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EXCLUSIVELY AMATEUR RADIOTELETYPE

VOLUME 33 Number 4 APRIL 1985 PRICE $1.50

MITSUO MORISAWA, JA5TX OF KOCHI, JAPAN, Mitsuo works low band AMTOR and is on 80 to 10 on RTTY, and has DXCC capabilities.

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RTTY JOURNAL

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FRANKLIN "DUSTY" DUNN, W8CQ 1907 - 1985

It is my painful duty to inform you of the passing of an old friend. Franklin M. (Dusty) Dunn, W8CQ, Became a silent key on March 2,1985, just 20 days short of his 78 birthday. Dusty, was Editor/Owner of the RTTY JOURNAL from 1967 until 1977, and had been an Amateur Radio Operator for 60 years.

Last year we lost Merrill Swan, W6AEE one of the founders of the RTTY JOURNAL. This year Dusty. Now there are just a few of the "Founding Fathers" of RTTY around. Those of you not having the privilege of knowing these two men missed a lot, as all of the many friends of Dusty can attest to.

Our deepest sympathy goes out to Dustys' wife Crystal.

Dusty once said that, "the job of publishing the RTTY JOURNAL is a labor of love". Well I can certainly agree with that statement. Since John, W3KV, was kind enough to send me the details on Dusty, I have been rereading some of the older RTTY JOURNALS. I noticed in one, dated in March, 1953 that, "the first Amateur Teletype contact cross-country was heard". What giant steps the wonderful world of 'green keys' has made since then. Reading further into that issue gave me the following item, "Bulletin #19 from Wayne Green, W2NSD suggests the following frequencies for FSK Teletype work, in order to find each other and make QRM a minimum. 3620 on 80 meters, 7140 on 40 and 14340 on 20 meters.". "One reason for these selected frequencies is the use of Auto Start on the Terminal Units. It is felt by some that this will not be possible, however as we get more experience, it should be possible to design a circuit that would be immune to QRM". Hope they are still trying!

Can't help noting some of the other remarks from that early era, like, "Barney, W6GPF reports a fellow employee is all rigged up for two meter teletype with a model 14 setup. This will give us two stations in the San Diego area...".. Or "been trying to break in for some little time, all my fault however, forgot to complete the circuit by not plugging the unit thru the transmitter". Sure sounds familiar..

You never know what strange items you will run across while perusing through past issues of the RTTY JOURNAL. The strangest is in the vintage September 1966, where there is a listing of all of the stations successfully printing the text from the Armed Forces Day Message. I looked for the California calls to see if there were any that I recognized and found a listing of "WB6AQR" I looked again at the date of issue and was shocked, for it was my son Glenns call, who now resides in Lake Zurich, Illinois. In 1966 we were in Glendora, California, where Glenn was interested in football and baseball not Amateur Radio. It was not until 10 years later that Glenn became interested enough to get his ticket. Wonder who the original holder of WB6AQR was? At least it answered a question I had wondered about for quite awhile..when does the FCC re-issue a formerly viable license, must be 10 years...

KT1N, Roy Gould, reports that he is now the QSL manager for HC1BW, Orbra Bliss, Quito, Ecuador. Address of KT1N is "POB "DX", Stow, MA 01775. His address is good only as above or in the 1985 callbook.

I received a QSL card from 4U1UN the other day. With it came the following information:

On 24 October, 1985, the United Nations will celebrate the 40th Anniversary of the United Nations Charter signed in San Francisco in 1945. To celebrate this event, and in the spirit of developing friendly relations among nations, the United Nations Staff Recreation Council-Amateur Radio Club is sponsoring the "UN AT 40 AWARD".

This award is available to any Amateur radio station or SWL, that has contacted two of the three Amateur radio station operating with the UN prefix, during the United Nations 40th anniversary year from 1 January to 31 December 1985. Contacts can be made on any band or mode. The three UN stations with their locations are:

4U1UN - UN Headquarters in New York.
4U1ITU - International Telecommunications Headquarters in Geneva, Switzerland, and
4U1VIC - Vienna International Centre in Austria.

Applicants must send a list of stations worked, time, date, mode, report and band. List must contain a signed statement vouching for the bona fides of the application. Cost of the award is $5.00 US or 15 IRCs, of which $4.00 will be donated to the United Nations Children's Fund . (UNICEF). Send to: United Nations Staff Recreation Council, A.R.C., United Nations, Room DC1-0724, Box 20, New York, NY 10017, before 1 February, 1986.

That award looks like a natural for the Europeans, statesiders may have a rough time getting either of the stations in Europe. Good luck!

Another award notice sent to me comes from the Lockheed A.R.C. W6LS.

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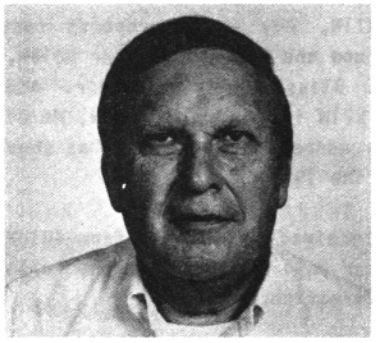

DX

JOE WOOD, AJØX

POB 84

LAUREL, MS 39440

Hello fellow DXers, April is upon us. Time sure does fly by when you are having fun! Lots of fun coming up this month too. The 26th, 27th and 28th will be red letter days.....our favorite get-together in Dayton and exposure to new equipment, ideas, flea market treasures, friends and tales of DX that can only be spoken in whispers. I think most DXers must have been exposed to fishing at one time or another...I sure do hear some whoppers from time to time! Another RTTY Forum is schuduled at Dayton and, for those that attend, will provide exposure to various presentations on RTTY, AMTOR, Mailbox/Bulletin Boards, DX, etc. The opportunity to meet and greet fellow RTTYers is there too, so I hope that you plan to attend.

