTTY. The other two, FT8XB and FT8XC prefer the voice route, but are known to work "our" mode if it becomes necessary. Ros reports working the group on fifteen meters at 0900 UTC, 13 September.

Ros, also reports that JT should be active by the time this reaches you.

The following is a list of stations and their QSL routes. It is a summary of information that has been received in the past:

STATION	QSL TO
A4XJQ	G4YTI
A35RS	ZL4DO
A92DU	PE1BSX
BY1PK	POB 6106, Beijing, P.R.China.
BY5RA	POB 730, Fuzhou, P.R. China.
CN8BX	Aladiesh des Yeux Ave, Mohamed 5, Marrakech.
C21FS	POB 83, Republic of Nauru.
C3ØLBM	EA5AGY
C3ØLCS	EA3TJ
C31NP	EA3BNX
C53CL	EA8ZZ
D44BC	POB 36, Mindelo, Cape Verde Isles.
EA8YV	POB 258, Laguna, Tenerife.
EA8ZO	Romantica 1, No. 30, Los Realejos, Tenerife.
EA9MY	POB 412, Melilla.
EL2AT	OE3NH
F6AEV	K2HG
FK8FL	POB 4561, Noumea, New Caledonia.
FM7BH	F2BS
FM7BK	POB 152, 97202, Port de France Cedex, Martinique.
FM7BX	205 Eastern Ave., St. Cloud, FL 32769 c/o E. Zysset.
FO8DP	N7RO
FO8KS	POB 5252, Pirae, Tahiti.
HC1BW	KT1N
HL1EJ	POB 6152, Seoul 100, Korea.
HL9AV	EUSA-G3-FD, APO, SF, CA 96301.
HR5SB	WBØMZB
HV2VO	IØAOF
HZ1AB	K8PYD
JY9IU	HB9AHA
K4OZL/KP4	POB 3022 NCS, FPO, Miami,FL 96301
KAØCVR/SV	WB4TDB
KC2OU/V2A	VOA, POB 19, FPO Miami, FL 34054.
KD7P/NH2	68 Betel Palm, S. Finegayn NCWP, FPO San Francisco, CA 96630.
KG4DX	WB2CPV.
KE5IZ/PJ3	WA5ZVZ.
NP4CD	POB 3861, Bayman, PR 00620.
OD5NG	WA1ZFS.
OE3HGB/YK	POB 999 AAA, 1014 Vienna, Austria.
OX3FG	POB 177, 3920 Julianehab, Greenland
PJ8UQ	W3HNK.
P29JS	POB 515, Konedobu, Papua, New Guinea
SVØAC/SV 9	WB4GCP.
SV5TS	POB 251, Rhodes, Greece, 85100
SW2ON	Vas Olgas 122, Thessaloniki, Greece
SW2SU	POB 10483, Thessaloniki, Greece.
TI2SPA	POB 7547, San Jose, Costa Rica.
TI9TTY	WB4UBD.
TR8DX	WA4VDE.
TZ6FE	DL4BC.
T3ØAT	G4GED.
T32AB	N7YL.
UB5MDI	POB 3EEEET, Kommunarsk, 349100,USSR
UO5OK	UT5RP.
UO5OWS	UT5RP
UT5RP	POB 300, Odessa, Ukraine, USSR.
V2AW	POB 229, Antigua, W.I.
VK9ZW	VK6YL.
VP2MIX	HB9AHA.
VQ9DX	VP-9WC66Ø AIMD, FPO, SF, CA 96601.
WH8AAJ	POB 973, American Somoa, 96799.
XT2AU	WA1ZEZ or DJ5RT.
YB3CBF	POB 75, Malang, Indonesia.
YJ8GX	F6GXB.
YS1GMV	POB 1557, San Salvador.
ZK1XL	ZK1CG.
ZK2WL	ZL3AFH.
ZP5JAL	KO2A.
ZS3TL	W7PHO.
ZS6APH	WA3HUP.
3B8FP	IK8DYD.
3X4EX	N4CID.
4U1UN	W2MZV.
4Z4NL	POB 30949, Tel Aviv
4Z4NUT	WB2FTK.
5T5CE	HB9BJL.
5T5RG	POB 322, Nouadhibour,Mauritania.
5V8WS	DJ6QT.
5W1EJ	WØWP.
6W1CC	F6CVE.

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HAVE RTTY—WILL TRAVEL

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KØVKH TECHNICAL DATA LIBRARY

PART ONE

This library contains files which may be of interest to the remote user. These files may be obtained by leaving a short note in this mailbox (MSOVKH), listing the 'PG' (s) of interest to the remote user. That/those file/files will be loaded into this MSO, addressed to the callsign of the remote user, (I.E., W4XXX"PG1). KØVKH and/or the RTTY JOURNAL assume no responsibility for problems with equipment modified utilizing this information.

