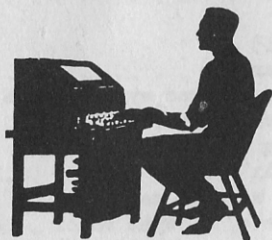


Dear Radio -  
Teletype Society

43 WEST 47 STREET  
NEW YORK 36, N Y

FORM 3547 REQUESTED



SAVE THE EASY WAY  
BUY U.S. BONDS  
PAYROLL SAVINGS



Charles Obert  
47 Morris Ave.  
Trumbull, Conn.

COVER PICTURE: Western Union "Mite," See ARTS 49 for specs.

ARTS has obtained 12 more Model 26-A perforated-tape distributors, similar in all respects to the batch released through Bulletin-Letter #488, with AC synchronous motors and cam-style (not faceplate) distributors. The 20 being given away in exchange for RTTY station photos are the same as these units. They are obtained for \$21. The price includes the packing fee.

Another infrequent item, starting to come through in larger quantities, are the 17 Teleprinter Control Panels (Monitoring Panels) which are similar in idea to that shown by Byron in "CQ" magazine, February 1957 issue, page 72, for the control and "patching" together of printers, reperforators, transmitter-distributors, meters, relays, etc. Contains "BIAS" and "LINE" current controls for assuring a distortionless signal. \$16 each.

50 more cartons of Teledeltos paper, identical to last batch in Bulletin-Letter #488. 12 5-inch-diameter rolls per carton at \$7 per carton. This paper is light in color and turns jet black wherever a current is applied to it with a copper-wire "catwhisker". Used on the small facsimile machines being distributed by the Society and has many other uses since the blackening of the paper is very rapid (will respond to high audio frequencies). Can be used to record CW and RTTY incoming signals, which can later be measured for distortion with an ordinary ruler.

ARTS 48-16



ARTS 48

# Department of Defense

## CERTIFICATE OF MERIT

ARMED FORCES DAY  
1957



*This is to certify that*

KNICKERBOCKER AMATEUR RADIO CLUB, W 2 KYN  
GEORGE W. MONAHAN, K 2 GMC (Operator)

*has demonstrated unusual proficiency in copying the International Morse Code by receiving and transcribing without error the Armed Forces Day message of the Secretary of Defense transmitted via military radioteletype at 25 w.p.m. on May 18, 1957.*

Dated 3 June 1957

Signed

*C. Wilson*

RADIO TELETYPE INDORSEMENT



COMMUNICATIONS



POWER FOR PEACE



ARMED FORCES DAY MAY 18, 1957

The following 62 stations contacted Navy Radio N S S by radioteletype during Armed Forces Day, May 18, 1957. Many of the stations worked N S S on more than one amateur band. NSS used 10 M of paper, compared to 25 ft last yr!

W1BGW	W3MHD	W6CQK/2	W6NSS	W9FCW	W9ROU
W1EFF	K3NSS	W6CQI	K6OUR	W9GVN	W9TCJ
W2AWL	W4EAS	W6DOU	W6USA	W9GLR	W9WMR
K2GSC	W4EHU	W6FLW	W6WIS	W9GRW	W0BP
K2HHH	K4GEC	W6FSA	W6ZNU	W9LIS	W0BDG
W2KDW	K4MCL	K6GB	W8DVL	W9OCV	W0FEC
W2LRW	W4ORB	K6GZ	W7PSQ	W9NOE	W0BDZ
W2RTW	W6AEE	W6MSG	W8LEX	W9OAG	W0FCW
W2SMX	W6CG	W6MTJ	K9BHD	W9PRO	W0QKA
W3KYR	W6CLW	K6OWQ	W9BMV	W9PTZ	VE3BAD
W3LWQ					VE7KX

A total of 121 stations copied the RATT Armed Forces Day broadcast. Of these, 102 made perfect copy. Certificates (see page 2) were mailed to the following amateur stations:

W1BGW	W2LRW	K4HIA	W6FHI	W6VPC	W9AKP
W1EFF	W2NRQ	W4MN	W6FZC	K6WDG	W9GLR
W1PIL	W2RTW	W4RTZ	K6GB	W6YDK	W9NVE
W2CTQ	W2RUI	W4ZJU	W6JAU	W7CO	W9GRW
W2CHH	W2SMX	K5WAB	K6KFF	W7DDY	W9PTZ
K2DQ	W2TAM	W6AEE	W6MTZ	W7MEV	W9TCJ
K2DRN	W3CA	W6ASJ	W6NCP	W7PSO	W9WOK
W2EBZ	W3LGE	K6BHF	K6NRK	W7RGD	W9EVN
K2GMC	W3MHD	K6BWJ	W6NSS	W7WQD	W0FWD
K2HHH	W3WTW	W6CG	W6OGG	W8CRY	W0HBD
K2HEJ	W4AWM	W6CBF	KN6OKV	W8DXM	W0JHY
W2ICA	W4EAS	W6CLW	K6OUR	W8HUG	W0JU
W2KDW	W4EHV	W6CQI	W6OJF	W8LEX	W0RAC
W2KLD	W4GVK	W6CV	W6PZV	W8TLW	VE3BAD