The RTTY World Championship contest appears to have been a complete success. I have been given a few "unofficial" scores by several participants and they appear to be quite high as compared to last year. This is interesting in that the cycle is one more year into the slump and propagation has not been the best, which indicates that more operating time and perhaps for the multibanders, usage of the lower frequencies was involved. I made my decision to go single band after working twenty meters into oblivion on Friday night and quick check of 40 and 80 meters showed high QRN levels from thunderstorm activity which was definitely not for me. Conditions on Saturday were excellent with furious activity coming from almost all directions. Absent from my log [and all others so far], is Africa, but all the other continents are there. The Far East, Pacific, and Europe were logged on more than one occasion. JA's in the late afternoon and VK's long path were very welcome at this QTH. 108 out of 285 contacts were with foreign stations, the balance being comprised of U.S and Canadian stations, some of which told me that they did not know a contest was on (all they had to do was listen!) Some of these were worked a second time later on. Aaah, the spirit had gotten to them but dupes one doesn't need. This contest was the most in enjoyment for me and I plan to be in there again next year, so if you haven't tried it, you do not know what you are missing!

The operation from Cocos Island is history. Jim Sladek, WB4UBD, has been gracious enough to keep me well informed on the operation and has passed along some of the details. TI9TTY was activated from 2200 UTC on 12 February until 1500 UTC on the 15th of February. 109 contacts were made, 70% of which, were stateside. 6 AMTOR contacts were made, 5 with Costa Ricans and 1 with a stateside station. The short stay coupled with poor band conditions took its toll. The operators are ready to do it again in the future with a more lengthy stay and perhaps over a contest weekend. This writer would like to be a part of the next effort. Jim has promised an article with photos and will be sending this along to our Editor for future publication. Thanks to all of the group who made the operation possible.

The "above 14100" subject has drawn a multitude of responses, some of which are very interesting. This topic is the theme of my presentation to the upcoming Digital meeting in San Francisco the latter part of March. A response summary will be included in this column in the future.

New DXCC members. Mas, W8WYK, reports that he has just received certificate number 92 for RTTY. Mas also holds WAS RTTY number 82! Congratulations and keep up the good work.

Togo. Walter, DJ6QT, was active from this rare spot for a few days in the first part of March signing 5V8WS. QSLs for this period go to his home call. His plans were to jump over to Benin where he will sign TYOABD. QSL via DJ6QT.

Desecheo. Although the DXpedition worked phone and CW, no RTTY was attempted. This one goes wanted by all DXers and perhaps one of these days someone will activate, on RTTY, this easy to reach island off of Puerto Rico.

Vatican. A promise from I8AA and I5FLN to activate HV2VO the first week in July, has been received. For those of us needing this one we say thank you.

March activity levels were on the upswing from previous months as indicated by the band activity, incoming letters and phone calls from concerned RTTY users. I have to agree with some of you as regarding activity levels and poor propagation, in that perhaps propagation is there, but no one is operating, thinking that propagation is poor! I need to hear from you, after all this is your column. You can leave a note in my MSO and I'll be happy to respond to it also.

Thanks go out to the following Hams for their input, which in some cases required a great deal of thought and time to put it into words: WB4UBD, KT1N, WB1AEL, W2JGR, WB2CJL, W1DA, N1API, WB1AQA, TG9VT, KB2VO, DA1OY/WA8SME, KA5BWU, AB0Y/4, I8AA and W8WYK.

I will be on the lookout for those attending the Dayton Hamfest. Sure hope to meet a bunch of you there and in closing, I wish to thank each of

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MSO'S

by *Dick Uhrmacher,* **K0VKH**

Hi Gang! The influence of "Planet Mongo" is strongly felt this time of the year, resulting in the mass migration of bipeds from all over the Planet Earth, to Dayton, Ohio! If you are planning to attending the "Dayton Hamvention" this year, you might want to consider travelling by air. "Piedmont" Air Lines has a very economical special air fare for Ham Radio Operators, called the "K5YI Hamvention Special". This airline provides service from many points within the United States and the savings are substantial. Call them at 1-800-334-8644, and ask for Ellis Goforth. Thanks to Frank, K4KOZ for providing this information, and to K5YI for his interest in providing the service. For those of you who may be wondering about ground transportation once arriving in Dayton, the Hamvention folks provide outstanding bus service throughout the Dayton area, to and from the airport, to Hara Arena, and to and from most motel/hotel areas.

If hotel or motel accomodations are needed, the "Dayton Hamvention Housing" group should be contacted at 1980 Kettering Tower, Dayton, OH 45423, phone 513-223-2612.

This is the "last call" for those of you who may want to attend the Annual "RTTY Dinner", held at the "Imperial House North", (I-75 and Needmore Road, Dayton, OH), on Saturday night, during the Hamvention. As of this writing, there are some vacancies left, and you may add your name to the list by dropping a short note to the AJOX or K0VKH MSO's on 14087 KHz, or the WA1IUF MSO on 14098 KHz. We always have a good time of it, and we'd enjoy your company if you can make it!

MSO OF THE MONTH: John Troost, TG9VT, has had a long and colorful career in Ham Radio, and we cherish his participation on the "National Autostart Frequency", from Guatemala. John was born in Holland and has lived in some exotic places, such as Sweden, England, Algeria, Libya, Germany, Ecuador, Costa Rica, and Brazil. John even admits to a tour in Boston, Massachusetts! John is married to a lovely Guatemalan woman, with two fine sons and he paints a beautiful picture of his QTH near Guatemala City, overlooking the whole central Guatemalan valley. An avid "DX" and Awards participant, John has "5BDXCC" number 1715, a truly worthy accomplishment. He uses the "HAL" DS3100 ASR, with the DSK3100 Disk Drive System, and ST6000 demodulator, for a super nice RTTY MSO station. He also uses an ICOM IC-751 for RTTY, coupled to a very nice tower and beam antenna system, a picture of which may be viewed in the February 1985 issue of "QST" magazine. Congratulations on a very nice RTTY station John, and keep up the good work! John has a phone number..001-502-3-0147 if you want to phone and ask him if the system is up (hi hi), his access code is Guatmail.