1. PG1 interfacing the 'HAL' DSK3100 disk system parallel port, to the OKI-DATA 82A printer.

2. PG2 Interfacing the 'HAL' DS3100 (ASR, MSO or MPT models) serial interface (retrans data) port, to the OKI-DATA 82A printer.

3. PG3 using "ASCII control codes" to program the OKI-DATA 82A printer.

4. PG4 interfacing the 'HAL' DS3100 (ASR, MSO or MPT models) serial interface (retrans data) port, to the Epson MX80F/T serial interface board.

5. PG5 'TAB' setting routine for use with the Epson MX80F/T printer, and the 'HAL' DS3100 ASR, serial (retrans data) output.

6. PG6 not presently being used.

7. PG7 modification of the 'HAL' CRI-100/200 RTTY/computer interface, to improve CW decoding.

8. PG8 interfacing the 'Kenwood' TS-930S 'FSK' input, to the 'HAL' ST6000 RS232 output, (or other RS232 signals).

9. PG9 modifying the INFO-TECH M-300-C keyboard for output of 'inverted' FSK.

10. PG10 modifying the 'Yaesu' FT-757GX to enable the transceiver to transmit in any area that it is capable of receiving.

11. PG11 modifications to the 'Kenwood' TS-930S to enable it to transmit in any area that it is capable of receiving.

12. PG12 modifications to the 'Kenwood' TS-930S to enable the "Ten Hertz" readout position on the digital frequency readout.

13. PG13 adding eight (8) additional memory channels to the 'Kenwood' TS-930S, and the capability to 'scan' all sixteen (16) memory channels.

14. PG14 interfacing the 'ICOM' 751 transceiver with the 'HAL' ST6000 demodulator, for use with 'AFSK'.

15. PG15 procedures to follow in constructing a parallel printer cable for interfacing a 'HAL' DSK3100 disk drive system, to either an 'Epson' MX80F/T, or FX80 printer. (all are 'Centronics' compatible).

16. PG16 procedures to follow in adjusting the "VCO phase lock loop" center frequency, of the 'HAL' DSK3100 disk drive system.

16A. PG16-A additional considerations when adjusting the DSK-3100 'VCO' frequency.

17. PG17 adjusting the 'Kenwood' TS-930S (serial numbers prior to 3080001) for better transmitted audio tonal quality.

18. PG18 procedure for fabricating a parallel interface cable for the 'HAL' DSK-3100 disk drive system, to the 'MPI' 88G dot matrix printer.

19. PG19 procedures for re-configuring drive two (2) of the 'HAL' DSK-3100 disk system, to operate as drive one (1).

20. PG20 procedures for configuring the 'HAL' DS3100 and a dot matrix printer to receive and transmit RTTY pix.

21. PG21 'FSK' power turn-down for the 'Kenwood' TS-930S.

22. PG22 parity bit use with ASCII RTTY codes.

23. PG23 examples of special option character (SOC) memory programming 'HAL' DS3100.

24. PG24 a brieg synopsis of the changes to the 'HAL' DSK-3100 system with version 4.4 software.

25. PG25 procedure for interfacing an OKI-DATA 82A dot matrix printer to an 'INFO-TECH' M-200F demodulator, (RS232, ASCII, 300 baud).

26. PG26 procedures for copying large/multiple, files from one diskette to another, 'HAL' DSK3100 system.

27. PG27 procedure for changing the VFO tuning rate, 'Kenwood' TS930-S.

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28. PG28 modifying the 'Kenwood' TS-930S for use on 'AMTOR'.

29. PG29 modifying the 'ICOM' IC-751 to provide a continuous transmit capability between 1.5 and 30 MHZ.

30. PG30 a handy table for constructing dipole antennas.

31. PG31 utilizing 'FSK' with the 'ICOM' IC-745 and the 'HAL' ST6000.

32. PG32 utilizing the 'ICOM' IC2AT, IC3AT, or IC4AT transceivers with the 'Kantronics' "The interface" for RTTY, (AFSK).

33. PG33 procedures for modifying the "Passive RTTY Scope Adapter".

34. PG34 procedures for modifying the 'ICOM' IC-745 for continuous frequency transmit capability.

35. PG35 intermittent power output from 'Kenwood' TR-7930/50 transceiver.

36. PG36 modification of 'ICOM' IC-02AT for expanded frequency coverage.

37. PG37 interfacing the 'Kenwood' TS-940S (FSK) to the 'HAL' ST-6000 demodulator, (and other RS-232C signal sources).

That is the listing of KOVKH's technical data library. Following and in subquent issues of the RTTY JOURNAL will be the contents of each file, in case you do not have the capability to access Dick's MSO, or haven't the capability to copy the contents with your printer, or just do not have hard copy capabilities.

