

ELEVENTH ANNIVERSARY RTTY SWEEPSTAKES FEBRUARY 14, 15 & 16

The Anniversary Contest will be held starting Friday, February 14 at 2300 GMT and run for thirty hours, ending at 0500 GMT on the 16th.

Messages shall consist of message number, originating station call, check or RST report of two or three numbers, ARRL section of the originator, GMT (0000-2400), date, and band used (Meters or Megacycles).

Scoring will be one point for a msg sent and receipted for entirely by RTTY, and one point for a message received and acknowledged by RTTY. Relaying or repeating by a third station disqualifies the message. The total message points is multiplied by the number of ARRL Sections worked to compute final score. Two stations may exchange messages again on a different band for added message points, but the section multiplier does not increase when the same section is worked on another band. ARRL Sections are as listed in QST (usually page 6) covering Canada, U.S.A. and some possessions. Each foreign country not included as a section but regarded by ARRL for DXCC credit is treated as a new section for RTTY multiplier credit.

Entries to the contest must be mailed within 15 days of its close (not later than March 5), and must contain a tabulation of complete message data required by paragraph above

both for messages sent and received. It should clearly indicate each new section worked, total section multiplier, total message points, computed score claimed, and a signed statement that all rules have been complied with. At the suggestion of any amateur (or on its own initiative) the judges in the contest may request the original printer copy from any contestant, it being interpreted as record message communications within the meaning of FCC Reg. 12.136 (h) to be retained one year.

Certificates of award will be issued to the ten highest scoring stations. The decisions of the judges are final.

Contest hours may be changed from time to time. Currently they are: Start: Friday 2300 GMT (6 PM EST, 5 PM CST, 4 PM MST, 3 PM PST). End: Sunday 0500 GMT (12 PM EST, 11 PM CST, 10 PM MST, 9 PM PST).

As the contest nears the date February 20 commemorates the anniversary of FSK authorization, only F-1 emission will be used in this contest on bands between 3.5 and 30 megs. Frequencies to watch are: 3620, 7040, 14090, 21090, and both the 28 bands where activity exists. The recent RTTY DX contest found many stations operating well on the 7040 frequency, don't overlook this one. Best of luck, and see you on the SS.—Ed.

THE FEDERAL COMMUNICATIONS COMMISSION ON JANUARY 8, 1964 ADOPTED A NOTICE OF PROPOSED RULE-MAKING IN RESPONSE TO THE LEAGUE'S PETITION IN AUGUST 1962, CONCERNING THE PROBLEM OF DUAL IDENTIFICATION BY AMATEURS WHEN USING RADIOTELEPRINTER. THE COMMISSION HAS PROPOSED TO REQUIRE THAT ONLY THE CALL SIGN OF THE TRANSMITTING STATION BE IDENTIFIED ADDITIONALLY BY RADIOTELEGRAPHY, RATHER THAN THE CURRENT REQUIREMENT OF THE STATION CALLED AND THE STATION TRANSMITTING. COMMENT DATE IS MARCH 16, AND REPLY COMMENTS MAY BE FILED BY APRIL 1.

RESULTS OF THE THIRD ANNUAL WORLD-WIDE RTTY SWEEPSTAKES. (OCTOBER 1963)

Bud Schultz, W6CG (DX Editor)

TOP TEN WINNERS

11RIF	39,320	KØDOM	22,590
W2RUI	31,486	ZS6UR	21,750
K8MYF	27,176	W9HHX	21,180
WØNFA	25,308	W7ESN	20,556
K3GIF	23,250	DL1VR	17,600