MSO HINT OF THE MONTH: THe great influx of new operators to digital communications is evident on the MSO frequencies. The inexpensive "personal computer" and RTTY interface has placed this mode within the reach of most Amateur Radio operators. If I might make one suggestion to new oerators, that I think is most important, it would be to listen on the frequency for a few minutes before transmitting. As far as the MSO's are concerned, their most intimate "secrets" will be revealed to all, by just observing others using the MSO's. Each of the MSO's have a "Help" command, which will make utilizing the MSO's a snap, even for the inexperienced operator, but, QRM, improperly formatted commands, and "fishing expeditions" cause difficulties for all, and a little patience and observation by all will greatly enhance MSO operation.

COMPLAINT DEPARTMENT: I received a call recently from a long-time RTTY enthusiast, who feels that some MSO's and CBMS/s do not really qualify as "mailboxes". Instead he feels that they are in the "broadcasting" business, pumping out lots of data on a variety of subjects, but not serving the functions normally expected of mailboxes, i.e., the receipt storing, and retransmitting of files. I suspect that there are MSO's and CBMS's who appear briefly on the various bands, and experiment with providing some kind of service, whether it be informational in nature, or mailbox activities. Each SYSOP must decide for himself what function his system will provide, and I rather suspect that his system longevity's entirely dependent on the quality of this service. If his system gets lots of use, then SYSOP satisfaction will be high; however, if his system sits idle most of the time and does not provide a continuing service, I feel that he will move on to other pursuits rather quickly. How do you feel about the services provided by the MSO's? Your opinion counts, and whether you agree with, or disagree with, a particular service or mode, I'll be happy to express it for you in this column.

I'd like to take this opportunity to welcome back a good friend, and long-time MSO user, "Tony", KI4X, from the "Bottom of the Lake", in beautiful downtown Clewiston, Florida. Tony has been absent from the RTTY scene for some time, and it's certainly nice to see his print on the screen again. If you're ever in the Clewiston area, Tony owns and manages one of the finest restaurants in this great country of ours, and his "Red Neck" special will be some-

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MICROPATCH™ MODEL MP-1

COMPUTER PATCH MODEL CP-100

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The MP-1 also offers a high performance CW capability. With respect to the CP-1, overall performance is nearly as good; but the CP-1 offers a few more advanced features such as variable shift tuning, RS-232 option, and a more advanced tuning indicator.

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CALL	FREQUENCY	TIME	QSL ROUTE
ZF1GC	14090 MHz.	1934Z	Callbook Address
9Y4VU	14090	2228	Via W3EVW
TI9WI	14084	1800	Via TI2J
TI2PI	14084	2110	CBA
I8AA	14084	2127	CBA
FE6HFX	14084	2150	CBA
TI9TTY	14092	2338	WB4UBD (DXpedition)
FM5BX	14096	2204	P.O.B. 152, Fort de France, Martinique.
JA1ACB	14084	2220	JARL
4U1ITU	14085	1200	CBA
LU1ASU	14087	0105	P.O.B. 1202, Buenos Aires 1000, Argentina.
ZP5JAL	14090	0147	K02A
GI4KKV	14085	1149	64 Olf Manse Road, Jordanstown Co., Antrim, Northern Ireland.
JA1JDD	14090	2241	CBA
7P8CL	21088	1904	Via SM5KDM
WH8AAJ	14098	1852	CBA
9H1GD	14093	1341	Francis Dramann, 51 Annunciation St., Tarxien, Malta.
EI3H	14093	1401	Buro.
LX1PZ	14092	1555	Buro.
GI4FXR	14086	1718	Buro or CBA.
SV5TS	14093	1852	P.O.B. 251, Rhodes, Greece 85100
EA8ZO	14096	1944	Romantica 1, No. 30, Los Realejos, Tenerife, Canary Islands, Spain.
SW2ON	14095	1236	Jannis Spanoudakis, Vas Olgas 122, Thes-Saloniki, Greece.
HI8WR	14086	1155	CBA
UZ0CWC	14085	2330	Buro (Zone 19).
SV1DO	14093	1206	CBA
C3ØLBM	14098	1228	Via EA5AGY
VU2VIM	14095	1323	CBA
C53CL	14096	2150	Via EA8ZZ
3X4EX	14086	2212	Via N4CID
TZ6FE	14082	2219	Via DL4BC
HP1AC	14092	2250	CBA
WP4C	14093	1644	CBA
LA7AJ	14085	1421	Buro.
6W1HL	14100	1118	P.O.B. 2260, Dakar
UB5MDI	14085	1149	Buro.
UZ2FWA	14085	1240	P.O.B. 15, 236000 Kalingrad, U.S.S.R.
ZS6APH	21090	1434	Via WA3HUP.
ZS1FP	21090	1453	CBA
8P6JG	14087	1540	Via WA8IMO.
OX3FG	14097	1330	P.O.B. 177, 3920, Julianehab, Greenland.
5V8WS	14091	1632	Via DJ6QT
ISØKNV	14090	1126	Buro or CBA.
HL9AU	14087	1135	Buro or CBA.
HH2HA	14082	2252	Buro or CBA.
CE2AN	14091	0050	P.O.B. 522, Valpariso, Chile.
KC2OU/V2A	14080	1407	Via OE4NH.
OE3HGB/YK	14081	1215	Undof/Ausbatt 1500, Vienna, Austria.