Dick, KOVKH says to enjoy them, and if necessary, he will enter into correspondence with anyone sending an SASE with their query, to him.

PG1 HAL DSK3100 parallel printer port, to OKI-DATA 82A parallel input port.

Interfacing the HAL DSK3100 disk system parallel port is very easy. The 82A printer works nicely up to 600 baud (ASCII mode).

Use a sixteen (16) conductor ribbon cable to interface these units. The printer cable end must have a "Centronics compatible" male connector (36-pin amphenol 'DDK' 57-30360). Pin assignments are as follows:

PIN	SIGNAL	DIRECTION	DESCRIPTION
1	data strobe	TO PRINTER	synch's input data/
2	data bit 1	" "	releases to printer
3	" " 2	" "	input data (high
4	" " 3	" "	equals "1", low
5	" " 4	" "	equals "0").
6	" " 5	" "	" "
7	" " 6	" "	" "
8	" " 7	" "	" "
9	" " 8	" "	" "
11	BUSY	FROM PRINTER	(high equals, data cannot be received. low equals,data can be received).
17	GROUND	N/A	Chassis ground

The HAL DSK3100 disk drive end of the printer cable must have a male DB25 connector attached. Pin assignments are as follows:

PIN	SIGNAL	DIRECTION	DESCRIPTION
1	strobe	to printer	synch's input data to printer.
2	data bit Ø	" "	printer input data
3	data bit 1	" "	" "
4	data bit 2	" "	" "
5	data bit 3	" "	" "
6	data bit 4	" "	" "
7	data bit 5	" "	" "
8	data bit 6	" "	" "
9	data bit 7	" "	" "
11	busy	FROM Printer	(controls data flow when printer busy)

GRAPHIC DESCRIPTION OF DSK3100 CABLE TO OKI-DATA 82A PRINTER

HAL DSK3100 END OF CABLE	OKI-DATA 82A END OF CABLE
PIN 1 (STROBE)	PIN 1 (STROBE)
PIN 2 (DATA BIT ZERO)	PIN 2 (DATA BIT 1)
PIN 3 (DATA BIT 1)	PIN 3 (DATA BIT 2)
PIN 4 (DATA BIT 2)	PIN 4 (DATA BIT 3)
PIN 5 (DATA BIT 3)	PIN 5 (DATA BIT 4)
PIN 6 (DATA BIT 4)	PIN 6 (DATA BIT 5)
PIN 7 (DATA BIT 5)	PIN 7 (DATA BIT 6)
PIN 8 (DATA BIT 6)	PIN 8 (DATA BIT 7)
PIN 9 (DATA BIT 7)	PIN 9 (DATA BIT 8)
PIN 11 (BUSY)	PIN 11 (BUSY)

NOTE: PINS 14 through 25 are grounded.

All printer "operator panel" dip switches, (located on front of the printer and accessible when cover removed) are "OFF". All "control panel" dip switches (located on rear circuit

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CoCo RTTY - PART III

Mark Spencer, WA8SME/DA1OY
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APO New York, NY 09012

This installment covers the active mark and space filters. Active band pass filter theory is covered by many electronic publications, but that doesn't help manage the many interrelated formulas involved with designing a filter for a particular application. The computer is well suited for this type of calculation and the program by B.E. Taylor, WD4HPC published in January 1983, 73 Magazine, is just one good example of making the computer serve in the Ham shack. I modified Taylor's program to work with the CoCo and used it in developing the filters in this circuit and would suggest using it if other shifts or tones are to be used in the demodulator. The program listing is included in the package of programs available through the RTTY JOURNAL ($1.50 PPD).

