

AMATEUR RADIO RTTY JOURNAL

Vol. 15 No. 1 - 30¢

January 1967

RTTY JOURNAL

MODEL 14 TEE DEE (SYNC) \$35.14 typing reperforator RO \$40, KB \$55. Solid-state 800ma Loop supply \$8. FRXD reperforator dee combo \$65. TT-63A schematic \$1. TOHOIDS unpotted 8ramly 5/\$1.25 pcd. 2 copy carbon page paper \$5.50/case. 11/16" oiled tape \$3/box-10 HQ170AC Ike new \$185. HQ10AC Ike new \$110. WANTED: Super pro receiver. Model 26. 14 strip printer with KB. D-104 mike. DM-35 dynamotor. W2DILT 302R Pas-saic Avenue Strirling, N.J. 07980

FOR SALE - 8 Philbrick K2-x & XA Operational amplifiers for variable bandwidth tunable audio filter, per Sept. 68 RTTY, \$8.50 with tubes, 5.50 without tubes. 2 Philbrick Universal stabilized amplifiers with tubes and chopper USA9, \$25, ea. with schematics and bulletin. 2 Dresen Barnes 300 vdc 150 ma supplies for above, regulated OA postpaid, power supply add \$1.50 shipping or sell all, approx. \$600. of gear for \$100, postpaid. Ogden Ham-ilton W2RMB, Lake Rd., Norwich, N.Y. 13815.

WILL TRADE 455KC input unit for CV-5TURR for a similar unit at 50 KC for CV-7TURR exray. My receiver has 50KC IF exray AR181. Bud Thompson, 3612 Henrietta Ave. Bartlesville, Ok.

WANTED parts for Kleinschmidt TT-76/GCC Character counter defent 5324 OA and defent spring 53313. Also trans-mitter-distributor upper ball lever 52811. Consider purchase of junked unit for parts. K50LU, C. Ellsworth, 5128 Paris Ave. El Paso Texas 79924 (915) 755-4376.

FOR SALE - Model 26 less cover, for parts - \$25.00. Tritronics Silicon TU, with schematic less M*5 filters - \$15. Motorola 5V, wiring to 12vt DC, less P.S. with control head and schematic. Want keyboard and cover for 14TR or ??. Bob Schaeffer, 1201 North Willow, Ellensburg, Wash. Phone (509) 962-2210

FOR SALE - Two-tone hmlterless TV as described in August 1965 RTTY phenolic PC board \$3.50 postpaid, write Cashion Electronics, Box 7307, Phoenix, Arizona 85011 for brochure.

WANTED - Model 28ASR with stunt box complete in excellent condition, send details to K7AWI box 7307, Phoenix, Arizona 85011.

WANTED - Type 5C Boehme TU or equivalent. Must be factory built. J. Peckham, 161 Grant Ave., Auburn, N.Y.

MODEL 14TD, synch Motor, steel cut- ch, for sale. W7JLF, 907 Webb Ave. Olympia, Wash.

FOR SALE. Model 19 - excellent condition complete including table and auto take up tape reel, \$95. Model 14 typing reperf with TD and table \$75. -FRXD, Ike new \$65. Pick up only. W8CLL, 18714 Teppert, Detroit, Mich.

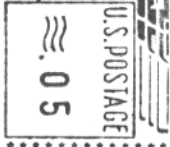
FOR SALE: Model 14 TDS - \$18 Box 837, Royal Oak, Michigan.

Return Requested
RTTY JOURNAL
 P.O. Box 837
 Royal Oak, Michigan 48068

1st CLASS MAIL



POSTMASTER
 PLEASE RETURN TO
 P.O. BOX 837
 ROYAL OAK, MICH. 48068



NEWS OF AMATEUR RADIO TELETYPE

Amateur Radio Teletype Christmas Gift

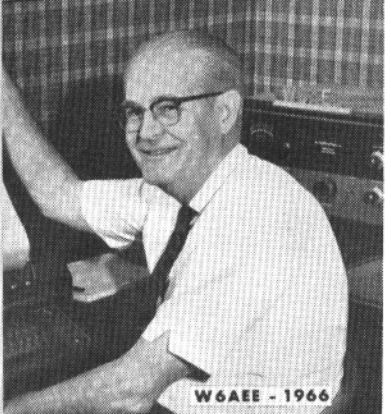
On December 23, 1962, FCC announced its action on Dockets 10073 and 10173. This action covers other items besides Radio Teletype. ARRL Official Bulletin 378 gives the details. NARC thru its official broadcasting network released this news on the evening of 23 December. It is of passing interest to note that throughout the actions relative to Dockets 10073 and 10173 NARC has extended its assistance in behalf of the teletype proposals. On the other hand ARRL has not been favorable. Time will prove the wisdom of these two group's policies. Following is given portions of the proposed rule making as issued by the FCC.

12.107-Special provisions regarding radio teletype transmissions. The following special conditions shall be observed during the transmission of radio teletype signals on authorized frequencies by amateur stations:

(a) A single channel five unit (start-stop) teletype code shall be used which shall conform to the International Telegraphic Convention with respect to all letters and numeral sign or fraction bars) but be employed for the teletype printer, or for other purposes, is not utilized for numerals. In general, the use of numerals is prohibited in teletype transmissions.

(b) The normal transmission rate for teletype signals having speed of 50 words per minute and, in the range 55 to 60 words per minute, shall be not less than 1000 bauds per second. The normal transmission rate for teletype signals having speed of 60 words per minute and, in the range 65 to 70 words per minute, shall be not less than 1200 bauds per second. The normal transmission rate for teletype signals having speed of 70 words per minute and, in the range 75 to 80 words per minute, shall be not less than 1400 bauds per second. The normal transmission rate for teletype signals having speed of 80 words per minute and, in the range 85 to 90 words per minute, shall be not less than 1600 bauds per second. The normal transmission rate for teletype signals having speed of 90 words per minute and, in the range 95 to 100 words per minute, shall be not less than 1800 bauds per second.

(c) When teletype signals having speed of 100 words per minute and, in the range 105 to 110 words per minute, shall be transmitted, the normal transmission rate shall be not less than 2000 bauds per second. The normal transmission rate for teletype signals having speed of 110 words per minute and, in the range 115 to 120 words per minute, shall be not less than 2200 bauds per second. The normal transmission rate for teletype signals having speed of 120 words per minute and, in the range 125 to 130 words per minute, shall be not less than 2400 bauds per second. The normal transmission rate for teletype signals having speed of 130 words per minute and, in the range 135 to 140 words per minute, shall be not less than 2600 bauds per second. The normal transmission rate for teletype signals having speed of 140 words per minute and, in the range 145 to 150 words per minute, shall be not less than 2800 bauds per second. The normal transmission rate for teletype signals having speed of 150 words per minute and, in the range 155 to 160 words per minute, shall be not less than 3000 bauds per second.