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CONTESTS

VK/ZL 1985 RTTY DX CONTEST

1. Test Period: Saturday,8 June,1985 0000 UTC to Monday 10th June, 1985 0000 UTC. Not more than 30 hours of operating time is permitted for single operator stations. Non-operating periods can be taken at any time during the contest. Multi-operators stations may operate the entire 48 hour contest period. Summary of operating times must be submitted with each score.
2. Bands: 3.5, 7, 14, 21 and 28 MHz.
3. Classifications: A. single operator (one transmitter)
   B. Multi-operator (one transmitter)
   C. S.W.L. Printer.
4. Messages: To consist of RST, Time, UTC and Zone.
5. Scoring: As per CARTG Zone Chart, multiplied by the number of countries worked, multiplied by number of continents worked (max 6). After the above calculations, world stations add 100 points for each VK/ZL station worked on 14 MHz,200 points for each VK/ZL worked on 21 MHz and 300 points for 28 MHz. A station may be worked only once on each band, but may be worked on another band for further multipliers.
6. Country count is as per ARRL list, except that each VK, ZL, JA, VE, VO, W/K districts count as seperate countries. Contacts with ones own country count as zero points for multipliers.
7. Logs: Logs must show in this order 1. Date, 2. Time (GMT), 3. Call of station worked, 4. Serial number sent, 5. Serial number received, 6. Points claimed.
8. Closing date: Logs must be received by 1 September, 1985. Send to: W.J.Storer, VK2EG, 55 Prince Charles Rd., Frenchs Forest, NSW 2086 Australia.
9. Summary Sheet: summary sheet must show, callsign of station, name of operator/s, and address of same, bands used (seperate log for each band), the points claimed for each band, number of VK/ZL stations worked, total points claimed and signature/s. Multi-op station logs must contain the signature and call of each operator.

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by GEORGE

HITS & MISSES

GEORGE HAMMON, WA6CQW
14215 Pecan Park Lane Space 73
El Cajon, CA 92021

30 DAY WAIT

The FCC proposes to abolish the 30 day waiting period. PR Docket 85-21, released January 29,1985, would amend 97.26 of the Amateur Rules by deleting paragraph (H).It would also amend paragraph (a) to require public announcement of an examination only for sessions intended for five or more candidates. The FCC stated that the 30 day waiting period was based on the administrative requirements of our field operations bureau. Comments must be filed by April 8,1985 and reply comments by May 10, 1985.

APPOINTMENTS

Our Editor Dee, N6ELP, has been newly appointed as Assistant Director to the ARRL. I am sure that the Southwestern Division will greatly benefit by this appointment as Dee is a very hard working, conscientious gal that has always given Hams and Amateur Radio a 110% effort.

REPEATER COORDINATION

The FCC released a notice of rulemaking (NPRM) concerning repeater coordination. The NPRM is designated PR Docket 85-22. This NPRM proposes to add definations of a coordinated repeater, frequency coordinator and harmful interference to Part 97.

This notice of proposed rule making looks at the problem of one repeater causing interference to another repeater operation. The two stations are each equally responsible for resolving the interference, unless one repeater is coordinated and the other not coordinated. Where one is coordinated and one is not, the non coordinated repeater has the primary responsibility to resolve the interference.

Several important questions are posed in this NPRM. A national frequency coordinator or coordinators are they needed? Also should new technological standards be adopted?

The FCC stated that repeaters already holding coordination but not yet operational may operate on the air. Only new coordinations, as of the issuance date of the NPRM, are forbidden. The FCC will use the next ARRL Directory as its' guide in determining those systems which were operational prior to the initiation of the ban.

Send in your listing now in order to avoid being shutout. The commission has set July 1, 1985 as the deadline for filing comments and September 30, 1985 as the deadline for reply comments.

I sincerely hope that all Amateurs using RTTY repeaters file replies in response to PR Docket 85-22. There is a need for a National Frequency coordinator, keeping records, mandated tone access and giving this coordination the Part 97 law to back it up.

ON THE MEND

This old body of mine sure feels a lot better. The back brace is off, and no more medication. I sure hate pills Hi Hi!

I am happy to report that the whole RTTY team is finally back to normal, with the flu season finally over and me on the mend and Dees' diverticulitis and hiatial hernia getting straightened out (no pun intended) by dialation, we are all set for the spring season which also brings the contest season to us.

I wish to again thank you all for the get well wishes, they do seem to help speed recovery.

The RTTY JOURNAL needs your stories with or without pictures (black and white) and your technical articles, so drop us a line please.

So long for now, George, WA6CQW....

THE EDITORS LOG CONTINUED

The Ten American Districts (TAD) award is in memory of Tadpole (TAD), a beagle dog who considered himself to be a W6LS club member. Tad liked the sound of code and Tad spent more time at W6LS than some members. Tadpole was also the name of the youngest son of our 16th President, Abraham Lincoln. A tadpole is a baby frog with a large tail for a body. Tad had a tail which he whirled around like a propeller. He was born in 1971 and died in 1974. Tad was an extremely intelligent animal with real CLASS.

Reguirements for the TAD award are: contact with all ten (10) American callsign areas and must have been made from the same callsign area. Hawaii aounts as a 6 and Alaska as a 7. Cross-band and cross-mode contacts are acceptable. Endorsements will be added to your award for:code, one-band, OSCAR, QCWA, QRP, RTTY, STV YL, 10-X or other special area. Send to: ARS W6LS, 2814 Empire Ave., Burbank, CA 91504 with $1.00 or 15 IRCs. Do not send QSL cards, but a verified list instead.