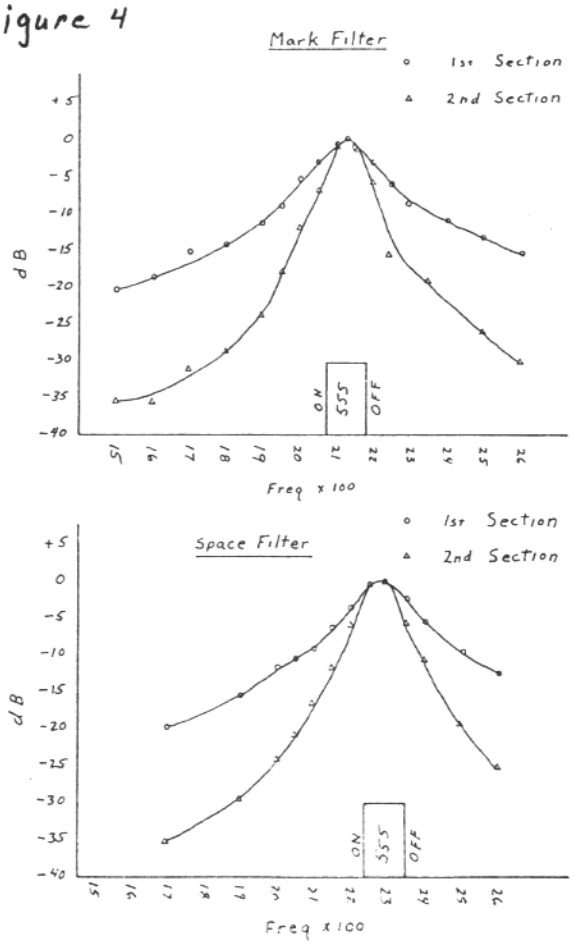
I chose a two pole active band pass filter with reasonably high Q for the demodulator (fig. 3). Too high of Q and the tuning becomes critical and the filter would be very unforgiving of improperly spaced shifts. Too low of Q would make tone separation "iffy." Once starting parameters were decided, an afternoon of figure manipulation with the computer resulted in the filter design of figure 3. (A sample printout using my adaptation of Taylor's program is Table 1).

The calculated Q of approximately 18 and 27 was never realized. The measured selectivity of the filters is plotted in figure 4. The resulting Q is somewhere around 10 for one section and 20 for two. This selectivity is just about right for the purpose.

The filters are tuned to peak output at center frequency. Adjustments using multi-turn pots are not critical and can be easily done using a cross pattern on an oscilloscope; however, peaking with an AC voltmeter also works well.

The 555 on/off notations on the selectivity curves leads us to next month's installment. This notation illustrates the range of frequencies where the NE 555 one shot timers will detect/rectify the audio into TTL data pulses. CUL.....

Figure 4



FOR THIS DESIGN
R1= 130000 OHMS
R3= 208 OHMS
R5= 270000 OHMS
C= .01 MICROFARADS
F= 2125.45896 HERTZ
Q= 18.0288231
G= 1.03846154

FOR 2 SECTIONS TOTAL Q= 27.99

FOR THIS DESIGN
R1= 130000 OHMS
R3= 178.3 OHMS
R5= 270000 OHMS
C= .01 MICROFARADS
F= 2295.40426 HERTZ
Q= 19.4703535
G= 1.03846154

FOR 2 SECTIONS TOTAL Q= 30.25

TABLE 1

Figure 4
on page 10

THE STANDARDS OF EXCELLENCE

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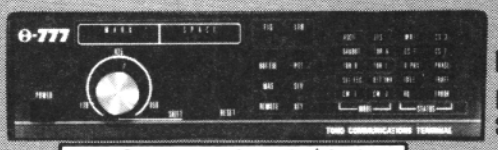