After the smoke of battle has cleared away and the mountain of logs have been checked by the Contest Committee the winner is once again—Bruno Riffesser, 11RIF, of Milano. 11RIF did an excellent job of retaining his title as the "Top DX'er" but was pushed quite hard by W2RUI and his margin of victory was somewhat less than it was a year ago. In spite of poor propagation conditions the participation was up for the third year and all Six Continents were represented by contestants. A check of the logs showed that only two stations managed to make contacts in all of the Continents—they were: KW6DS and ZS6UR. A survey of the results does not give a true picture of the many foreign stations participating in this contest because unfortunately many did not submit their logs for credit. Actually there were about 25% more DX stations active in this SS than in the previous two years. The fact that a good percentage of overseas stations were among the top winners is a good testimonial to the effectiveness of the rules. The Committee received only a very small number of complaints concerning the scoring arrangement this year and only a few of the contestants had any difficulty in correctly evaluating their scores. The most common error in scoring seemed to come from rule 6 which specifies the number of points allowed for two way contacts by various countries. Rule 6 under "A" states that all contacts by North and South American Countries (including KH6) gives two points. Under section "B" it allows all other countries except those mentioned in "A", ten points for each exchange. Some of the Stateside logs took ten points for exchanges outside of North and South America and these had to be corrected by the committee.

Getting back to the top scorers; with just a few exceptions the top flite winners were nearly the same as last year. A couple of old timers dropped off the list and several new ones showed up to take their place. It should furnish some encouragement to the lower powered stations that 11RIF again managed to come out on top using only a barefoot ex-

citer. As has been pointed out before, 11RIF makes good use of an excellent antenna set-up to accomplish this feat. Of course, not many of us could manage a good beam 350 feet in the air but it still underlines the importance of an efficient antenna system. The Stateside winner, W2RUI, made good use of the multipliers available to take second place honors. Skipper had the highest number of contacts of any station participating as well as the greatest number of countries worked. W2RUI also made use of five bands in running up his fine score.

At least two multi-operator stations participated in this year's contest and both scored in the top ten. W9HHX and WØNFA were both manned by a number of RTTY'ers and made a fine showing. The committee hopes the success of these two groups will encourage others to "pool" their facilities in future contests. It certainly helps to take the wear and tear from the "one man—around the clock" operation.

Several overseas participants suggested that a second DX Type RTTY contest during the Spring months when DX conditions are better might be a popular idea. With this suggestion in mind, VK3KF is in the process of sounding out the members of the SPRATS on a second major DX RTTY contest to be held early in 1965. Eric's idea is to have some overseas RTTY group take over the handling of this second yearly test and pass the sponsorship around from year to year. More details on this will be forthcoming in the next couple of months.

Finally we come to the question of the awards for the Contest. The first ten winners will receive certificates attesting their fine performance. An appropriate trophy will be presented to 11RIF for his winning effort. You will recall that Bruno, 11RIF, offered a fine Olivetti typewriter to the first place winner of the SS. This now becomes a bit complicated and the decision as to the disposition of this item has been left to Bruno by the Contest Committee. Chester Franz, WØNFA, also has generously offered a trophy to be offered to the station working the largest

number of DX countries during the contest. This latter award will be based on a "points" system worked out by the contest committee and is still not complete. It should be pointed out that the Committee is scattered over five Continents and decisions on matters like this takes a great deal of time. There will be more on this in the next couple of months.

Thanks to all of you who sent letters of encouragement with your logs and hope all of you had a good time even if you didn't win an award. Hope all of you will be in there pitching again next October! Let's take a look at some of the deathless prose taken from logs.

"... Conditions as well as activity were not good... ran less QSO's than I normally do on a weekend without contest."—DJ4KW

"... Enjoyed the test tremendously... the RTTY'er seems to be a somewhat different breed of 'ham cat'."—WØGUS

"... Conditions did not seem to be as good as last year but I logged about thirty W's working each other on twenty!"—G2HIO

"... quite a show."—W2RUI

"... The European boys had wonderful sigs right throughout the test."—ZL1WB

"... The time was excellent—I liked the way it was set up very well. Much better than last year."—W8KDW

"... Careful analysis of signal levels with last year's log shows about an average of three S units lower this year."—KW6DS

"... This is my first contest in about fifty years of operating."—KH6AX

"... Would it help to increase the country points so the fellows would look for DX instead of calling CQ on the frequency?"—W7FEN

"... The bands were anything but ideal

this year."—K8MYF

"... This is the only contest of its kind that I ever get into but it is always an enjoyable one."—WØRX

"... Saving up for a winning effort next year. Oh yeah!"—VK3KF

"... It was a lot of fun and while we did not do as well as we hoped, we did enjoy every minute of it."—WØNFA