Thanks to the many Amateurs sending their get well wishes to me, they are always well received, and as George WA6CQW says, they do help you feel better.

I have been appointed as Assistant Director of the ARRL in the Southwestern Division and hope to be helpful to all of you in that capacity.88

THE CP-1 TERMINAL

By Chet Price, KD6XI
812 Caminito Rosa
Carlsbad, CA 92008

I had been listening to the strange RTTY sounds for a number of years, and had always been intrigued by them. I finally decided to do something more than just listen to the funny sounds. This report is on my experience with the AEA CP-1 and the MBA-TOR software. It also covers some of the fun I had while trying to listen and read these strange sounds.

I first acquired a Microcraft RTTY reader. This is a fun machine- I copied 60 words a minute very well with it. I gave up trying to copy ASCII with it as the speed was too fast. Interesting--- the machine stopped working, and then I had a chance to learn about IC's, timers, clocks, Rom, Ram, UARTs, Mark and Space etc. I added a frequency counter and a digital probe to my collection and, machine fixed, was back in business. During this time I had acquired a monitor-terminal, and worked with a Modem over telephone lines to copy local bulletin boards.

When I acquired the AEA, CP-1 terminal, I connected it to my transceiver and to my monitor terminal (I have the RS-232 option). I copied ASCII code easily and very well, but this was too limited, since there is very little ASCII on the air. (The best source was W1AW after the RTTY portion had been sent).

I finally broke down and bought a Commodore 64 computer and the AEA MBA-TOR software. Wow! What a thrill. All of those funny sounds were now coming onto my monitor as words that I could read and understand.

The "listen" hook-up was very easy, just a connection from my transceiver, a Kenwood 830S, to the AEA CP-1. The "send" was a little more work, as I had to solder to the mike input jack for AFSK and push-to-talk.

Since the cables come with the AEA CP-1 all it took was to connect to the monitor, in my case a TV set, and to the computer, again the cables were included.

The instructions from AEA are fair to very good, but I had to read and reread them just to feel that I was ready to go on the air - so many commands and options. The commands are also listed on the screen for proper selection. THe only fault I really found with the directions was that they did not follow in order of getting everything started. A followed B instead of being before B, thereby necessatating a lot of rereading. Some rearrangement of the instructions would make it a lot quicker to 'digest'.

My first RTTY contact was N6ELP, "Dee", editor of the RTTY JOURNAL. A land line contact with Dee to make sure I was getting out set this up. My next contact was K5MIO, then VE7AKV and Ralph, WOMMJ in Kansas. Since then I have made a number of contacts with no problems at all.

The tuning LEDS on the CP-1 do a good job, but I had to hear the signal and then tune it in. I found that using a 'scope' really made the tuning a snap with a completely silent contact. Connecting the CP-1 to the scope was only a matter of plugging it in, as there is a scope output jack.

AMTOR now, is a different story. I have to keep going back to the instructions in the manual to get into this mode. Under 'select', press 'T' for AMTOR, under 'options' set-up, call sign and selcall. Under 'commands' decide whether to load, edit, save, set color, etc. As I said you must keep going back to the manual. I have copied AMTOR quite easily, but as yet have not transmitted. Before I get into the 'send' mode I want to really feel at ease with it, but the chirp, chirp and I will made contact soon.

I have not mentioned the CW aspects of the CP-1 because I am not and have not been a CW enthusiast, although the CP-1 copies code very well. I have read copy and been amazed at the way the copy is printed, so clearly, but compared to RTTY, for me, CW is too slow.

An old-timer Ham friend of mine, asked, "Why all this?" I had one answer, "Because it is there, and it brought me from one phase of communication clear into another world."

I hope to be able to make contact with some "RTTY JOURNAL" members, and perhaps pick up some pointers for better RTTY fun.

Til then, 73 de Chet, KD6XI.....

MSO CONTINUED

thing you"ll remember for a long time! If you do not like home cooked 'alligator' (like mother used to make), Tony's Glade restaurant serves up many other good treats. Tony is also an excellent photographer in his spare time. So, welcome back Tony, keep pounding away on those keys!

Al Kaiser, N1API, tells me that he now maintains his local Amateur Radio Club newsletter on his MSO, which can be accessed on both HF during the daytime, (14087 KHz), or two-meters in the evening hours. That's what you really call "instant newsprint"! Thanks Al!

That's it for this month gang. Hope to see many of you at Dayton, and if not, we'll see you next month!

73's.....de Dick, KØVKH.

THE STANDARD OF EXCELLENCE

The world of CW, RTTY, and new DUAL AMTOR is as close as your fingertips with the new brilliantly innovative state-of-the-art microcomputer controlled* EXL-5000E.