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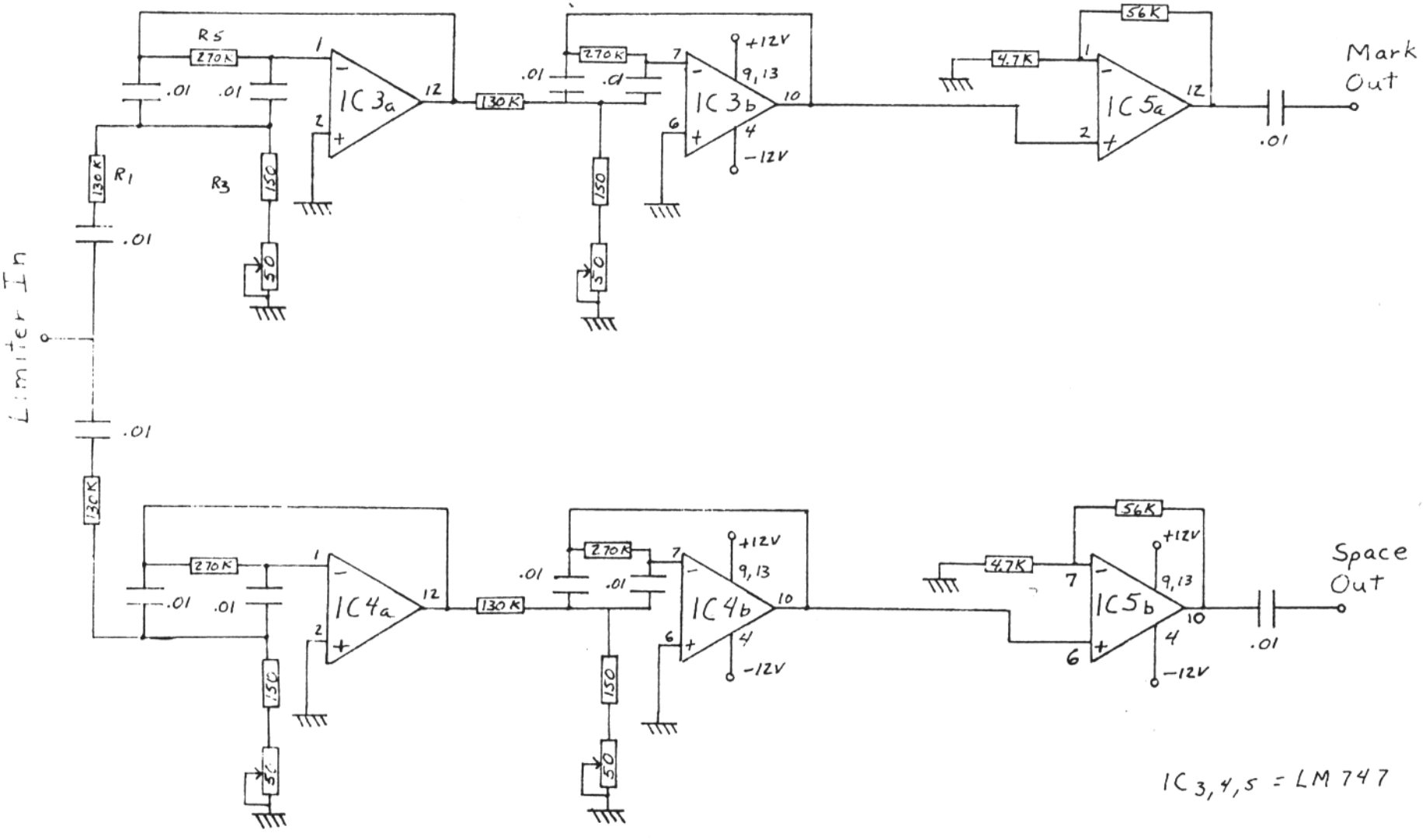
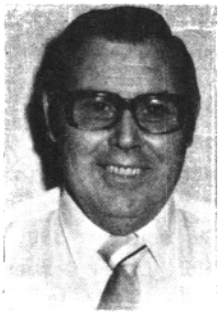


Filters fig 3.

by GEORGE

HITS & MISSES



GEORGE HAMMON, WA6CQW
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SB 1431

California Amateurs, with the help of Joe Merdler, N6AHU, won an important amendment to Senate Bill 1431. A meeting on July 31, 1985 with Herschel Rosenthal (California State Senator), resulted in the bill exempting all radio reception gear except that equipment specifically designed to intercept cellular radio telephone conversation.

A defeat for the high priced Pacific Telesis lobbyists who had demanded an all inclusive law that would have provided criminal penalties for anyone who even overheard cellular telephone conversations.

The battle looks to have been won in California, but I have a strong feeling that the battlefield will shift to the federal level. Attempts will be made to persuade the FCC to ban ALL gear capable of cellular telephone reception.

The need to make the ARRL and FCC aware of our wishes is important if not vital.

902-928 MHz

The 902-928 MHz band is now available (September 28,1985) to all Amateurs, above Novice class. Emissions authorized are: A1A, A2A, A2B, A3E, A3C, A3F, F1B, F2B, F3B, G3E, F3C, F3F, F8E and PON.

Amateur operation in Colorado and wyoming bounded by latitude 39 to 42 degrees N., and longitude 103 to 108 degrees W., is not permitted.

Amateur use of 902-928 MHz is also prohibited by the FCC in the area of White Sands Missile Range. Portions of New Mexico and Texas, Latitude 31 degrees, 41' north, on the east by longitude 104 degrees, 11' west, on the north by latitude 34 degrees 30' north and on the west by longitude 107 degrees 30' west.

MEXICO

On Thursday, September 19, 1985, I went on the air with Health and Welfare traffic to Mexico City. I started an hour after the initial quake and worked thru to midnight. Friday, I started again until the second quake hit. Saturday I pulled another shift until nine o'clock and again on Sunday 'til the band and lack of sleep folded me. The total at this station was 175 messages sent and 35 to be delivered. I enlisted the help of Jim, WA6UFY and his wife Linda, WA6HGA, and with the patience of XE1USA, XE1FJ, XE1HC, XE1ALK and XE1GE there resulted a smooth flow of traffic both ways. Amateurs from all over California, Arizona and Texas, mounted a maximum effort in part due to the large Hispanic population in these states. The press, Red Cross and other emergency services relied on Amateurs from coast to coast for help. I have never been prouder of our Amateurs. A big tip of the hat gang, once again we got through when others in the commercial line took it on the chin.