CQ CQ CQ DE AIR AIR AIR NR 2691  
R 182130Z  
FM WASHINGTON DC  
TO ALL RADIO AMATEURS  
GR 152 BT

THE COMMUNICATIONS SERVICES OF THE ARMED FORCES TAKE GREAT PRIDE IN THE DEVELOPMENT OF AMATEUR RADIO TELETYPEWRITER SERVICES CMM THE NEW TECHNIQUES THAT HAVE BEEN EMPLOYED AND THE TECHNICAL ADVANCES THAT HAVE BEEN ACHIEVED IN THE COURSE OF THIS DEVELOPMENT PD ALL AMATEURS ARE URGE TO CONTINUE THE DEVELOPMENT AND OPERATION OF THIS MEDIA OF TRANSMISSION PD YOUR EFFORTS IN PIONEERING IN NEW TECHNIQUES AND PROVIDING A SUPERIOR TRAFFIC HANDLING FACILITY BE DEVELOPING AMATEUR RADIO TELETYPEWRITER NETS ARE INSTRUMENTAL IN CARRYING ON THE GREAT TRADITION OF AMATEUR RADIO PD YOU ARE EXTENDED THE CONGRATULATIONS AND BEST WISHES OF YOUR COMRADES IN THE ARMED FORCES FOR YOUR CONTINUED SUCCESS IN THIS FIELD SIGNED J D OCONNELL CMM MAJOR GENERAL CMM USA CMM CHIEF SIGNAL OFFICER SMCLN H C BRUTON CMM REAR ADMIRAL CMM USN CMM DIRECTOR OF NAVAL COMMUNICATIONS SMCLN ALVAN L PACHYNSKI CMM MAJOR GENERAL CMM USAF CMM DIRECTOR OF COMMUNICATIONS ELECTRONICS

BT

CQ CQ CQ DE AIR AIR AIR QRU AR

W1UHE, N. Tiverton, R I: Have FRA and a very noisy Model 12, no keyboard. Have decided to get a Model 26 and operate 6M.

W1WEW, Newton, Mass has been busy running back and forth to N H. The 64-element beam is still a tangled mess...

W2AKE, Andy, S. Ozone Pk, N Y, left for Europe on Aug 2.

W2DCF/PYL???, Rio de Janeiro: Am now living in Rio and am assigned Civil Aviation Assistance Div of U S Embassy. I am awaiting issuance of a Brazilian license... Have my old stateside rig with me and will operate SSB on 14 and 21 mc. Do not have my RTTY with me as I gave same to W2CFT prior to my departing N Y.

W2MIB, Doc, Elmont, N Y: Have been busy with tape set up and low freq RTTY with the very limited time I have...

W2MYL, Radford, Va: Expect to return to NYC for the winter early part of Nov. At present am trying to get an FRA converter cooking but not meeting with too much success.

W2RTW Elmira NY is retiring and expects to keep the RTTY channels hot.

W3CA, Ken: Building a new home in the country which I hope to occupy this fall. Really a paradise for location... Have a couple 26's going on rcvg but never seem to find time to get the transmitting end going. I hope I can in the fall.

W3UWM, Ken Harris: I always look forward to rcvg ARTS, and it has been a great help to me with my RTTY. RTTY equipment here is 26 printer, W6AEE converter with Gates filters, FRA

ARTS 4g-4

converter, tape reperf, and complete tape gear. Not on air now with RTTY until I figure good way to FSK my KWS-1. Rcvr is A4. Expect to get more active very soon.