W6AEE - 1966

Amateur Radio Teletype Christmas Gift

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NEWS OF AMATEUR RTTY
 DECEMBER 1966
 30 Cents
 Vol. 14, No. 12

14 YEARS Without A Miss

As the deadline for the first issue by your new editor approached we tossed around in bed at night trying to think of the best way to tell the story about Merrill, a very modest man, and his long devotion to Amateur RTTY.

We knew that back in 1953, at the time RTTY was first allowed on all amateur bands, Merrill accepted the editorship of a magazine sponsored by the Southern California RTTY Society, and with the help of W6DEO. "Fletch" Hantke, put out the first issue of RTTY, a magazine devoted to amateur teletype operation.

We found out that Merrill had started his ham career in the early 20s in Oklahoma as W5ADE and has been active ever since. He has been an officer of the IRE, an assistant director of the ARRL for the SW Division, an officer in many Radio Clubs in the areas where he lived. He holds patents in his name for electronic developments in his field of Geophysics and is still active in new developments. In 1962 he was the recipient of the Dr. Lee DeForest Award for the greatest contribution to Amateur Radio in the Southwestern Division.

We wanted to tell of his untiring ef-

COPY

HERBERT HOOVER, JR.
900 WILSHIRE BOULEVARD
LOS ANGELES 90017
MADISON 4-4014

September 1, 1966

Mr. Merrill L. Swan
372 W. Warren Way
Arcadia, California

My dear Merrill:

It was with a deep pang of regret - and yet with complete sympathy - I read the notice in September RTTY that you would be suspending publication at the end of this year.

I am not going to make this a long, tear-jerking affair because neither of us like that sort of thing.

But I can't let the moment go by without telling you that what you have done for ham radio these last 15 years has been one of the most effective and dedicated jobs I have ever seen. And I think I've seen most of them!

My affectionate regards to you and Margaret, and I'll be looking for you soon!

Sincerely, - and 73

Herbert Hoover, Jr.

forts to help others getting started in RTTY. The hours he spent helping arrange for machines, fixing home built TUs brought to him with problems, the letters he wrote to anyone asking for help. With all these activities he kept the RTTY magazine going for fourteen years. Many friends offered help, but it was his responsibility and he never failed in the 168 consecutive issues while he was editor. We thought that over such a long period of time many readers might take things for granted but we have never found such a loyal group of subscribers. RTTY magazine was their Bible and Merrill was Mr. Teletype to them. We had to mention the number of letters from friends, many of them prominent in Amateur

Radio that arrived with messages of thanks and good wishes for Merrill.

The more we wanted to say the more inadequate we felt in telling the story of a man who had done so much for RTTY. We fell asleep at last. In the morning it seemed like a dream.

It was a Dream - Merrill was the Dream - a real live one - and the best thing that ever happened to Amateur Teletype.

In the future, as time permits, Merrill will be active on the air. If you ever see a Dream printing, I am sure you will break in and tell Merrill that you are one of the thousands of friends that join the new editor in saying THANKS for the helluva good job he and his wife Margaret have done. . . .

THE AMERICAN RADIO RELAY LEAGUE, INC.

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U. S. A. 06111

November 3, 1966

Mr. F. "Dusty" Dunn W8CQ
Editor "RTTY"
Royal Oak, Michigan 48068

Dear Dusty:

Tribute should be paid to Merrill Swan, W6AEE, not only for initiating an outstanding RTTY Bulletin, but for the highly dedicated effort he and Margaret have put forth these many years in assisting those entering the field---building the bulletin and advancing amateurs in the techniques of RTTY work. In Margaret's case this was seeing that every copy was correctly addressed and mailed. Merrill's personal contributions of course started long before "Volume 1" of the bulletin came down the pike in 1953. Many of us will regret that Vol. 14 must mark a change, but we feel sure you will have the benefit of his continuing close interest and ideas, and the full support of W6CG and so many others making contributions to the Bulletin.

A hearty THANK YOU to Merrill on behalf of ARRL and fellow RTTYers for a job well done. May I express good wishes and our high hopes to you and RTTY in meeting the opportunities and challenge. Best success in your '67 plans for "RTTY". 73.

Sincerely yours,

F. E. Handy
F. E. Handy WIBDI
Communications Manager

FEH/rk

GREETINGS from the NEW EDITOR

"Dusty" Dunn - W8CQ

In writing any column the hardest part is the first line --

We are going to start right out by taking our hair down (if you check the pix on this page you'll see this isn't a big job.) Why do we print our own picture -- simply because if you were the editor we would like to see yours. We are certainly not vain and we hope that our courage will encourage others to send us their picture. We especially want to run a pix of our column editors and authors whenever possible. The better half of the picture is the "Staff". How could we be an editor without a "staff" to furnish coffee, check our spelling and a hundred other things. "Crys" has not only endured our hamming for thirty years of marriage but encouraged us and is ready to take on the staff duties, even to raking the leaves while we are playing editor.

Seriously the job of publishing the RTTY JOURNAL is a labor of love. Merrill knows this well and we knew it before we started so we have no illusions or regrets. It is fun to do things you love. We do not expect to make money but it would be nice to break even. If some profit appears we hope to enlarge the Journal and pay a token fee for articles, for in the long run they make the magazine.

As for a few of our immediate plans -- We have changed the name to RTTY JOURNAL - we feel this is specific and descriptive.

Frankly the income from subscriptions in the past has barely covered the actual costs of printing and mailing. We have a printer that specialized in small publications and his price is very attractive. It may not be the excellent job that Merrill has produced but we feel that it will be legible. The savings will help make possible the enlargement or other features we hope to accomplish. The combining of the two summer issues, when interest is at a low ebb also saves the expense of one issue, gives the editor a chance for a vacation and permits a lower subscription rate. A token fee of one dollar is being charged for classified ads. We like the ads but feel that if the results are not worth this small amount the space might better be used for something else.



One of the greatest time consumers is answering mail. We love your letters and comments but please don't be offended if we can't answer them all.

A SASE will be appreciated with requests for special information. This is a courtesy that any of the authors will also appreciate when answering special requests. The response of friends on the air and by mail has been outstanding in well wishes and offers of help. We have never seen such a loyal group of readers. We only hope to keep and deserve your loyalty. Witness this letter from a mid-west doctor.