"... On the whole, DX conditions were rather poor but all in all it was a good contest."—K3GIF

"... Enjoyed the contest this year although conditions were quite poor here. No Canadians were heard and only very few W's."—LA6J

"... My first RTTY contest. All operators showed much patience. Hope to improve score next year!"—W8FWG

"... My home-brew final broke down on the morning the contest started so I had to use the HX-2Ø barefoot. Anyway, it was great fun, just trying to get my feet wet!"—OZ8US

"... This is the first time the club has operated the RTTY contest but I think we came out pretty well."—W9HHX

"... Very good contest! Had a ball!"—KØMHB

"... Didn't do so good in the contest but had a lot of fun!"—W7LI

"... Have heard of rigs blowing up in these shindigs but mine actually got so hot it blew a fuse!"—VE4BJ

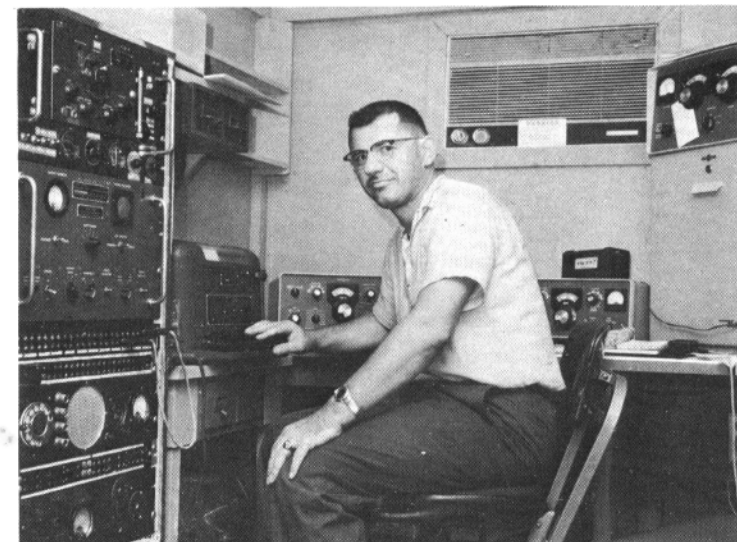
"... Had guests from abroad so I had to make acrobatic programs, with the help of my XYL, in order to have the two days free or almost free at least to devote the longest possible time to the sweepstakes."—I1RIF