Automatic Sender/Receiver: Due to the most up to date computer technology, just a console and keyboard can accomplish complete automatic send/receive of Morse Code (CW), Baudot Code (RTTY), ASCII Code (RTTY) and new ARQ/FEC (AMTOR).
Code: Morse (CW includes Kana), Baudot (RTTY), ASCII (RTTY), JIS (RTTY), ARQ/FEC (AMTOR).
Characters: Alphabet, Figures, Symbols, Special Characters, Kana.
Built-in Monitor: 5″ high resolution, delayed persistence green monitor — provides sharp clear image with no jiggle or jitter even under fluorescent lighting. Also has a provision for composite video signal output.
Time Clock: Displays Month, Date, Hour and Minute on the screen.
Time/Transmission/Receiving Feature: The built-in timer enables completely automatic TX/RX without operator's attendance.
Selcal (Selective Calling) System: With this feature, the unit only receives messages following a preset code. Built-in Demodulator for High Performance: Newly designed high speed RTTY demodulator has receiving capability of as fast as 300 Baud. Three-step shifts select either 170Hz, 425Hz or 850Hz shift with manual fine tune control of space channel for odd shifts. HIGH (Mark Frequency 2125Hz)/LOW (Mark Frequency 1275Hz) tone pair select. Mark only or Space only copy capability for selective fading. ARQ/FEC features incorporated.
Crystal Controlled AFSK Modulator: A transceiver without FSK function can transmit in RTTY mode by utilizing the high stability crystal-controlled modulator controlled by the computer.
Photocoupler CW, FSK Keyer built-in: Very high voltage, high current photocoupler keyer is provided for CW, FSK keying.
Convenient ASCII Key Arrangement: The keyboard layout is ASCII arrangement with function keys. Automatic insertion of LTR/FIG code makes operation a breeze.
Battery Back-up Memory: Data in the battery back-up memory, covering 72 characters x 7 channels and 24 characters x 8 channels, is retained even when the external power source is removed. Messages can be recalled from a keyboard instruction and some particular channels can be read out continuously. You can write messages into any channel while receiving.
Large Capacity Display Memory: Covers up to 1,280 characters. Screen Format contains 40 characters x 16 lines x 2 pages.
Screen Display Type-Ahead Buffer Memory: A 160-character buffer memory is displayed on the lower part of the screen. The characters move to the left erasing one by one as soon as they are transmitted. Messages can be written during the receiving state for transmission with battery back-up memory or SEND function.
Function Display System: Each function (mode, channel number, speed, etc.) is displayed on the screen.
Printer Interface: Centronics Para Compatible interface enables easy connection of a low-cost dot printer for hard copy.
Wide Range of Transmitting and Receiving: Morse Code transmitting speed can be set from the keyboard at any rate between 5-100 WPM (every word per minute). AUTOTRACK on receive. For communication in Baudot and ASCII Codes, rate is variable by a keyboard instruction between 12-300 Baud when using RTTY Modem and between 12-600 Baud when using TTL level. The variable speed feature makes the unit ideal for amateur, business and commercial use.
Pre-load Function: The buffer memory can store the messages written from the keyboard instead of sending them immediately. The stored messages can be sent with a keyboard command.
"RUB-OUT" Function: You can correct mistakes while writing messages in the buffer memory. Misspellings can also be erased while the information is still in the buffer memory.
Automatic CR/LF: While transmitting. CR/LF automatically sent every 64, 72 or 80 characters.
WORD MODE operation: Characters can be transmitted by word groupings, not every character, from the buffer memory with keyboard instruction.
LINE MODE operation: Characters can be transmitted by line groupings from the buffer memory.
WORD-WRAP-AROUND operation: In receive mode, WORD-WRAP-AROUND prevents the last word of the line from splitting in two and makes the screen easily read.
"ECHO" Function: With a keyboard instruction, received data can be read and sent out at the same time. This function enables a cassette tape recorder to be used as a back-up memory, and a system can be created just like telex which uses paper tape.
Cursor Control Function: Full cursor control (up/down, left/right) is available from the keyboard. Test Message Function: "RY" and "QBF" test messages can be repeated with this function.
MARK-AND-BREAK (SPACE-AND-BREAK) System: Either mark or space tone can be used to copy RTTY.
Variable CW weights: For CW transmission, weights (ratio of dot to dash) can be changed within the limits of 1:3-1:7.
Audio Monitor Circuit: A built-in audio monitor circuit with an automatic transmit/receive switch enables checking of the transmitting and receiving state. In receive mode, it is possible to check the output of the mark filter, the space filter and AGC amplifier prior to the filters.

CW Practice Function: The unit reads data from the hand key and displays the characters on the screen. CW keying output circuit works according to the key operation.
CW Random Generator: Output of CW random signal can be used as CW reading practice. **Bargraph LED Meter for Tuning:** Tuning of CW and RTTY is very easy with the bargraph LED meter. In addition, provision has been made for attachment of an oscilloscope to aid tuning.
Built-in AC/DC: Power supply is switchable as required; 100-120 VAC; 220-240 VAC/ 50/60Hz + 13.8VDC.
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HAL COMMUNICATIONS STRIKES AGAIN ! If you have an IBM-PC Personal Computer, then you want to utilize the new HAL PCI-2000 interface and software to turn it into the ultimate in a computer based RTTY system! Morse, Baudot and ASCII, 103/202 modems, all speeds/shifts, split screen and a host of other features. Write or call Dick, KØVKH, DIALTA Amateur Radio Supply, 212-48th St., Rapid City,SD 57702. 602/343-6127. Our prices can't be beat!

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RTTY READER, MICROCRAFT (RTTY ONLY), including all manuals. Excellent condition. $60 includes USA shipping. Chet, KD6XI, 812 Caminito Rosa, Carlsbad, CA 92008. 619/438-1517.

THOUGHTS ON THE 930S - CORRECTIONS

Regarding the mod I sent you, and was published in March 1985, for the TS930S monitor in the FSK position. Alas a bug has appeared and didn't show up until I started using the narrow filter position. Unfortunately the way the mod was wired caused a shift in oscillator frequencies and a consequent loss of signals.

However, attached is a mod to the mod. This entails removing the diode previously proposed and wiring in two diodes as shown. This time I have done a complete check of oscillator frequencies and all appears okay. Also this reworked mod will not require a Service Handbook, as all neccesssary changes should be readily seen on the Signal Unit PCB. Sorry for any problems which may have been caused. de Gary, ZL2AKI. [None of us is perfect Gary..Thanks for the remodel job].

Remove both covers. On Signal Unit PCB locate plug/socket 11 in front of the 455 KHz filter position. On the right side of the PCB plug is Jumper 22 (J21 in older models).(this jumper connects directly to plug 11/1 "FSK").