Nov. 15, 1966

RTTY
Royal Oak, Mich.

Dear OM;

I see by the November 1966 issue of RTTY that you are taking over publication of this great little magazine. As a practicing psychiatrist I do not ordinarily encourage lunacy. However, in your case, and in the interest of preservation of this fine magazine I am prepared to make an exception.

It seems to me that the quickest way to encourage you with this project was to get our 1967 subscriptions in as soon as possible, and I am therefore enclosing my check for a \$3.00 fee.

With all good wishes for your future success in this endeavor.

Sincerely
(signed) WA9--

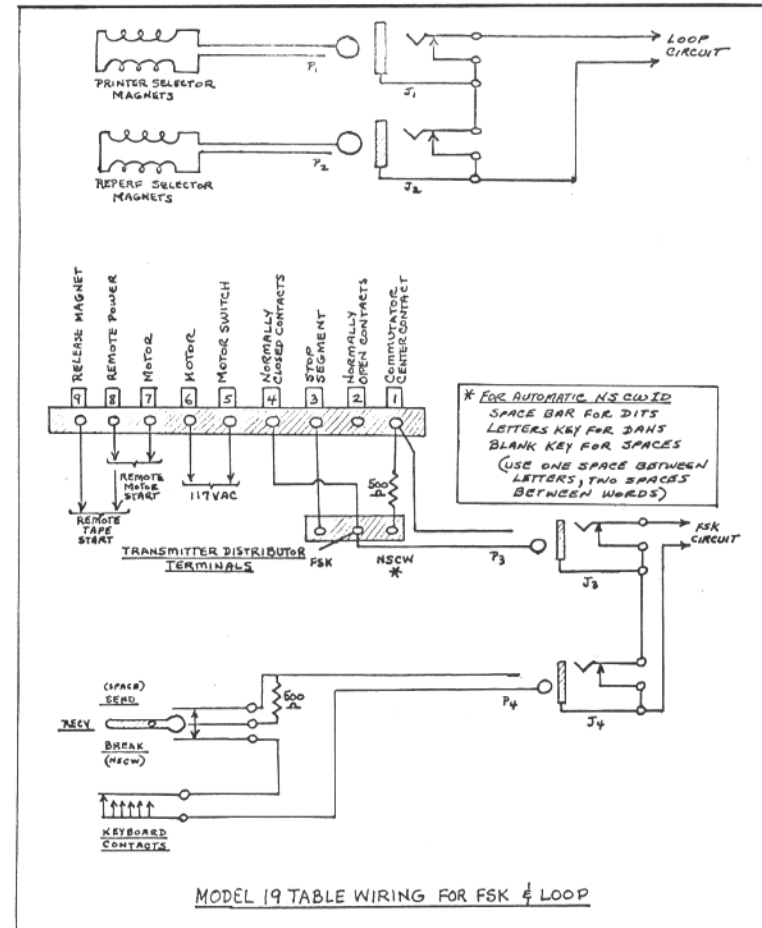
So there you are readers - if you follow the doctor's prescription and send in your three dollars we'll do our best to put out a good magazine without going insane.

Rewiring a Model 19 for Amateur Teletype.

EVERETT HAWLEY - K8JTT
"BUD" HAWLEY - K8JND
790 OXFORD ROAD
Grosse Point Woods - Mich

Most nineteens contain excessive wiring and components such as switches, filters, line resistors, relays, brackets, terminals, nuts and bolts, etc. Far more than is required or even desirable for good amateur RTTY. When the average

ham takes a first look at his machine and tries to compare it with the diagrams of teletype corporation, which is about all that is shown in the various handbooks, it is no wonder that he is completely lost. But actually the wiring needed for best amateur operations is extremely simple. So why not get out the cutter, hex wrenches and screw driver and strip the machine down to its basic mechanical parts. This will also give you a chance to clean up all that



oil and grime that covers everything on the base, motor, keyboard and TD. It is rarely necessary to strip the printer section so that can be merely cleaned up with rags, swabs, a tooth brush, small wire brush, Q Tips, or anything handy. Just get the excessive oil out of there.

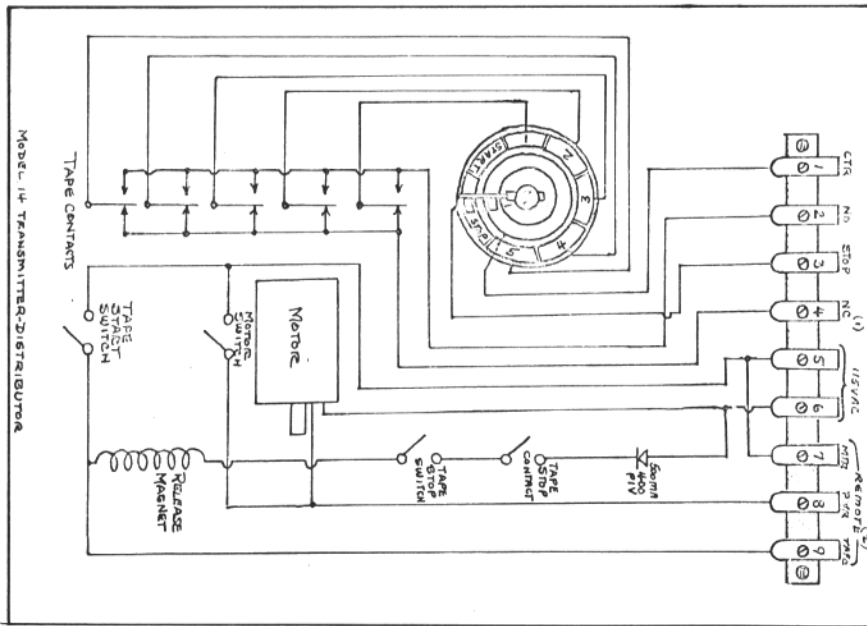
The enclosed charts provide for the simplified rewiring and furnish a bases for later changes and trouble shooting that will be worth far more than the one evening that it should take to get the job done. As far as practicable these charts are oriented to the general location of terminals and other components as viewed from the top and front of the base and keyboard. You will note that provision has been made for certain remote functions that can be added now or later with little difficulty.