I1RIF demonstrates his gear for YV1EM and a friend

FINAL TABULATION OF ALL LOGS RECEIVED

Call	Exchg. Points	States	Countries	Continents	Total	Call	Exchg. Points	States	Countries	Continents	Total
W1ZPX	90	18	3	3	3,420	W8VMP	130	26	12	4	12,980
W1AOH	68	22	2	2	2,296	W8YFE	94	22	4	3	4,468
W1FSH	24	7	3	3	1,968	K8JTT	60	16	5	1	3,960
W1AW	26	8	1	2	608	W8FWG	74	21	—	—	1,554
W1BGW	20	8	—	1	160	K8YJQ	26	10	2	3	1,460
W2RU1	306	31	22	5	31,486	W8QMI	32	13	1	2	816
WA2LKF	188	24	7	3	8,712	K8DDC	12	4	1	2	448
W2FAN	88	23	4	3	4,424	W9HHX	270	34	12	5	21,180
W2IGO	52	23	4	3	3,596	W9CMC	146	27	6	4	8,742
K2AMI	30	5	1	1	350	K9UHR	34	9	4	3	2,706
WA2ZVL	32	3	—	1	96	K9BJM	40	10	2	3	1,600
K2QIB	28	1	—	1	28	W9UMJ	48	16	2	2	1,568
K2ECQ	10	1	—	1	10	W0NFA	268	31	17	5	25,308
K2TRN	10	1	—	1	10	K0DOM	230	33	15	5	22,590
K3GIF	170	25	19	5	23,250	W0GUS	250	34	7	4	14,100
W3WGC	156	27	3	3	6,012	W0DOP	128	32	2	2	4,896
K3RZX	54	16	2	1	1,064	W0RX	104	21	4	2	3,784
W3MHD	42	15	2	1	1,030	W0ASO	84	19	—	1	1,596
W4AIS	110	26	9	5	12,260	K0FOW	32	14	—	1	448
W4BOC	76	19	7	4	7,044	K0AAR	2	1	—	1	2
W4GJY	86	21	4	4	5,006	DL1VR	350	16	12	5	17,600
K4QVD	94	26	3	2	3,644	DJ4KW	50	—	3	2	1,250
WA4OCY	104	25	2	2	3,400	G2HIO	80	4	6	4	5,120
W4JP	92	18	3	2	2,856	I1RIF	840	23	20	5	39,320
W5SH	124	22	6	3	6,328	KH6AX	154	26	5	2	6,004
W5CME	70	15	3	2	2,250	KH6ANR	62	13	6	3	4,406
W5BOT	16	7	2	2	912	KH6DLE	86	14	8	2	4,404
W6CG	116	27	10	4	11,132	KL7DTR	66	6	6	2	2,796
W6WLI	170	26	5	2	6,420	KL7MZ	2	1	1	1	202
W6MTJ	104	25	6	3	6,200	KR6BE	50	—	3	3	1,850
W6LVQ	62	18	6	4	5,916	KW6DS	410	10	10	6	16,100
WA6FKN	112	24	4	3	5,088	LA6J	120	2	6	4	5,040
W6QID	66	20	5	3	4,320	OZ8US	80	2	6	3	3,760
WB6AQR	70	18	6	2	3,660	VE4BJ	90	24	3	3	3,960
WA6VVR	46	12	5	3	3,552	VE3BIJ	70	20	6	2	3,800
K6MTX	24	8	—	1	192	VK4RO	230	7	10	5	11,840
W7ESN	276	31	12	5	20,556	VK3KF	100	2	7	4	5,800
W7PHG	170	28	10	4	12,760	YV5AVW	52	14	5	5	5,728
W7FEN	112	20	10	4	10,240	YV1EM	78	23	5	3	4,794
W7CBY	110	23	4	3	4,930	ZL1WB	150	5	9	4	7,950
W7HFH	118	20	4	1	3,160	ZS6UR	450	19	11	6	21,750
W7LI	58	15	3	2	2,070						
W7BAJ	32	13	3	2	1,616						
K8MYF	296	31	18	5	27,176						
W8DKW	186	31	10	5	15,766						



KW6DS PACIFIC AREA WINNER



Third Place Winner, K8MYF



WØNFA

Photographs of other top scorers have appeared in recent RTTY's.



ZS6UR

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 W6DEO W6CG W6TPJ W6AEE

K9LDU and K8DKC and K3NIO and W4MGT this is W9HRH in Evansville, Indiana and this is really a lot of fun will put my brag tape in for Henry's benefit.

The equipment at W9HRH is as follows:

- A Transmitter
- B Receiver
- C Antennas
- D RTTY Gear

Tear Here and Save

TWO-TONE, SHIFTS AND FILTERS

PART II

Frank J. Gaude, K61BE/4
101 Mountainwood Dr., S.E.
Huntsville, Alabama

The dialogue on limiterless two-tone RTTY reception continues.

I wish to apologize for my delay in writing this second installment and for my inability to answer all the letters I have received. Since my move to Huntsville my free time for ham radio has been less than excessive. The article in Jan. 1964 RTTY by Vic Poor, K3NIO, has stimulated the mid-night and beyond oil burning.

First, I would like to extend the comments and suggestions made by K3NIO and it is to be expected he will extend my remarks in a subsequent issue, hi. The simple push-pull clamp shown as Fig. 2 in Vic's article (one diode should be reversed in the diagram) is the identical circuit pioneered by H. B. Law of England. Of course, without the series resistor, Rx. With this resistor the circuit can be adjusted to have half the peak A.C. signal as a D.C. component when resting on a steady mark. However, when this is done there is a decision error or bias when the mark and space signals are of unequal amplitude. The situation is at its worst for "mark only" copy or when one tone has faded to the noise. I conclude that the circuit is not equivalent to the TU-D slideback detectors. It is the circuit that Elmer Thomas started with and perfected for start-stop RTTY operation from a keyboard. The logic of Thomas was genius. But it took H. B. Law to get it all started!

