

Amateur Radio Teletype Christmas Gift

On December 23, 1952, 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 teleprinter transmissions. The following special conditions shall be observed during the transmission of radio teleprinter signals on authorized frequencies by amateur stations:

(a) A single channel five unit (start-stop) teleprinter code shall be used which shall correspond to the international Telegraphic Alphabet No. 2 with respect to all letters and numerals (including the slant sign or fraction bar) but special signals may be employed for the remote control of receiving printers, or for other purposes, in "figures" positions not utilized for numerals. In general, this code shall conform as nearly as possible to the teleprinter code or codes in common commercial usage in the United States.

(b) The nominal transmitting speed of the radio teleprinter signal keying equipment shall be adjusted as nearly as possible to the standard speed of 60 words per minute and, in any event, within the range 55 to 65 words per minute.

(c) When frequency-shift keying (type F-1 emission) is utilized, the deviation in frequency from the mark signal to the space signal, or from the space signal to the mark signal, shall be adjusted as nearly as possible to 850 cycles and, in any event, within the range 800 to 900 cycles per second.

(d) When audio-frequency-shift keying (type A-2 or type F-2 emission) is utilized, the highest fundamental modulating frequency shall not exceed 3000 cycles per second, and the difference between the modulating audio frequency for the mark signal and that for the space signal shall be adjusted as nearly as possible to 850 cycles and, in any event, within the range 800 to 900 cycles per second.

(Continued on page 7)

RRTTY



HORSE TRADES

This page of the Bulletin is for use of amateurs who have teletype equipment for sale or trade and for those looking for equipment to buy or trade. It is a free service and may be the means of getting some one on the air or to distribute some equipment that might otherwise get lost on a shelf. The only requirement is that teletype gear is the prime object. It can be traded for other gear as long as the one or the other parties get something that will help the teletype fraternity. Following are a few examples:

Wanted—Model 12 Keyboard, with receiving and transmitting distributor or just transmitting distributor W6GFI

Wanted—Model 12 Keyboard . . W6NAT and W6CL

RRTTY is the Official Publication of the Southern California Radio Teletype Society

and is published for the benefit of all Radio Teletype Amateurs and Experimenters. Use the enclosed card to indicate your comments on the new Bulletin "RRTTY".

SOUTHERN CALIFORNIA RADIO
TELETYPE SOCIETY

3769 East Green Street
Pasadena 10, Calif.

Return Postage Guaranteed

Southern California Radio Teletype Society Holds Meeting

The December meeting was held at Leo Shepard's (W6LS) house. Some twenty of the club were present. Leo has recently completed a patio which is glass enclosed with an alsinite roof tinted a light blue, this creates the illusion of sky. A large fireplace with barbecue facilities is included. Leo provided a long table across the room around which the gang gathered in small groups discussing the various phases of teletype operations. The usual refreshments were served. After about an hour and a half of "local QSO's" the business meeting was held.

Lewis Rogerson (W6SCQ) acted as Secretary and treasurer.

Discussion was opened on the matter of the two new frequencies used, 147.75 voice or teletype . . . 147.85 exclusively for teletype. The crystals for these new frequencies were obtained from Monitor. So at present the S.C.R.T.S. has four active channels on two meters:

A—146.70	C—147.75
B—147.10	D—147.85

Next the matter of receiving crystals was brought up—Merrill Swan advised that these would be available shortly at \$6.20 a pair from Monitor thru him.

The matter of radio teletype in the C D effort was brought up by Ed Simmons (W6CLW). Ed pointed out, this would be an excellent means of helping the RTTY effort along, while doing a good job. He also stressed the need for mobile units which could be installed anywhere on short notice. Shorty

Griggs (W6RL) has his mobile RTTY station operating and has expressed willingness to help.

Next a committee of Emile Duval (W6FLW) and Ed Phillips (W6IZJ) were appointed to set up Net Operations. They will report at an early date. Tentative date for the first Net Operations has been set for Tuesday, January 13, 1953 at 8:00 p. m. Contact either of these stations for further information.

It was suggested that a committee consisting of Leo Shepard and Merrill Swan contact the C.A.P. group and invite them to the next meeting.

The members present at this meeting were:

W6QQM	W6FLW
W6LS	W6CLW
W6MRO	W6NSS
W6NWM	W6CL
W6GFI	W6NAT
W6IZJ	W6DEO
W6BWQ	W6OQB
W6IIV	W6CMQ
W6AEE	W6SCQ

Art Addaway

The next meeting will be held at Lewis Rogerson (W6SCQ) at 5340 North Muscatel, San Gabriel, on January 24, 1953 at 8:00 p. m. To get there . . . Muscatel is about one half mile west of Rosemead Blvd. and a half block south of Broadway, which is the first stop light below Las Tunas on Rosemead Blvd. SEE YOU THERE!