The narrow shift CW provision will

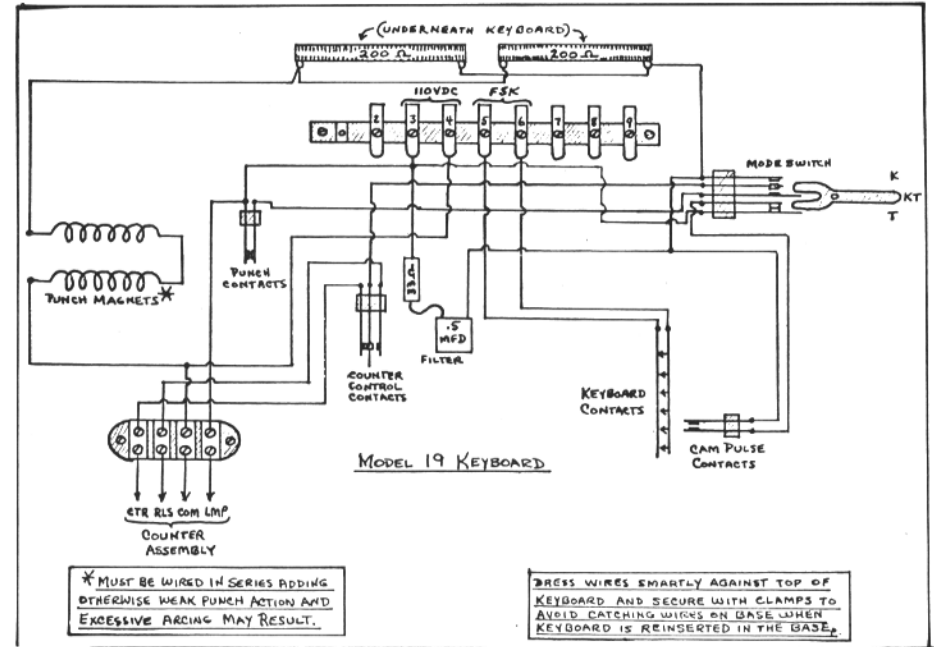
operate only if the FSK or AFSK line runs directly through the keyboard and TD. But the automatic CW from tape can also be made to operate for wide shift or mark or space make and break. Also note that the send-receive-break tab sticking out of the left front of your machine cover makes a swell little CW ID key if the latching arm is removed. Ours is wired to give narrow shift CW by keying it and to give space when raised up by breaking the FSK line for testing.

If you follow the charts for the power supplies, no outboard supplies will be required, which will leave the back of your table clear for just wiring and terminals.

Note punch and TD magnet supplies are merely simple diode circuits from the AC line.

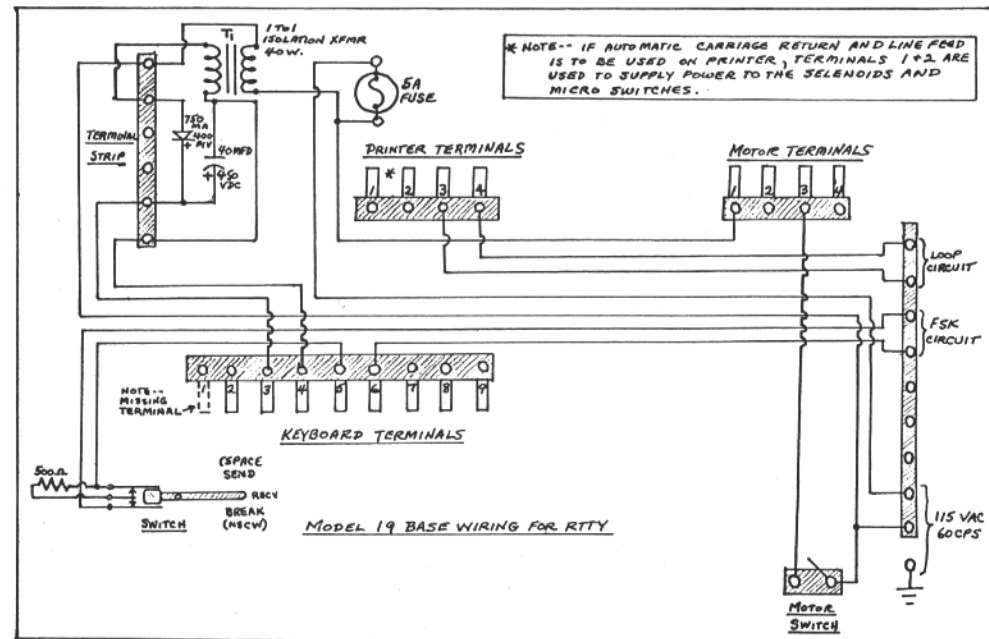


- (1) NOTE - NORMALLY CLOSED CONTACTS ARE THOSE IN CONTACT WHEN DISTRIBUTOR BRUSHES ARE ON SEGMENTS 1 THRU 5 (NOT STOP OR START) WITHOUT TAPE IN GATE.
- (2) NOTE - TERMINALS 7, 8 + 9 ARE FOR REMOTE CONTROL OF MOTOR AND TAPE START FUNCTIONS.



* MUST BE WIRED IN SERIES ADDING OTHERWISE WEAK PUNCH ACTION AND EXCESSIVE ARCING MAY RESULT.

PRESS WIRES SMARTLY AGAINST TOP OF KEYBOARD AND SECURE WITH CLAMPS TO AVOID CATCHING WIRES ON BASE WHEN KEYBOARD IS REINSERTED IN THE BASE.



* NOTE - IF AUTOMATIC CARRIAGE RETURN AND LINE FEED IS TO BE USED ON PRINTER, TERMINALS 1 + 2 ARE USED TO SUPPLY POWER TO THE SELENOIDS AND MICRO SWITCHES.

NOTE - MISSING TERMINAL -
SPACE SEND
BREAK (NECW)

MODEL 19 BASE WIRING FOR RTTY

Interpreting the U.S. Weather Bureau

Aviation Weather Transmissions

By **E.W. KOCH - W8QMI**
2911 DARTMOUTH DR.
MIDLAND, MICHIGAN

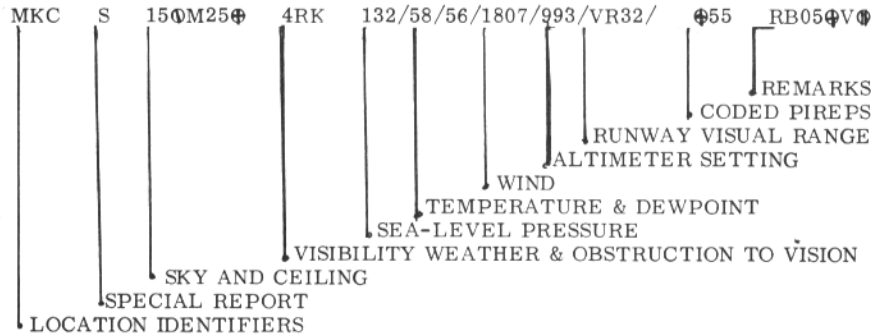
The U.S. weather bureau transmits, among many other things, a summary each hour of observed weather as recorded at the major airports of the country. This data is transmitted by radio-teletype at 60 words per minute, and the following data will enable you

to print the report and interpret it, provided you can set your printer so it will not unshift on space. A comparison of a weather type arrangement with your own type system will be explained further on in this article.