Now as to the three situations in which the Decision Threshold Computer (DTC) is supposed to be better than the TU-D slideback detector: 1) impulse noise—In the TU-D, noise in the mark and space channels should have equal energy if noise balanced filters are used. The detected noise will charge the long time constants equal but with opposite polarity and on summation cancellation will occur. This same situation occurs for the DTC. The cancellation is not perfect and a slow varying A.C. remains due to noise which can cause element errors. The point is that neither circuit is better. 2) fast-fade signals—The ability of a limiterless TU to adjust the threshold mid-way between mark and space under fade conditions depends on the time constants of the R.C. circuits. The limit to the correction speed is set by the RTTY keying rate. The TU-D was set up for 100 millisecond threshold time constant. It appears the DTC was set up for about 350 milliseconds. One can

conclude from this, in my opinion, that the TU-D would be better under fast fade conditions. 3) Slow speed typist—The TU-D has a definite disadvantage when resting on a long mark as indicated in Part I of this series. RTTY, Sept. 1963, Fig. 2. An uncompensated mark fade of 6 db will cause a character error. The DTC gets around this difficulty by letting the threshold rest midway between the resting mark level and a space of the same level. This I believe has solved one problem by introducing another. What happens if, after this long mark rest, a space is spent but because of multi-path is not received? The threshold is far from being in the right place with the DTC but it is in the TU-D circuit.

Now this whole thing boils down to a statistical thing as Vic so well indicated. What are the conditions that we most often face? Do we receive more slow speed typists than fast or tape transmissions? What are the average selective fade rates? Is "mark-only" important to us in side-stepping QRM? I believe before we can *scientifically* answer these questions we would have to run A-B tests for a full sun-spot cycle! All other answers will be just opinions or feelings.

I opine that it has been reasonably demonstrated by many hams that the TU-D type detector, on the average, is far superior to the limiter-discriminator type unit. Let these same hams compare the slideback to the DTC. (After all fellows, they are both detectors of limiterless two-tone converters. Dallas gang, pse note.)

The significant thing about the last RTTY year is that errors are being reduced. And to an RTTY'er, an error is like a mortal sin—to be completely avoided.

To answer all the letters as to where is the TU-E? I had the unit in operation for just a short time and only a few hours of A-B tests were run against the TU-D. After that the station was dismantled and has not been put together again. The unit with its 60 cps bandwidth channel filters has very good QRM rejection properties. The new slideback arrangement permitted zero bias adjustment in "mark-only" operation. The original bias was caused, as W6NRM has pointed out, by unequal rise and fall times of the channel filters. For those who *must* have the schematic of the TU-E, I believe Irv, K8DKC, will send you a copy with tune-up instruc-

tions if you send him a stamped, self-addressed envelop. (Forgive me, dear winged falcon.) The TU-E employs one of Irv's most advanced VFO keyers.

I have continued the literature survey concerning selective fade vs. mark-space frequency separation. If one analyses all the data taken over the past ten years, the conclusion can be drawn that selective fade is independent of frequency separation down to at least 170 cps shift. Some years were a little better for wide shifts but most years showed no difference. There were many times when there was more selective fade at the narrow shifts than at the wide, which is, indeed, surprising.