California Amateur Radio Teletype Stations

W6AEE—Merrill	Pasadena	W6LIZ—Leon	Los Angeles
W6APW—Pete	Pasadena	W6LS—Shep	La Canada
W6BGN—Vince	San Pedro	W6LLP—Walt	Pasadena
W6BWQ—Bud	San Marino	W6LSG—Larry	Pico
W6CL—Bert	Gardena	W6MEL—Earl	Bakersfield
W6CLW—Ed	Pasadena	W6MYC—Johnny	Pasadena
W6CMQ—Ted	San Marino	W6NAT—Bill	Montebello
W6CYR—Jim	Santa Ana	W6NRM—Bob	Oxnard
W6DEO—Fletch	Eagle Rock	W6NSS—Al	West Los Angeles
W6DOU—Paul	Hayward	W6NWM—Johnny	Yucaipa
W6DQW—Bud	S. W. Los Angeles	W6NYF—	Los Angeles
W6DRL—Art	Pasadena	W6OCP—Ralph	La Canada
W6EAL—Hy	W. Los Angeles	W6OPM—Cal	Los Angeles
W6EFE—Al	Wilmington	W6OQB—Ralph	Arcadia
W6EKO—Leonard	Los Angeles	W6OZE—Pat	Redondo
W6EV—Ham	East Los Angeles	W6PNW—Ray	Bellflower
W6EZF—Don	South Pasadena	W6QQM—Walt	Altadena
W6FGS—Virg	Alhambra	W6RL—Shorty	El Segundo
W6FLW—Emile	Whittier	W6SCQ—Lewis	San Gabriel
W6FNW—Jim	S. W. Los Angeles	W6STA—Bill	Glendale
W6GFI—Roy	West Hollywood	W6STN—Bob	Los Angeles
W6GFY—Van	Burbank	W6TAC—Ed	East Los Angeles
W6GPF—Benny	Chula Vista	W6TD—Jean	Covina
W6HCC—Phil	Ontario	W6TRX—Doc	Pasadena
W6HWW—Ernie	Hayward	W6UG—Larry	Long Beach
W6IAL—Frank	Van Nuys	W6VEG—Larry	Westchester
W6IIV—George	Pasadena	W6VHR—George	W. Hollywood
W6INX—Paul	Long Beach	W6VKF—Jim	Sierra Madre
W6ITH—Reg	Moraga	W6WGK—Bill	Los Angeles
W6IZJ—Ed	Sierra Madre	W6WTS—Larry	Monterey Park
W6JAU—Bob	Arcadia	W6WTU—Hugh	Inglewood
W6JWB—	San Francisco	W6WXS—Ted	Sherman Oaks
W6KAT—Ford	San Marino	W6YMX—Bill	Reseda
W6KBU—Henry	Palo Alto	W6ZEM—Syd	Pacoima
W6KEY—Wayne	Garden Grove	W6ZH—Herb	San Marino
W6KLD—Gerald	Oxnard	W6ZQY—Jack	Santa Monica
W6KYV—Dave	Los Angeles		

This is a cumulative listing of all Amateur Stations equipped at some time with Radio Teletype apparatus. Some stations no longer operate or possess Teletype gear. Advice on additions or corrections is requested. Contact W6CLW or other committee members for further information.

Classification of Teletype Machines and Equipment

MODEL 1—Multiplex tape transmitter with distributor.

MODEL 1-A—This model is a tape perforator. Normally cuts "chad" tape, that is with the holes cut completely out. Two models of this 1-Perforator known. In one model the small holes (blank key perforations) line up with the leading edge of the large holes. The 2nd type has the small holes centered on the large hole. 110 volts D. C. necessary to operate.

MODEL 2—Perforator, smaller than the 1A perforations. Same general style with end of line indicator.

MODEL 2-A—Tape sensing head—is a sensing unit for tape transmission, requires a sending distributor and 110 volts D.C. power supply to operate.

MODEL 6—This is a dual distributor, one receive and one transmit. Operated from a common motor. Original users were the telegraph companies for wire line work. Requires 110 volts A.C. for motor. Can be used with Tape sensing unit and one 21, or one 25, or one 12 printer can be operated from the receiving distributor.

MODEL 11—Manufactured by M. K. and is a combination keyboard, printer which prints on 1/4-inch tape. Maximum receiving speed 45 wpm. However keyboard can be modified to operate at 60 wpm. 110 volts A.C. and 110 volts D.C. required to operate.