Following is a schedule of transmissions by WBR70, Miami, Florida:

3235 KC	2030 to 1400 GMT
5937	Continuous
8130	Continuous
10950	Continuous
14395	Continuous
16440	1155 to 0500

Here is a sample aviation weather report:



Explanation and Key to above headings:

Location identifiers -- following is a list of cities in the order in which they are transmitted

ORD O Hare Field, Chicago	RDU Raleigh-Durham, N.C.	FLO Florence, S.C.
EVV Evansville, Indiana	HAT Hattiesburg, S.C.	MYR Myrtle Beach, S.C.
DAY Dayton, Ohio	PMD Palmdale, California	AMG Alma, Georgia
MEM Memphis, Tennessee	ONT Ontario, California	AGS Augusta, Georgia
ATL Atlanta, Georgia	LAX Los Angeles, California	CNM Carlsbad, New Mexico
PHX Phoenix, Arizona	BUR Burbank, California	MAF Midland-Odessa, Texas
DUG Douglas-Bisbee, Arizona	SAN San Diego, California	LBB Lubbock, Texas
ELP El Paso, Texas	TLH Tallahassee, Florida	ABI Abilene, Texas
TUS Tucson, Arizona	TPA Tampa, Florida	DAL Dallas, Texas
CLE Cleveland, Ohio	PIE St. Petersburg, Florida	SJT San Angelo, Texas
ERI Erie, Pa.	FMY Fort Myers, Florida	SAT San Antonio, Texas
JFK New York City	EYW Key West, Florida	JCT Junction, Texas
EWR Newark, New Jersey	MIA Miami, Florida	AUS Austin, Texas
LGA La Guardia, New York	FLL Ft. Lauderdale, Florida	HOU Houston, Texas
PHL Philadelphia, Pa.	PBI West Palm Beach, Florida	COT Cotulla, Texas
DCA Washington D.C.	VRB Vero Beach, Florida	ALI Alice, Texas
DIA Dulles Intern.-Washingt	MLB Melbourne, Florida	PSX Palacios, Texas
BAL Baltimore, Md.	ORL Orlando, Florida	CRP Corpus Christi, Texas
RIC Richmond, Va.	DAB Daytona Beach, Florida	BRO Brownsville, Texas
ORF Norfolk, Va.	JAX Jacksonville, Florida	MKE Milwaukee, Wisc.
GSP Greer, S.C.	SAV Savannah, Georgia	DTW Detroit, Wayne, Michigan
GSO Greensboro-High Point	CHS Charleston, S.C.	GRW Greenwood, Miss.

BHM Birmingham, Alabama	BPT Beaumont/Port Arthur, Tx	Springfield, Mass.
LFK Lufkin, Texas	LCH Lake Charles, La.	BRL Burlington, Iowa
SHV Shreveport, La.	MSY New Orleans, La.	MKC Kansas City, Mo.
JAN Jackson, Miss.	PNS Pensacola, Florida	STL St. Louis, Mo.
MGM Montgomery, Ala.	MOB Mobile, Ala.	LRD Laredo, Texas
DHN Dothan, Ala.	BOS Boston, Mass.	TRF Turner, Ga.
GLS Galveston, Texas	BDL Hartford, Connecticut -	

SKY AND CEILING: Sky cover symbols are in ascending order. Figures preceding symbols are heights in hundreds of feet above station. Sky cover symbols are:

- O Clear: less than 0.1 Sky cover
- 0 Scattered: 0.1 to less than 0.6 sky cover
- 0 Broken: 0.6 to 0.9 sky cover.
- 0 Overcast: more than 0.9 sky cover.
- Thin (when prefixed to the above symbols) (mystery here -- there is no dash symbol on my weather type basket???)
- X Partial Obscuration: 0.1 to less than 1.0 sky hidden by precipitation or obstruction to vision (bases at surface)
- X Obscuration: 1.0 sky hidden by precipitation or obstruction to vision (bases at surface).

WEATHER SYMBOLS

- A Hail
- AP Small Hail
- E Sleet
- EW Sleet Showers
- EW Sleet Showers
- IC Ice Crystals
- L Drizzle
- R Rain
- RW Rain Showers
- S Snow
- SG Snow Grains
- SP Snow Pellets
- SW Snow Showers
- T Thunderstorms
- ZL Freezing Drizzle
- ZR Freezing Rain

INTENSITIES ARE INDICATED THUS:

- Very Light
- Light
- (no Sign) Moderate
- Plus Heavy

OBSTRUCTION TO VISION SYMBOLS

- D Dust
- F Fog
- GF Ground Fog
- H Haze
- IF Ice Fog
- K Smoke
- BD Blowing Dust
- BN Blowing Sand
- BS Blowing Snow

WIND

Direction in tens of degrees from true north, speed in knots. OOOO indicates calm. G indicates gusty. Peak speed of gusts follows G or Q when squall is reported. The contraction-wshft; followed by local time group in remarks indicates windshift and its time of occurrence.

ALTIMETER SETTING

The first figure of the actual altimeter setting is always omitted from the report.

Runway visual range (RVR) is in hundreds of feet.

Letter preceding height of layer identifies ceiling layer and indicates how ceiling height was obtained. Thus:

- A Aircraft
- B Balloon (pilot or ceiling)
- D Estimated height of cirriform clouds on basis of persistence.
- E Estimated heights of noncirriform clouds
- M Measured
- R Radiosonde balloon or radar
- W Indefinite
- U Height of cirriform ceiling layer unknown
- / Height of cirriform non-ceiling layer unknown
- "V" Immediately following numerical value indicates a varying ceiling

VISIBILITY - REPORTED IN STATUTE MILES AND FRACTIONS (V - VARIABLE)

Coded Pireps: Pilot reports of clouds not visible from ground are coded with MSL (mean sea level) height data preceding and or following sky cover symbol to indicate cloud bases and or tops, respectively.