RETIREMENT

My retirement was short lived. I am now managing a local radio store. The difference between my old job and this one sure makes working fun.

So long for now, George, WA6CQW

THE EDITORS LOG

George, WA6CQW is too modest in his telling of his activities during the Mexican earthquake. Not so your editor. George was on TV channel 8, here in San Diego County while doing his best to relay incoming and out going messages to friends and relatives frantically looking for information on hotels, hospitals or homes where loved ones where thought to have been.

There was one large gap in the chain from Mexico City to the rest of the world however. WHERE WAS RTTY?? Since day one of the quake, I looked, in vain, for RTTYers to pass traffic in and out of Mexico City. My antenna system was damaged when we rewrapped a flapping balun, while neglecting to undo the rotor at the base of our crank-down, fold over mast. The result was that I spent almost three weeks at the home of a very

To Page 12 please

C L A S S I F I E D A D S

30 words $3.00, additional words 5 cents each - Cash with copy. Deadline 1st of month for following month.

NEWS-NEWS-NEWS-Amateur Radio's Newspaper "WORLD-RADIO". One year subscription is $9.00. Send to: Worldradio, 2120 28th St., Sacramento, CA 95818.

WANTED: Schematic or service manual for Northern Radio TU type 174, Model 1. Good Zerox OK. Jim Stanicek, AG3Y, 1028 Corbett St., Hagerstown, MD 21740.

HAM RADIO MAGAZINE- The no nonsense state-of-the-art technical magazine. Subscribe now and see for yourself. 1 year $19.50 in USA. Canada & foreign surface $21.50. Europe, Africa and Japan area $28 airmail. Ham Publishing Group, Greenville, NH 03048.

ROBOT 800 TERMINAL, Mint condx, recently factory serviced $200. Kenwood TR-7500, 2 meter, Midland 13-509, 220 rigs, best offer. A. Lakritz, KB9DD, 319 Bird Rock, LaJolla, CA 92037. 619/459-4401.

HAL DS-3000 KSR, New condx. with Monitor and Manual $325. Model 32, new condx $135. Many other items, list for SASE. G. Churpek, N6FL, 839 Cambon Circle, Ojai, CA 93023. Tel. 805/646-5296.

WANTED TELETYPE MODEL 20 typing unit and keyboard units similar to Model 15 but made for 6 unit code. Teletype codes are BP172/347 or BP176/347 typing unit and BK5PA keyboard. W. Turner, 5 McIntosh, Clarendon Hills, IL 60514. 312/323-1025

SALE: 2 Lorenzs with ASR, very good condx., Model 32 and 33 TTYs, need works or good for parts. 301/730-1056 ask for Tony.

Alpha 374, 3KW amplifier, $1600, BC221 Signal generator, $50; Harvey-Wells Model TBS-50C "Bandmaster SR transmitter $75; Drake TR-22C 2-M $100; E.F. Johnson in-line coupler $30; Electrohome 9" BW monitor $90; Epsom MX80F/T serial interface $50; Extel Commercial Baudot printer 60WPM,manual $100; GE 811A tubes $10; Hal RS2100 RTTY tuning scope, $195; Hal MPT3100 ASR RTTY terminal with MSO $1700; HAL DSK3100 disk drive system, $650; HAL ST6000 demodulator $500; INFO-TECH M-200F demodulator $275; INFO-TECH M-300C tri-mode keyboard $225; Kenwood SP-70 speaker, $20; Kenwood SP-520 speaker, $20; Kenwood TR-7400 xcvr, $169; Kenwood TS-930S(AT) w/filters, $1100; Loop Supply 160v, 20/60 mil, $30; MPI-88G dot matrix printer $150; OKI-DATA 82A dor matrix printer, $200; Tempo S-15 HT, $150; Tubes, extensive collection, let me know what you need. Complete Drake TR-7 Station TR-7, PS-7, RV75, Aux-board, 7075 mic., $1000. Units shipped and insured UPS, FOB Rapid City, SD. Prices do not include shipping. Most are in excellent condx.,the "Bandmaster" is- as is. DIALTA Amateur Radio Supply, 212-48th St., Rapid City, SD 57702. 605/343-6127.

PACKET/ASCII/BAUDOT/CW for IBM-PC and equals. Split screen and buffers beaucoup. Bigger and better than ever! SASE to: Emile Alline, NE5S, 773 Rosa Ave., Metairie, LA 70005.

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LIBRARY CONTINUED

board and accessible when cover is removed), are in the "OFF" position. Jumper "SP2" is set to the "B" position, and jumper "SP1" is set to the "A" position. Good luck! DE: Dick, KØVKH

PG 2 THROUGH PG 37 will be reproduced in subsequent issues of the RTTY JOURNAL.