MODEL 12—The work horse of teletype. Separate printer-keyboard. Keyboard unit contains receiving and transmitting distributors. Also mounting a polar relay. Normally has a 110 volt A.C. to 110 volt D.C. generator. The printer has six magnets to operate the code bars which operate the typing units. Approximately four major versions of the 12 are known. Tel. Co.; W. U.; A. P.; and U. P. The differences are mainly the inclusion of "unshift on space," Bell on upper S, or upper J or on blank key. This is a page printer.

MODEL 13—Page printer used by the Tel. Co., requires 5A or 6A distributor.

MODEL 14—Like the 12 this is the work horse for the telegraph companies. Unlike the 12, this is a tape printer but like the 12 has several different upper case figure arrangements. It employs a mechanically operated distributor called a selector. This eliminates the six magnets used on the 12. Also two different types of selectors are used; the pull type in which the mark signal pulls the magnet of the selector in its holding position. In the holding type this operation is performed mechanically and is supposed to be superior in operation. Some models of the 14 are printers only, others sending also, still others are also perforators. The telephone company lists eight different versions of the 14. Requires 110 volts D. C. from polar relay or operable from a single ended terminal unit.

MODEL 14TD—A combined tape sensing and distributor for automatic transmission

MODEL 14 Reperforator—Perforates tape from incoming signals—has its own polar relay and motor. Model 20 is similar except it perforates a 6 unit code.

MODEL 15—A page printer with a mechanical selector, separate printer and keyboard. Some model 15's have the polar relay built in. This model is standard at present with many commercial users such as radio, newspaper, TWX service etc. The 15 also has many features not found on other machines, such as stopping the printer motor by transmitting upper case H. To start up the printer, the first space signal will perform this function. Models are available with tabular function like a typewriter. Also optional unshift on space and other functions can be had. Requires a polar relay and 110 volts D. C. to operate or operable from a single ended terminal unit.

MODEL 19—Similar to the 15 with a built in tape perforator. This can be operated while receiving or during transmission. Same functions and requirements as the Model 15.

MODEL 20—A *Type-setting* teletype which uses a six unit code instead of a five unit in the above teletypes. Similar in operation to a Model 15.

MODEL 21—A tape printer only, no keyboard. Has six magnets to select characters and functions. Requires an external distributor and 110 volt D. C. power supply. Quite small physically.

MODEL 24—Page printer which the paper moves from side to side in front of a type wheel. Has a mechanical selector. Incorporates a keyboard. Usually has a sync motor. Requires either a polar relay or a terminal unit with single ended output.

MODEL 25—Similar to 21 except upper case is operated from a separate magnet. Requires an external distributor for operation. Has no keyboard. Originally used in stock broker offices.

MODEL 26—Page printer with built in keyboard and mechanical distributor or selector. Quite similar physically to the 24. Originally designed for TWX (Tel Co.) customers use where a smaller unit than the 15 was needed. Has fractions instead of normal upper case punctuation marks.

MODEL 28—Page printer used by Military at present. Not too many details are available.

FGC/1—Diversity (two channel) terminal unit with combining unit for output of the two channels. Self contained in a 6-foot steel cabinet.

AN/URA-8B — Diversity (two-channel) terminal unit, self contained in a rack 3-foot high by 19-inches wide. Has two scopes for tuning indicator. Operates local printer and keys tone oscillator for remote use.

The above information is from tech manuals and visits to various stations. Additions or corrections are welcomed by Merrill Swan, W6AEE.



TAPE OFF THE FLOOR

Talk about round tables—how's this?—W6FLW, W6QQM, W6IZJ, W6LS, W6RL, W6GFI, W6NWM de W6CMQ. . . . OK all.

During the evening at Leo's the last meeting some babe was a bit high, turned a corner and run into the rear of Ed's car (W6IZJ), bent the rear panel, the trunk lid, and scratched the finish in one spot with a sharp gouge to bare metal. The car ran OK so Ed got home with no strain.

. . . also the lousy, blank, blank co-axial stacked array which shot a whole weekend here never has worked as well as the old folded dipole ten feet lower. Hi. Will write an article on why not to build a stacked coax. W6CL de W6IZJ.

Shorty (W6RL) has a brand new 2000 watt Kohler light plant in his car. And while on the subject of Shorty, anyone who has not seen that mobile layout has really missed a treat — 75 meter phone es CW . . . 2 meter phone and Teletype . . . boy what a layout.

Well I pulled the printer part of the 12 today, and the more that I looked at it the more I got scared about tearing the T bar down, so I welded the T . . . yep it works, that is, welded the letter back on, and strange to say it is OK so far, hope that it will hold. Now got a new T bar in. Have I bragged too much? W6AEE de W6RL.

W6NAT has been heard on the air again after a long absence. Perhaps he has finished that electronic organ that has been occupying all of his time. Is it portable Bill?