INTERPRETATION OF A SAMPLE REPORT:

MKC S 150M250 4RK 132 /58/56/
1807/993/VR32/955 RB050V0

Decoded report: Kansas City Special observation, 1500 feet scattered clouds, measured ceiling 2500 feet overcast, visibility 4 miles, light rain, smoke. Sea level pressure, 10132 millibars, temperature 58 dewpoint 56, wind 180 degrees, 7 knots, altimeter setting 29.93 inches. Runway visual range 3200 feet. Pilot reports top of overcast 5500 feet, rain began 5 minutes past the hour, overcast variable broken.

S indicates that report contains important change.

FCC RULES & FREQUENCIES

for RTTY OPERATION

The following excerpts of F.C.C. operation have been summarized and rules and regulations governing RTTY are listed below for ready reference--

BAND	RTTY SUB-BAND	RTTY EMISSION	ID EMISSION
80 meters	(Not authorized)	(N/A)	(N/A)
80 meters	3500- 3800 KHZ.	F-1	A-1/F-1
40 meters	7000- 7200 KHZ.	F-1	A-1/F-1
20 meters	14000-14200 KHZ.	F-1	A-1/F-1
15 meters	21100-21250 KHZ.	F-1	A-1/F-1
10 meters	29000-29700 KHZ.	F-1/F-2	A-1&3/F-1&2&3
6 meters	50.1-54.0 MHZ.	A-2/F-1/F-2	Same as 10 M.
2 meters	144.0-147.9 MHZ.	A-2/F-1/F-2	Same as 10 M.

Below 2 meters, all authorized bands and emissions may be used.

2. RADIO TELEPRINTER TRANSMISSIONS (Section 97.69):

Must use standard five unit "International telegraphic alphabet No. 2" for all letters, numbers, and slant sign (/). Code for functions and operations is to conform to general commercial practice. May use other "figures" positions for auto-start, remote control of receiving printers and other purposes.

When using F-1 emission (FSK), the shift from mark to space and space to

A comparison of your own particular keyboard with that of a weather keyboard will provide you with the key to reading the aviation weather forecasts. The top row of keys is not shown, since this is identical for all keyboards. Here are rows 2 and 3 of a weather keyboard:

ROW 2
LETTERS A S D F G H J K L

FIGURES ↑ ↗ → ↘ ↙ ← ↖

ROW 3
LETTERS Z X C V B N M

FIGURES + / 0 1 2 3 4 5 6 7 8 9

Assuming you have a standard communications keyboard, the sample aviation weather report used above would look like this on your printer:

MKC S 15;M25? 4RK 132/58/56/
1807/993/VR32/ 755 RBO57V, 73 DE
W8QMI

mark shall be less than 900 cycles. (See note 1 below)

NOTE 1: It is general amateur practice with F-1 emission to shift down in transmitter frequency from mark to space signal, but not required by regulations.

When using tone modulation for A-2 or F-2 emission (AFSK), the highest audio tone frequency permissible is 3000 cycles. The difference in tone frequency or shift must be less than

Continued on page 13

VHF RTTY NEWS

RON GUENTZLER --- W8BBB
988 Chelston Rd.
South Euclid, Ohio. 44121



There must be a start to everything, so here is the start of the VHF RTTY section.

As we see it, there are three reasons for this monthly dissertation: 1) To act as a "clearinghouse" to let those interested in VHF RTTY know who is doing what, where, 2) To promote the use of VHF RTTY for local and short-haul traffic, and 3) To discuss technical features of RTTY and its associated equipment for use on the VHF bands.

In order to promote VHF RTTY as much as possible, we plan to publish the activity taking place on the VHF bands as we hear about it. The only way we are going to gather much information is by having someone in each center of activity send to us as much information as possible.

We cannot stress too heavily that knowing what kind of activity exists is a big help to someone thinking of getting on. Also, if you know that someone is on a hundred miles away, there might be a lot of hitting the green keys in vain never realizing that you are cross-polarized or on the wrong frequency.

The following type of information should be supplied: Call, name, address, frequency, xtal or VFO controlled, mode (6A2, 40F2, etc.), if AFSK, the audio frequencies used, make of xmtr and rcvr, RF power output, type of antenna, polarization, whether autostart, and if A/S, the times and means of starting.

If enough information is gathered, we will not only print it as received, but also compile a list that will either be published here or under separate cover if the quantity of information requires it.

Some of the peculiarities (and incidentally, nice features) of the VHF spectrum for RTTY will be discussed.

In the Cleveland and Detroit areas we have standardized on certain items such as type of polarization and operating frequencies. These will be discussed with the view to "standardizing" operations as much as possible. We are not necessarily going to promote anything that has not been suggested previously, but instead just keep suggestions coming as to methods that have proved satisfactory.

We plan to discuss technical topics which include factors to consider before building a TU, or which TU to use for VHF work, what type of autostart to use, what type of xmtr and rcvr to use, etc. We suspect that things could get lively, and hope they do. We hope that none of the readers get up in arms over our views, and we plan to be as impartial as possible. (Actually, a little bit of controversy might be a way to keep the mailman busy!)

So until next month --- keep those cards and letters coming, folks!

73, RG

SHORT BIOGRAPHY of W8BBB

Age 32 - Active ham since 1957. B.S.S.E. and MSEE from Case Institute of Technology. Worked as Assistant Engineer, General Engineering Division, Ohio Bell Telephone Co. Instructor, Department of Electrical Engineering, Fenn College of Engineering, The Cleveland State University since 1963. Works VHF exclusively. Hobbies - anything pertaining to ham radio.

FLASH -

"LOU" ITORS WINS

RTTY DX CONTEST

- FULL DETAILS NEXT MONTH

PREFIX	COUNTRY	CN	HONDURAS	DJ4L	WEST GERMANY	FA	ALGERIA	ES7	SAINT MARTIN	KN6
AC3	SIKKIM	CP	CAPE VERDE	IT	ITALY	F8B	NETHERLANDS	FE	NETHERLANDS	KP4
AC4	INDONESIA	AC	ANTIGUA	PC	PORTUGAL	FC	FINLAND	FE	FINLAND	KR6
AC5	INDONESIA	CR6	ANGOLA	FE	FRANCE	FE	FRANCE	FE	FRANCE	LS6
AP	AFRICA	CR7	MOZAMBIQUE	K49	KANAWA IS.	FM	COMORO IS.	GD	ISLE OF MAN	KV6
BV	BURMA	CR8	GOA	PORTUGAL	FE	FRANCE	FRANCE	FRANCE	FRANCE	KX6
BY	YUGOSLAVIA	CR9	MACAO	EL	EL SALVADOR	EL	EL SALVADOR	EL	EL SALVADOR	KZ5
CC	CUBA	CT1	PORTUGAL	EP	EP	EP	EP	EP	EP	LA
CE2	JUAN FERNANDEZ	CT2	AZORES IS.	ET2	ET	ET	ET	ET	ET	LU
CM	CUBA	CT3	MADIRA IS.	ET3	ET	ET	ET	ET	ET	LU
CMCO	CUBA	CU	URUGUAY	A	FRANCE	PAR	REUNION I.	HC	GALAPAGOS	LY

DX RTTY NEWS

JOHN POSSEHL - W3KDF
Blue Bell, Pa. 19422



Hello there...