Solder one end of a wire to the bare end of the jumper and run this wire toward the back of the board, following the thick yellow wire around the Carrier Oscillator 1 to Plug/Socket 31.

Locate Plug/socket 31 on the left side of Carrier Oscillator 1 area - the 7th wire from the front of the socket should be orange. Cut this wire about two inches from the socket. Connect two silicon signal diodes of sifficient rating as shown in the diagram.(Note: on older models this wire may not be orange, but the socket number is the same i.e. 31/7).

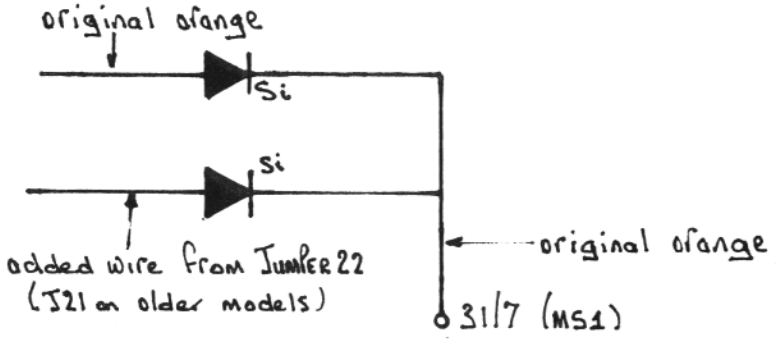
to page 14 please

OH2BNE	14088	1515	Buro.
GM4UYP	14093	1232	Buro or CBA.
CT1CFI	14087	1250	Buro or CBA.
EI4EH	14095	1310	Buro or CBA.
GM4VST	14086	1324	Buro or CBA.
EA8CK	14089	1411	Buro or CBA.
CT1CVK	14096	1612	Buro or CBA.
EA6KP	14096	1652	Buro or CBA.
EA8ZO	14089	1717	Buro or CBA.
CT1XK	14090	1830	Buro or CBA.
CT1APZ	14093	1840	Buro or CBA.
GM4VWV	14093	1853	Buro or CBA.
EA7KF	14081	1911	Buro or CBA.
EA8BEX	14093	1940	Buro or CBA. SEE BELOW FOR CARTG
5T5CE	14080	1139	Via HB9BJL.

ZONE CHART

Until next time 73 and SK de Joe, AJØX

MODIFICATION TO THE MOD OF THE TS 930S CONTINUED



Sleeve the diodes and wire connections to prevent any accidental short circuits.

The monitor will now operate in The FSK mode irrespective of Monitor switch position, with normal Monitor functions in other modes.

73 de Gary Moles, ZL2AKI, 5 Edward Street, Bulls, New Zealand.

THE WORLD'S TWELVE GREATEST LIES

1. " I'm with the government, I am here to help you."
2. "Your check is in the mail, I mailed it yesterday."
3. Really, this is not going to hurt you one bit."
4. "What an adorable baby, Looks just like you."
5. "Don't worry, they cannot make you do that."
6. "The doctor/lawyer/manager/etc., will call you right back."
7. "Let's stop by the Joneses for just one drink."
8. "There is absolutely no obligation on your part."
9. "We must have lunch soon, I'll call you."
10. "Try it you'll like it."
11. "Your part is on order, what was its' part number?"
12. "So glad you dropped by."

NO good deed goes unpunished.
My doctor told me to, "Cheer up, things could be worse," so I cheered up and sure enough,things got much worse.!

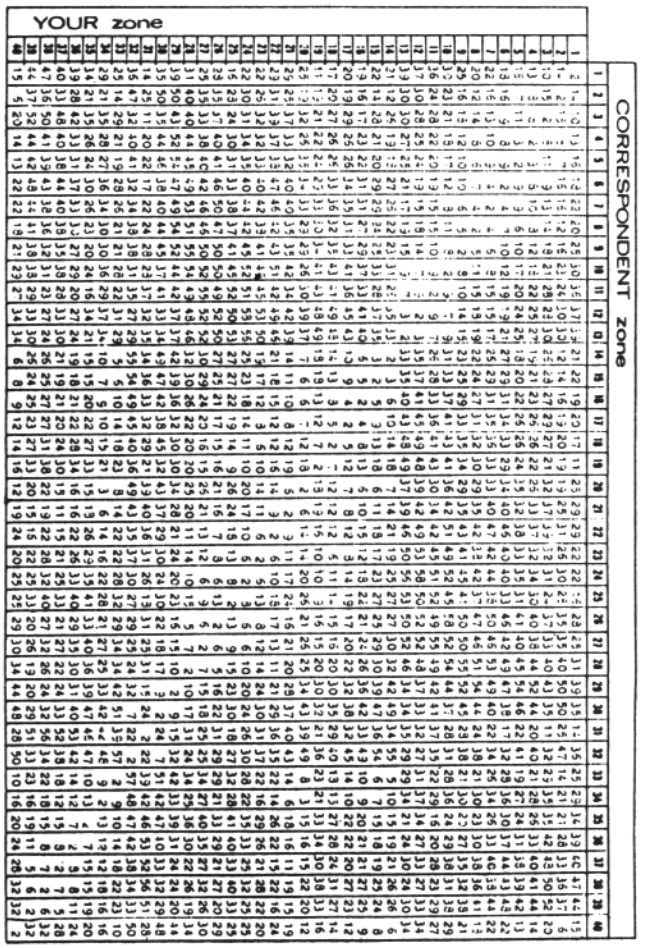
CONTESTS CONTINUED

10. Awards: Awards will be issued for first, second, and third place on a world basis and also on a country basis.

The judges decision regarding the placings in the contest will be final and no correspondence will be entered into regarding same. The logs become the property of the Contest Committee on completion of checking.