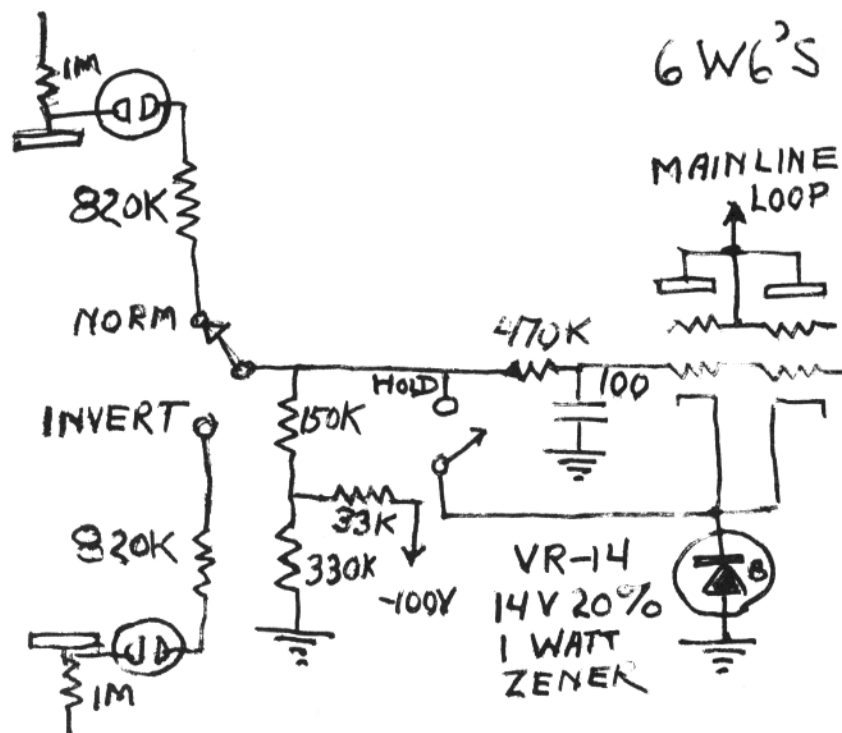
In conclusion, I wish to thank our gracious editor for providing a forum through which all the non-conformists, limiterless RTTY'ers could make known their comments and findings. The last of this series will present (I hope) a converter which has combined all the advantages, and none of the disadvantages, of the TU's developed over the past several years. You can be sure it will have no limiters, but will have very sharp channel separation filters and be of the heterodyne type to permit narrow band reception of any shift with but two such filters.

IMPROVING POLAR RELAY OPERATION

Paul F. Haire, WILLY
39 George Street
Arlington, Mass. 02174

If anyone else is having trouble getting the magnet current on space under control, he should try this answer before taking the gas pipe on polar relays. Remember that it takes minus 50 volts on 6W6GT's grids to get the plate current down to practically zero. I simply lifted the cathode-to-ground wire, inserted a zener diode, returned the mark hold switch to cathode rather than to ground, and my troubles were over. The Sarkes-Tarzian VR-14 20 percent costs \$1.50. Circuit values are not optimized, but those shown give 45 mils on mark, 4 mils on space.

NOTICE: When sending in renewals or other mail, be sure and give your call, and zip code numbers. Thanks, RTTY, INC.



DX-RTTY

Bud Schultz, W6CG
5226 N. Willmonte Ave.,
Temple City, California 91780

Hi DX'ers:

This will necessarily be a "shorty" due to the space and time taken up this month by the Contest summary. It was my intention to skip this DX survey this time in favor of the SS info but so much "hot" news has arrived at the desk it seems necessary to let you in on it. The big news of the month was the debut of F8KI on the keyboard mode. Ed, K3GIF, had the honor of making the very first F/W RTTY QSO. John, FG7XT, made the second QSO with Jean on the next day. F8KI is only running 20 Watts at the present time but under good conditions his signals have been good copy on the East Coast. Since the ice has been broken by F8KI we have received subscriptions and requests for back issues of "RTTY" from F8RQ and F3PI so it appears that activity is moving rapidly in France. In addition to the above - FG7XT reports that F9RY/FC will be on FSK from Corsica soon. That should be a real blue chip DX goody!! Speaking of FG7XT in Guadeloupe . . . John has a fabulous signal here on the West Coast during the midday hours. His signals have been running better than S-9 for hours on end. John tells me that he has replaced his TA-33 Jr that he lost in the hurricane with a new full size TA-33 and he is now set for any DX that shows up. FG7XT says he came to Guadeloupe for a two months' visit and stayed for 25 years! He enjoys diving, yachting and big game fishing so if any of these subjects are of interest to any of you get a contact with FG7XT and he will really make it interesting.