Better take another look at the masthead. Quite a surprise, isn't it? Well, to tell you the truth, I'm about as surprised as you are. Through a chain of events that are adequately explained elsewhere in this issue, Dusty asked and I have agreed to be editor of the DX column in the RTTY Journal. It is going to be no easy task to fill the shoes of Bud, who has done such a magnificent job of reporting over the past decade; in fact, almost since RTTY has become a part of amateur radio. You will be hearing from Bud and Ed, K3GIF, on this page from time to time as they have both graciously agreed to assist in anyway they can to make the column of interest to you DX'ers.

Before going too much further it might be appropriate to introduce myself and give a few of those facts we are all interested in knowing about the other fellow, particularly since we will be in monthly contact.

W3KDF was first licensed in 1934 as W2HQX and at that time the QTH was in the Bronx, New York. Activity has been constant ever since, with a couple of interruptions for military obligations. The present call was issued in 1946; a second call sign, W3DBF, is also held and is active. Commercial 2nd class radiotelephone and radiotelegraph are current but not active.

Operating has always been confined mainly to CW on the DX bands until the RTTY bug bit a couple of years ago, and I have found it to be such a fascinating phase of our hobby that just about all available time is now spent at the keyboard.

Membership is held in the Frankfort Radio Club (former secretary), BARTG, and TOPS (#616). As for awards, there is the DXCC (275 confirmed - 287 worked), and WAZ on

CW. On RTTY the WAC and QCA 25 certificates are held. At present, there are 48 countries confirmed out of 54 worked on RTTY.

The station consists of the Heath SB-300/SB-400 with an additional homebrew linear into a TA-33 and a G.P. antenna on 7mc. RTTY gear is a Model 28 ASR, a Model 15 with switchable speed motor for 45 and 50 Baud, a Model 28 LAXD reperf T.D. combination, a Model 14 typing reperf, and a MXD three headed T.D. The convertor is an all transistor two tone type. The standard (850 cy.) and narrow (170 cy.) shifts can be sent and received.

On the family side there is the xyl, Marie, and two daughters, Linda and Lois, and we are all located on a typical acre of suburban real estate about twenty miles or so west of Philadelphia.

Well, fellows, I guess it's about time we get down to the main topic of this column, DX. For this first attempt I'm afraid I will have to "play it by ear". I have already found out that in doing a column like this, one does a lot more listening and a lot less sending.

In reviewing Bud's column, month by month for 1966, I've come up with some interesting information. All told, you fellows have worked, heard, or had information on pending activity in 67 different countries this past year. To add to that, I have knowledge of at least 13 more that I have either worked or heard back to 1965 that bring the total up to eighty countries in the past two years. The point I'm making is that at the rate countries have been showing up in the past two years, the century work is not far off. The DXpeditions of the past year by the groups in Italy, England, and Jean's one, two, punch from the Caribbean in 1965, has helped tremendously in getting new

countries on the RTTY map.

In anticipation of the magic number 100 being reached "in our time", I would like to start the following activity immediately.

1. An RTTY DX Honor Roll listing on a quarterly basis, i.e., March, June, Sept., and Dec.
2. Listing to consist of call sign, total countries worked, total countries confirmed (numerical totals only).
3. All submissions will be accepted at face value up to but not including 100.
4. For the present the ARRL and RSGB countries lists are accepted.

Please note that I must have your listing prior to February 10, 1967 in order for it to appear in the March issue.

The type of award for the 100 country total or the method of verification has not been determined at this writing, but such information will be forthcoming at an early date.

Fellows, I have long since come to the conclusion that RTTY is the most efficient and fastest method of exchanging information. In keeping with those concepts and particularly as it applies to this column, I am going to list my intended operating habits. Please keep in mind that the listing below is not a fixed schedule. It is based on my operating habits over a long period of time. Some days I may not be on at all. Since I will be listening more than sending, a short blind call will suffice. If you get no answer after about two calls, figure that I am not around.

Monday thru Friday - 1230-1330 GMT-14095-21095 KC. 2130-2220GMT - 14095 KC. 0000-0100 GMT - 14095-7040 KC.

Weekends - No fixed time - any of the above freq. as conditions and my availability permit.

If you have any interesting DX news, please try to pass it to me this way, particularly the DX stations.

Well, this brings this first column to a close. With some of the formalities out of the way, next month we get down to business. Keep the info coming fellows. 73 de John

F.C.C. RULES & FREQUENCIES FOR RTTY OPERATION

Continued from page 10.

900 cycles. (See note 2 below)
 NOTE 2: It is general amateur practice with A-2 or F-2 emission to use a 2125 cycle tone for mark signal and 2975 cycle tone for space signal.

Normal rate or speed of teleprinter must be as close to 60 words per minute as possible, and in any event within the range of 55 to 65 words per minute.

3. STATION IDENTIFICATION (Section 97.87)

Must send the call sign of the receiving station (or net name) and transmitting station by radio teleprinter and the call sign of the transmitting station by international morse code (or voice on bands where voice is permissible) as follows: (See note 3 below)

A. Beginning and end of each single transmission. OR

B. Beginning and end of series of transmissions between stations having established communications, each transmission of which is less than three minutes duration. (The identification at the end of such a series may be omitted when the duration of the entire series is less than three minutes.)

AND

C. At least once every ten minutes or as soon thereafter as possible during a series of transmissions between stations having established communications.