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EDITORS LOG CONTINUED

dedicated Amateur named Judy, N6LSO. During daylight hours we passed some two thousand messages in and out of Mexico City, with the mighty help of Amateurs: John, N6LUK; Corey, K6ACY; Dennis, N6XI and Shea, N4HNS/6 who lost his voice and almost flunked some of his college classes due to his dedication. In Mexico, were operators: Jesus, XE1IM; Pedro, XE1HHA; Carlos, XE1BX and John, XE1UX/N6IOJ.

XE1BX, and XE1UX with their wives met N6LSO, N4HNS, N6XI, KA6NYK and N6ELP for dinner last week. We enjoyed each others company and and made friends of "voices at the other end". Where was RTTY??

RTTY was made for emergency traffic handling, why was it not utilized to the fullest? I ask you my fellow RTTYer, where was RTTY when needed? The adage of "use it or lose it" applies here, if we do not use the RTTY spectrum we have, soon we will have none!

There were some RTTYers working and working hard. One was Art, XE1LL. Art was working with a blow torch, I've been told, helping release victims from the twisted metal that surrounded them.

Ralph, KD6QS and Valentin, XE1M were the only two RTTYers on the air passing any traffic. Where was RTTY?? Traffic could have been handled much more accurately than the slow, slow process of voice.

Judy and I are still stopped by people having seen us on channel 10 here and in New Jersey. What an experience! BUT WHERE WAS RTTY??????????

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BY:Dick Uhrmacher, KØVKH
212-48th Street
Rapid City, SD 57702

MSO'S

Hi Gang! Can you believe that Ol' Man Winter is just around the corner? The 18 degree temperature, and four inches of snow, drove that point home early to us South Dakota natives recently. ANd, that means it's time to take one last look at towers, antennas, feed lines, etc., prior to Winter's real onslaught. Nothing worse than hanging from a well-secured safety belt, trying to correct some newly found antenna problem, while the ambient hovers just below "frost bite" someplace!

MSO RAMBLINGS: John TG9VT, (Guatemala City, Guatemala), tells me that his MSO will be back in service on the National Autostart Frequency soon. Summer thunderstorm activity is slackening a bit, and, of course, it will be nice to see John's booming signal again. ---Bob, KBlS, could be heard on the air during most of hurricane Gloria's pass through his neighborhood near Westwood, MA. Bob's emergency generator was put to good use!---Dick, WD4MTC, (known from this point on as "TV Star"), was seen on the local Fort Myers, FL., TV stations several times, actively engaged in passing SSB health and welfare traffic to the Mexico City area after their disastrous earthquake. Dick's station was one of the mainstay communications centers during this emergency, and we all take our hats off to him for a job exceedingly well done!--- The KØVKH MSO now has a new TS-940S transciever in service, replacing a very old, but ever-so-faithful, TS-820S. And, by the time this article is in print, Frank, K4KOZ, will also be the proud owner of a new TS-940S, also in MSO service.

NEWS FROM UP-STREAM, (14097.5 KHZ): Jerry,WAlIUF, tells me that some of the MSO/CBMS' on the "International Mailbox Frequency" now have a new operating command structure. (See information listed below). As in the past, these systems all nave remote user accessible "HELP" commands, which provide the intimate details. (Turn your printer on folks, while copying the "HELP" information, as it precludes never-ending repeat requests for the same information)! Rumor has it that Jerry is also the proud owner of a new TRS-80 Model IV, which is being pressed into Mailbox service even as I write these words! Congrats Jerry! Jerry is also recovering from eye surgery at this time, and we wish him a speedy and complete recovery. Dayton, (and the Imperial House North), will never be the same, considering that the Imperial Wizard of the Great Society of OH-WHA-TAH, will be able to "see" again!

Thanks to Bob, KlUOL, Bethel, CT, for providing the following list of the new Crown Mail box software commands. Rather than list them all here, I'll provide the basic commands, and remote users can then utilize the familiar HELP command for a more detailed list:

COMMAND	FUNCTION
XXXZW	Send Mailbox 'WRU' response.
XXXZL (Callsign)	Log onto System.

Note: The 'XXX' is usually the last three letters of the station callsign.

:H	System sends HELP information.
:D (Callsign)	Lists message for 'callsign'.
:P	System sends your messages.
:M (Callsign)	command to store a message for another station. System replies with 'ready' message. End message with four N's. System replies with 'stored' message.
:KILL	Deletes your messages.
:X	Log off Mailbox.

Bob informs us that the CR/LF is still used to execute commands, (before and after each command, or after the 'callsign' if used), and that it is important to 'log-off' the system. If more than one minute lapses between commands, the system automatically logs you off. The system contains many other sophisticated features, such as remote speed changes, a relay mode, and file protection. Giv. it a shot, you'll like it!