A letter just arrived from OZ5JT with some very exciting news of activity in his country. He reports that after writing three letters to the Ministry for Official Affairs (Compares to our FCC) he has word that this month they will release 20 to 40 page printers to the Danish Hams at a price of \$10 each! This should really start things rocking over there. OZ5JT says he received a model 15 from W2ZXM/MM. (He refers to Kurt as "Captain Stay-Put" hi).

K3GIF sends in a flock of choice tid bits for me to spray around for what they are worth. Ed tells me that the Germans are very active at the present time and lots of new ones are showing up. DL9EX is putting in a fat signal on 14Mcs as are DL3IR and DL1VR. ON4HW is back on the bands once more and 11DBK is a new one showing up from Bruno's land. Here's an interesting quote from K3GIF's copy: ". . . Sunday was typical

of the kind of thing we are running into on the East Coast. I was working John, FG7XT, about ten AM when 5A5TR from Libya broke in and at almost the same time Alan, G2HIO, began calling John. 5A5TR couldn't copy FG7XT so I worked him and set up skeds for them." This is indeed drooling material! Ed has been keeping skeds with ZS1FD and reports Henry's signals have been good copy. ZS1FD and his XYL are busy taking Italian language lessons preparatory to their trip to visit Bruno 11RIF in April. (ED. NOTE: I don't dig this last item-talked to Bruno on SSB recently and he spoke better English than I do).

Nothing further to report on the rumored activity on FSK from BV1USG on Formosa. Understand that the only obstacle now is official government sanction. We received a change of QTH notice on Cas, Ex-KR6AK, ex-HL9KK. He is now back in the States at a place in Virginia. Just received a worried note from Rene, DL3IR, telling that he sent his WAC-RTTY QSL cards to ARRL rather than to me. Stop worrying, Rene, your cards were forwarded to me by ARRL and your Award is in the mail. Congratulations on being nr 39.

The boss just told me that he has received a subscription from KB6EPN on Canton Island. I'll look into this one and give you more scoop later. Now I'm out of space so will cut out and hope all of you are around again next month. Please mail me any DX news you happen to hear or work.

73

Bud, W6CG

NEWS

Have been appointed OBS (Official Bulletin Station) for the ARRL by my Section Communications Manager, W6ZRJ and am holding regular skeds:

3625 KC 0430Z Tuesday (Monday local date)

3625 KC 0430Z Friday (Thursday local date)

7105 KC 0445Z Wednesday (Tuesday local date)

RATTS NET has been in scheduled operation for one year and consistently have 8 to 10 stations checking in. Not a great volume of traffic but it's a good meeting place.