AND

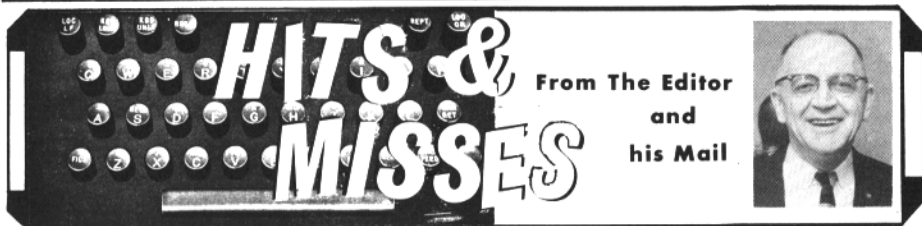
D. At least once every ten minutes during any single transmission of more than ten minutes duration.

NOTE 3: F.C.C. notice of rule change "suggested" that a frequency shift of not less than 100 cycles be used for CW identification if F-1 emission is used, and code speeds of 20 to 25 words per minute be used. CW identification must be identifiable on standard communications receiver.

Courtesy W2BLR, Buffalo, N.Y. This is not an official F.C.C. document.

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Closing date for copy or Classified ads- 10th of month preceding publication.



This column is a pot-pouri of news, comments, ideas or what not - as long as it pertains to RTTY. If it is controversial -- please no personalities. Here is your chance- if you have an idea, suggestion, or gripe lets hear from you.

As the time draws near for the first issue to go to the printers we are still amazed at the hundreds of letters arriving expressing thanks to Merrill and wishing the new publisher best wishes. We only wish we could answer all of them. To help you know the editor a little better we will run a short "Brag Tape". I hope that over a period of time we can meet many of you on the air and say hello in person.

Frank "Dusty" Dunn, age 59, Married to Crystal "Crys" - One daughter and one granddaughter. Occupation- Owner of 3 Camera stores in the Detroit area.

First amateur license in 1920 and have worked all modes and frequencies. Discovered RTTY in 1963 and sold on it ever since. Equipment - Collins 75A4 receiver with TT/L converter. 100V exciter and Henry 2K final on all bands from 10 to 80. Machine is 28ASR on the lower frequencies with a 28KSR on 2 meter FM. Model 14 typing reperf with 14 TD can be used with either printer.

We were glad to have the ARRL recognize RTTY listeners by broadcasting official bulletins on a regular schedule. We now wonder about the value of the outdated - long - repetitive - rebroadcasts of these bulletins by amateur stations. Does anyone listen to them?

CW in the RTTY portion of the band tends to rouse the hackles of RTTY operators. But fellows, we bet not one in a hundred hams knows where the RTTY portion of the bands are. Did you before you got on RTTY? Let us

try to publicize our usual haunts, most cw stations will co-operate if they know.

We are not sure who, if anyone, offers an award for "Worked All States" on RTTY. We are quite sure very few have been issued, less than the WAC award. If we find no award is available we will be glad to have a certificate printed and handle the distribution. As stateside participation in the DX contests seems to be limited pretty much to stations with beams, possibly a contest with multipliers of states and Canadian provinces only would attract many of the low powered and low frequency stations to participate. It would also be an ideal way to pick up some missing States. Foreign stations could also enter in search for needed States.

We would like to hear from readers if such a contest would be of interest. Should it be 24 or 48 hours and the approximate time of year to be held. Scoring could be on total contacts times states worked.

We have had a number of requests for back issues of RTTY. At this time they are being shipped from California to Royal Oak and we do not know which issues will be available. As soon as they are received we will try to publish a list of all issues that are available. Price will be 30¢ a copy.

Who can furnish us an up-to-date list of commercial stations using 60 WPM speed and their frequencies?

The co-authors of the popular TT/L demodulator have both moved recently.

Irv Hoff (ex K8DKC) a pilot with United Airlines is now W6FFC and located at 12130 Foothill Lane, Los Altos, California 94022.

Keith Peterson W8SDZ is now living at 1418 Genessee Street in Royal Oak, Michigan 48073.

Automatic- Unattended AUTO START on 80 Meters

Keith Peterson — W8SDZ

The following is a list of all stations participating in automatic auto-start operation on 3637.500 KC using 170-cycle shift. There are many types of experimental systems being used and evaluated. Common to most of them is the requirement for the transmitting station to send 35 to 40 characters such as letters keys before sending the call-up code of the desired station. Some units require the time period necessary to send these 35-40 characters and others require the reception of the characters themselves, so sending them will satisfy all requirements. When sending the call-up and turn-off codes remember to repeat several times to be sure they are received.

This completes the list as of December, 1966. Those stations which do not have call-up or turn-off codes

will print anything that is sent on the frequency during their monitoring hours. WOEPY/2 autostart requires one full line of the letter "Q" repeated at machine speed. His shut-down is five seconds of steady space. WA8PCK autostart requires five seconds steady mark followed by five seconds steady space followed by five seconds steady mark followed by PCK. These letters must be sent before any carriage return or line feed as his machine will otherwise cut off.

Messages to be sent to any station listed below may be relayed through others listed if you are not sure you can hit the frequency close enough to leave a message yourself.

Messages addressed to the 'RTTY JOURNAL', may be sent to W8SDZ and will be relayed the same day.

Station	Name	Location	Call-Up	Turn-Off	Monitoring Hours
WOEPY/2	Lew	Titusville, N.J.	See Note	See Note	Continuous
K8ERV	Tom	Mansfield, Ohio	None	None	Evening Hours
WA2GVP	Larry	Buffalo, N.Y.	ZLZL	NNNN	Evening Hours
KOKBY	Neal	St. Louis, Mo.	KBY	NNNN	Continuous
K3NIO	Vic	Frederick, Md.	ZCZC	NNNN	Continuous
KOOJV	Harold	St. Louis, Mo.	OJV	NNNN	Continuous
WA8PCK	Bill	Columbus, Ohio	See Note	NNNN	Evening Hours
W8SDZ	Keith	Royal Oak, Mich.	SDZ	NNNN	4:30PM to 4:30AM
WA2YJD	Gerry	Greatneck, L.I.	None	NONE	Evening Hours
K3YZF	Harry	Wilmington, Del.	YZF	NNNN	Continuous

DAYTON HAMVENTION

One of the largest and best hamfests especially for RTTY enthusiasts is the Annual Dayton Hamvention. This year it will be held April 15 at Wampler Arena Center, Dayton Ohio. Plan on attending now and if possible arrive Friday night in time for the RTTY get together. Lots of activity for the XYL. For information write - Dayton Hamvention - Box 44, Dayton, Ohio.

HELP US ---

Readers sending in subscriptions can help us by noting one or two of their favorite types of articles or departments. This will help us determine future material for publication.

RTTY JOURNAL

P.O. Box 837 - Royal Oak, Michigan 48068

"Dusty" Dunn — W8CQ

Editor & Publisher

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