Yep, the Gang has been at this RTTY system about five years as I recall. Verg Wiley, W6FGS and myself were about the first hams on RTTY in this area, and I don't remember how much longer. W6DEO de W6CMQ.

There sure was a lot of fancy art work on during the holidays, and mighty pretty too, those Christmas cards put out by W6IZJ, W6CLW, W6QQM, W6SCQ and W6AEE were solid copy in Gardena and was well worth the paper they consumed. It must have taken some of the boys hours to dream them up.

OK Ed, I just got this 24 put back together again and she works now OK. Im waiting for you to send the Xmas card so I can tape it. Dont forget the letters as this turkey doesn't unshift on space. W6CLW de W6NSS.

Well it looks like we are going to have another station on 2 meters as W6NSS reports the sale of his Model 12 to W6NYS and adds that W6NYS is coming on 2 meters very shortly.

SOUTHERN CALIFORNIA RADIO TELETYPE SOCIETY MEMBERS

- W6AEE—Merrill Swan
3769 East Green St., Pasadena
- W6BWQ—Bud Kuhlemeier
1630 Kenilworth, San Marino
- W6CL—Bert Ayers
2132 West 146th Place, Gardena
- W6CLW—Ed Simmons
455 South Oakland Ave., Pasadena
- W6CMQ—Ted Swift
2330 Melville Drive, San Marino
- W6CYR—Jim Perkins
1419 So. Spruce St., Santa Ana
- W6DEO—Fletch Hantke
1261 Linda Rosa, Los Angeles
- W6FLW—Emile Duval
11420 East Dickey St., Whittier
- W6FNW—Jim Ries
332½ East 76th St., Los Angeles
- W6GFI—Roy Meadows
516 West Oak Knoll Dr., Hollywood
- W6HIV—George Lowe
1516 Las Lunas, Pasadena
- W6IZJ—Ed Phillips
170 S. Michillinda Ave., Sierra Madre
- W6LS—Leo Shepard
460 Oliveta Place, La Canada
- W6MRO—Braz Brazelton
3120 Poplar Blvd., Alhambra
- W6MYC—Johnny Rothrock
69 Mar Vista, Pasadena
- W6NAT—Bill Driml
912 So. Montebello Blvd., Montebello
- W6NSS—Al Brody
1962 So. Sterns Drive, Los Angeles 34
- W6NWM—John Gross
122 Ave. "C" St., Yucaipa
- W6OQB—Ralph Poore
230 West Camino Real, Arcadia
- W6QQM—Walt Nestler
1727 New York Drive, Altadena
- W6RL—Shorty Griggs
110 Standard St., El Segundo
- W6SCQ—Lewis Rogerson
5340 No. Muscatel St., San Gabriel
- Art Addaway
9709 Ben Hur St., Whittier
- Jim Childress (2nd Op. W6RL)

For information regarding membership in the Southern California Radio Teletype Society contact committeemen W6CLW, Ed Simmons, W6SCQ, Lewis Rogerson or W6AEE, Merrill Swan.

AMATEUR RADIO TELETYPE CHRISTMAS GIFT

(Continued from front page)

12.111 (a) (2) (i) Amendment:

(i) 3500 to 4000 kc, using type A-1 emission and, on frequencies 3500 to 3800 kc, using type F-1 emission, to those stations located within the continental limits of the United States, the Territories of Alaska and Hawaii, Puerto Rico, the Virgin Islands, and all the United States possessions lying west of the Territory of Hawaii to 170° west longitude.

12.111 (a) (3) Amendment:

(3) 7000 to 7300 kc, using A-1 emission on frequencies 7000 to 7200 kc, using type F-1 emission and, on frequencies 7200 to 7300 kc, using type A-3 emission or narrow band frequency or phase modulation for radio telephony.

12.111 (a) (4) Amendment:

(4) Amend by addition of the authorization for the use of type F-1 emission on frequencies 14000 to 14200 and 14300 to 14350 kc.

Official Bulletin Nr. 378 from ARRL Headquarters, West Hartford, Conn., December 23, 1952 to all radio amateurs Bt: FCC today finalized proposals on Docket 10073 and 10173 with the following results. Effective February 18, 1953 General and Conditional Classes Licenses are permitted 75 and 20 meter voice operations. Effective February 20, 1953 voice is authorized in 7200 to 7300 kc. by all amateurs except Novice and Technician. Novices are permitted CW operation 7175 to 7200 kc. Frequency shift keying, including Radio Teletype is permitted in non voice portions of 80/40 and 20 meters. New standards are adopted for teletype operation and procedures for signing off amateur calls is made more strict. Note again these changes are not effective until February 18, and 20 respectively. Details February QST, or refer June QST 1952 issue for essential details. AR.

Well fellows, there it is!