K6DXY



HORSE TRADES

- WANTED:** Instruction manual for TT-63A/FGC Telegraph repeater. W7KYO 409 East Hawthorne, Bend, Oregon.
- FOR SALE:** Toroids, 88 mhy, unceased .60¢ each or five for \$2.50 PP USA. WA6VVR/WA6FKN, P.O. Box 34, Dixon, Calif. 95620
- WANTED:** CV89A/URA-8A chassis less plug in units, state price and condition. KIAJE, 50 Crabapple Lane, Groton, Conn.
- FOR SALE:** Tape puller TT-106U 110V AC, unused, walnut finish \$2.50 FOB Tampa. TRADE TTY and KLI parts for TTY Upper case H motor start-stop kit. W4BNI, 2903 Bay View Avenue, Tampa, Florida 33611.
- FOR SALE:** Model 14 typing reperf with kybd \$100.00. Model 14 TD \$50.00. Model 15 printer with kybd and table \$125.00. All in excellent condition. No Waiver. W6VYI, 2647 20th Avenue, San Francisco 16, California
- WANTED:** URA-8A Terminal unit. State price and condition. W6TNS, Baseline and Hellman, Alta Loma, California
- FOR SALE:** Complete model 19, with table, which includes 19 keyboard, TD, base, typing unit, cover, table, power supply. \$125.00 plus crating costs. A.T. Corbin, 6511 Aberdeen, Dallas, Texas.
- FOR SALE:** Model 19 keyboard, power supply, TD. \$75.00 waiver, plus cost of crating. K5AUM, 1309 French, Irving, Texas
- FOR SALE:** Teletype sync motor, complete with fan, base plate, like new \$10.00 each, also AC-12 cabinets for model 15 teletypewriters, sound proof, complete with electrical control box, cable and slide out table, like new \$30.00 each. Frank Agnello, 181 Sackett Street, Brooklyn 31, N.Y.
- FOR SALE:** Limited number of bound issues of RTTY \$10.00 each. Two Vol 2. Two Vol. 3. One Vol 4. One Vol 5. Two Vol 6. Two Vol 7. One Vol 8. One Vol 9. Two Vol 11. RTTY, INC. 372 Warren Way, Arcadia, California 91007 (Wanted July 1962 issue.)
- WANTED:** Model 28 KSR. Will trade or sell, Swan SW-240 Tri-Bander, complete with Webster Bandspringer (blue) short model. Topaz 12V Pos or Neg DC with 800 volt output. Used on two week trip. Also five unit perforator. Model 26 with auto CR/LF installed. Also have a model 15 to trade if I get a 28 KSR. W7ULL, 227 West 28th, Spokane 41, Washington
- FOR SALE:** Key tops .20¢ each. Five level chadless tape splicer \$2.50. Also 14 typing reperf, with and without kybds. 14 kybds., used good condx. 15 metal tables. 14 and 19 tape reels. RA87 power supplies, polar relays and sockets. Slip base for 14 TD. MXB 201A, new with sync motor, less heads. 22.50. K9CNG, 839 North 6th Street, Vandalia, Ill.
- FOR SALE:** AC-21 cabinet mounted teleprinter units. Includes 15 machine, plus 14 typing reperf. 14 TD, write for details. R.E. Goodheart Co. P.O. Box 1220 Beverly Hills, California. Phone 213-272-5707

FOR SALE: Model 26 with auto CR/LF, and table write W7BEG for details on a very reasonable offer. W7BEG, 1641 Ridgeway, Medford, Oregon.

FOR SALE: 28 Typing Units only. 28 KSR. 32 KSR. Pick up only. W9GRW, 8029 Keeler Ave., Skokie, Illinois.

HELP! HELP! HELP!

On October 15, 1956, Mace Warner, WØJRQ, moved into a new home at 165 Dudley Street, Lakewood.

In November of that year he erected a beam antenna on a self-supporting steel tower. This has been modified where he now has a spauling steel tower on which is mounted a 10-15-20 meter tri-band beam about 47 feet high.

Largely through the efforts of one notable trouble-making neighbor who aroused three others, they were successful in engaging a lawyer to take the case and file suit against WØJRQ nearly two years ago in an effort to force him to remove the tower and beam, claiming violation of zoning regulations, building restrictions, and deed covenants. That the tower was unsafe, noxious, not an accessory to the home, created disturbance, was unsightly and the four plaintiffs demanded damages to the evaluation of their property in the amount of \$8,000.00 because of the fact that the antenna existed.

All this in spite of the fact that Mace and his family had lived in the new house and the antenna was erected before any of the four troublemakers moved in.

WØJRQ has a completely clean report from F.C.C. after especially exhaustive tests as late as April 16, 1963.

Fighting a lawsuit of this kind is a miserable experience and very costly. To date Mace has paid out a total of \$1329.90 in attorney fees and costs. Of this amount the Empire Radio Club donated to the cause \$62.50.

A motion for summary judgment was denied by Judge Christian D. Stoner of the Jefferson County District Court on December 2, because of the complexity of the Court's hearing of the motion. This means a full blown court trial must be held and an early date is promised.

The estimated time for the trial with expert witnesses is estimated at four days. The cost \$500.00 per day!

The effects of such a lawsuit are far reaching. It is doubtful if there is an amateur in any town or city in Colorado that hasn't at least one neighbor who doesn't like his antenna, and of course it only takes one to start the ball rolling. The ham gets the blame for anything that happens in the entire neighborhood with reference to any radio, TV, telephone and record player interference, he is just automatically guilty.

Should this case be lost and set a precedent, which is what the courts go by, there is no doubt but that there would be an epidemic of court cases started throughout Colorado, and even the entire country involving hundreds of amateur operators.