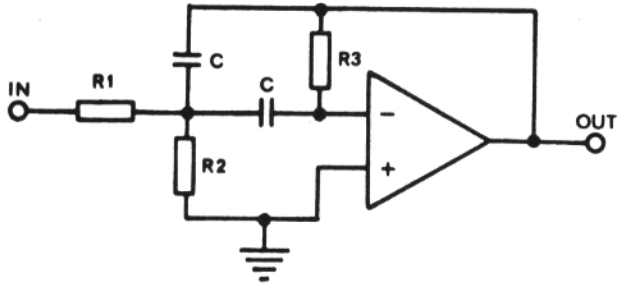
This contest is now being organized and conducted by the Australian National Amateur Radio Teleprinter Society, POB 860, Crows Nest, N.S.W. Australia.

EXCHANGE POINTS TABLE



THE FOLLOWING IS REPRINTED FROM AN ARTICLE BY G4HYD, A. J. OAKLEY IN THE BRITISH AMATEUR RADIO TELEPRINTER GROUP NEWSLETTER. TWO ARTICLES FOLLOW THIS ONE ONE ON THE HIGH PASS FILTER, THE OTHER ON THE LOW PASS FILTER. WE WILL TRY TO HAVE THEM BOTH IN NEXT MONTHS ISSUE.

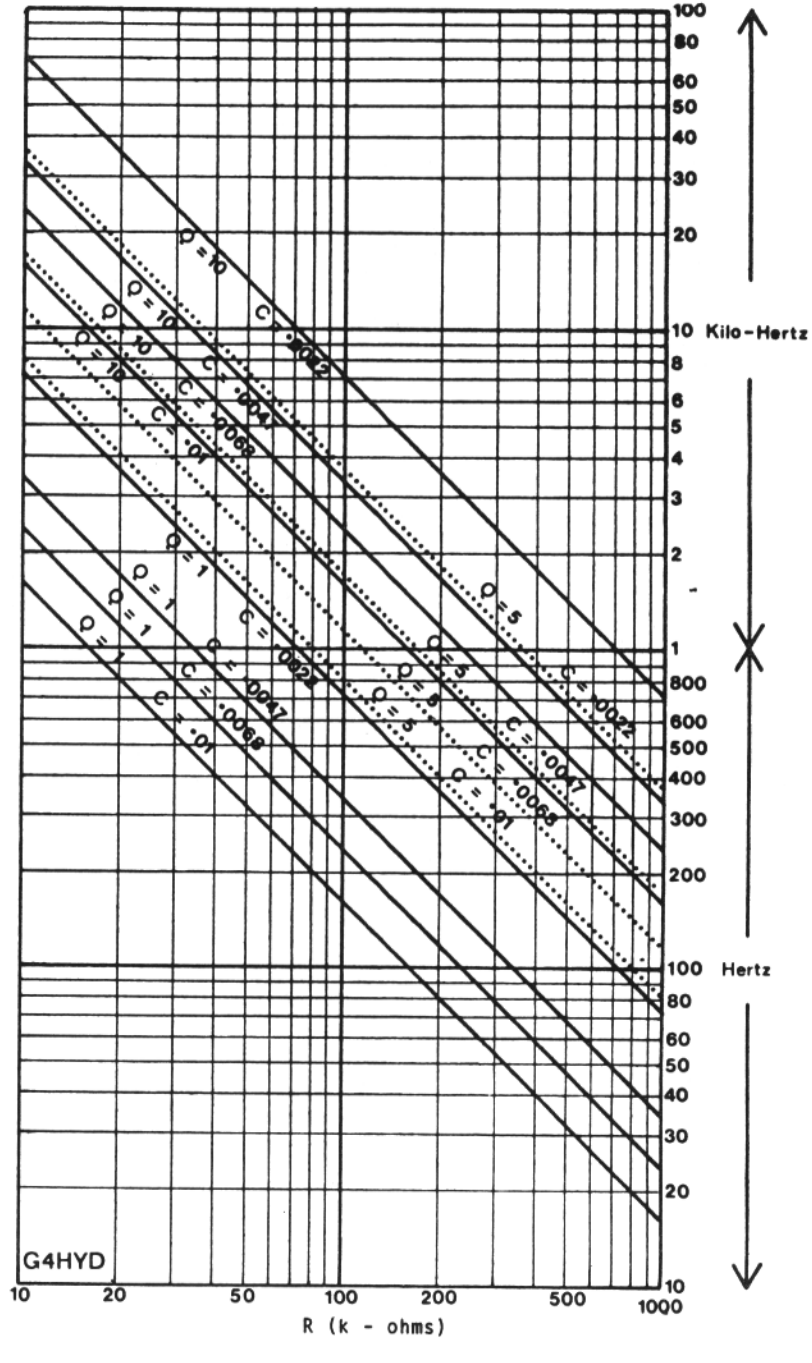
BANDPASS



The circuit is as shown above. For the chosen centre frequency and value of Q, select a convenient capacitor value, and from the graph read off the value of R. (If your chosen frequency and Q value take you outside the graph, do not worry. Dividing the capacitor value by 10 will multiply the frequency by 10, and vice-versa, enabling the graph to be extended in any direction) The values of the resistors are then calculated as follows:-

For Q - 1	R1	= R
	R2	= R ÷ 1.5
	R3	= R x 2
For Q - 5	R1	= R
	R2	= R ÷ 50
	R3	= R x 2
For Q - 10	R1	= R
	R2	= R ÷ 200
	R3	= R x 2

Select the nearest standard 10% resistors to the calculated values. Both capacitors are equal to the value selected, and the bandwidth at -3db will be equal to the centre frequency divided by Q.



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