DAYTON HAMVENTION, 1986: "Fore-warned, is fore-armed"!! If you are planning on staying at the "Imperial House North" Motel in Dayton, Ohio, while attending the 1986 Dayton HAMVENTION, you will need to have CONFIRMED reservations, and these reservations should be made immediately. Typically this motel, (where the annual RTTY Dinner is held), is booked full by the November-December time frame.

MSO COLUMN CONTINUED

TECH TIPS FOR THE MONTH: Several new files concerning use of the Kenwood TS-940S on RTTY, are listed in the KOVKH "Technical Library" on the National Autostart Frequency. Continuous transmit frequency capability, reduced VFO tuning rate, interface to the ST6000, etc., are available. Additionally, it should be noted that coupling the continuous transmit frequency capability, with the Kenwood AT-940S Automatic Antenna Tuner, makes it one of the hottest MARS rigs around. The AT-940S will also tune and operate continuously across the HF spectrum.

MSO SOAPBOX: Congratulations to Jerry, WA1IUF, for his excellent article in the October 1985 issue of QST, (page 59). Jerry's very appropriate comments and suggestions should be read by all interested in any form of digital communications, especially those who may be influential in any manner concerning digital modes.

In conjunction with Jerry's article, as well as others who have spoken out on this subject, this author feels that it is time for expansion of the "Gentlemens Agreement", with reference to 20 Meters. The area from 14103 to 14125 is really a "no mans land", containing a smattering of RTTY, AMTOR, Packet, SSB and CW signals. The unprecedented growth of digital forms of communication, including RTTY, AMTOR, Packet and CW modes, makes the referenced Gentlemems Agreement both out of date, and unresponsive to the current needs of Amateur Radio. No formal action by the ARRL or FCC is needed! We need only to start routine RTTY, AMTOR and Packet activities in this area, including hopefully some permanent MSO/CBMS /Packet operations on frequencies where remote users can count on systems appearing on a hour to hour, day to day basis. Although it is a time-worn phrase, this author strongly believes that it is another "use it, or lose it" situation, and further SSB expansions will eat up this very spectrum unless activity dictates other uses.

Finally, this author felt a twinge of guilt during the catastrophe in Mexico City. We spend literally thousands of dollars on very sophisticated RTTY systems, capable of automatic storage and re-transmission of RTTY messages. Yet, to my knowledge, not one of us was able to dedicate these systems to much needed assistance during this crisis period. It wasn't because the systems weren't able to handle the traffic, or that we lacked the desire to participate. It was ONLY because we were not prepared! I'd like to see a concentrated effort by MSO/CBMS operators to affiliate themselves with some disaster relief organization, (most likely the American Red Cross), where we could assist in disaster communications. In talking to those familiar with Red Cross activities, I'm also confident that they do not realize the potential of the MSO/CBMS systems, nor how to exploit them. I have some basis ideas along these lines, but I'd like to hear from each of you as well. It would be well worth the time and money expended to be able to share in these communications problems, rather than being known only for routine, and sometimes quite mundane, communications. What do you say Gang? what are your ideas???

NEW MSO STATIONS ON THE AIR

MSOVTP has been on the air since 1984 but has not had much usage. Most of the files are ARRL bulletins, DX bulletins, formal traffic to and from NTS and a few personal messages. MSOVTP parameters are: Frequency 147.33 MHz 9normal repeat formula). Time:6PM to 6AM next day. 110 Baud ASCII, limit of 50 files. 5000 bytes per file-until 176 K bytes are used up. Acesss the MSO by sending ret MSOVTP ret Directory of commands can be listed with ret .HELP ret . As you can see the system follows the familiar HAL format. The software used is from VidComm. Computer is VIC-20 with a 1541 disk drive. Coverage of MSO is approximately to Conneticut, to NH seacoast, to NH lakes region, to Kenne, NH. MSO operator is Al Brown, Sr., W1VTP of Manchester, NH.

I hope the Turkey Fairy is nice to each and every one of you, and doesn't add inches to your 'waste'-line! See you again next month!

DE: Dick, KØVKH.....

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DX COLUMN CONTINUED

6W1CK	DL1HH
6Y5SH	AK1H
7P8CL	SM5KDM
8P6JG	WA8IMO
9H1GD	51 Annunciation St, Tarxien, Malta
9K2LA	POB 3534, Safat, State of Kuwait.
9X5SP	DL8OA.
9Y4GX	W7GVF.

I will add to this list as new routes are obtained and repeat it every three months for your convenience. Hope you find it useful.

Thanks to each contributor to this column,your input is always welcome no matter the content.
See you next month, 73 es gud dx de Joe, AJØX....

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