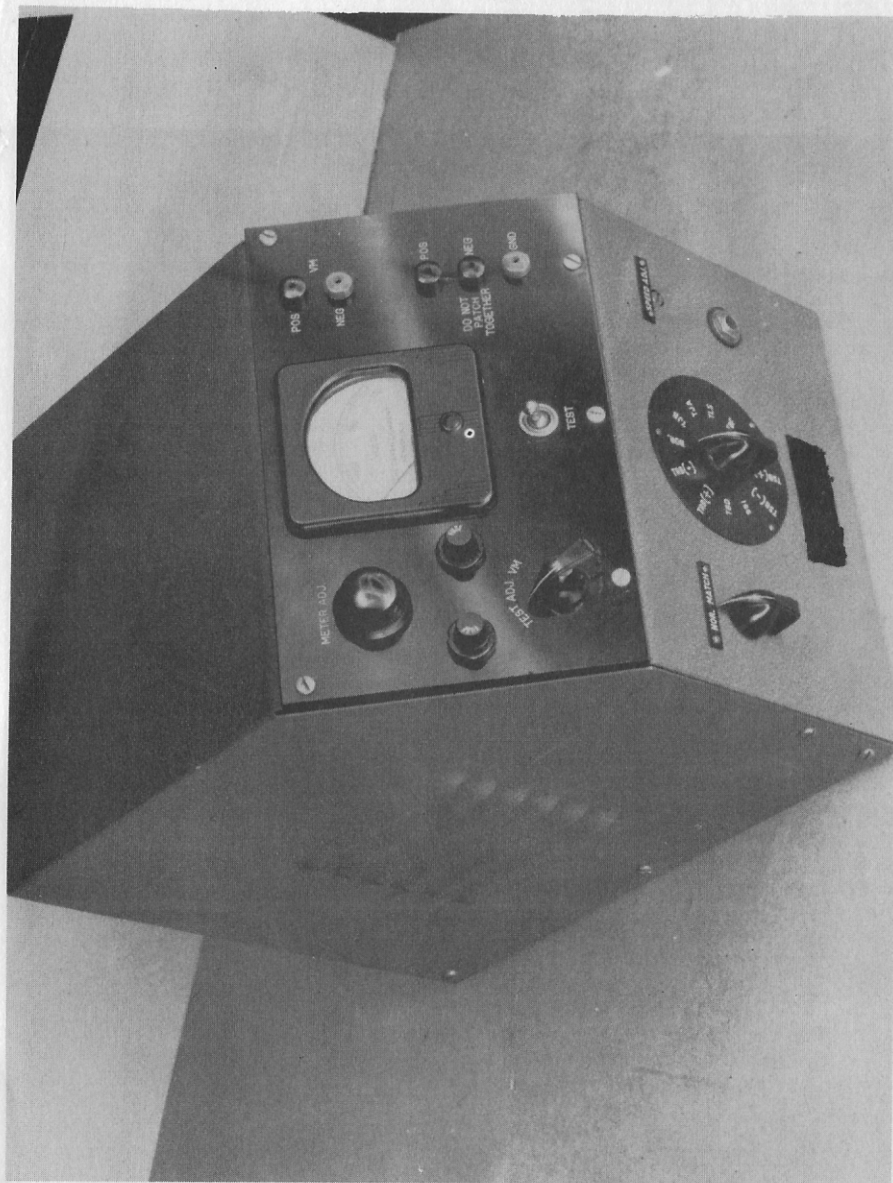
W3GIV/5, Allen Daniel: I am general class and interested in setting up an RTTY system. The main thing that I am worried about is the cost of RTTY equipment. I am operating at 400 W on CW or voice... I am a member of the U S Air Force and my job is radioteletype so I already know a few things about RTTY, the only hold back is obtaining equipment! Hi!... Preferable a M-19 with punch block and rectifier. Wow! \$\$\$ I believe I can build my own converter...

W5DEH Roy Rust: Still interested in TT but short of time. Received my 26 from Calif OK and am very proud of it... All I need to transmit is to finish the transmitting part but no time... have to make a living first.

W5TD, Art, Baytown, Texas: Am using a Model 15 with governed motor. The typing unit section is on lend lease from AF MARS and I would like to procure a 26 or other suitable machine. Have made several contacts with UG terminal equipment but others using the UG have quit using same because of their bulk so I'm going conventional AFSK and FSK.

The UG is a single tone device made for Navy by W. E. and is quite elaborate. Designed for wire line use and is complete with polar relay test panel.

Am in need of a transmitter distributor, perf and repert. Have in mind relaying traffic on VHF channels...



ITEM 262: COMBINATION ELECTRONIC TELEPRINTER TEST SET AND GENERAL VACUUM TUBE VOLTMETER

ITEM 286: "STROBOTAC" UNIT. FLASH SYNCHRONIZES WITH  
TELEPRINTER SIGNALS FOR SLOW-MOTION OBSERVATION



YOUR SUBSCRIPTION TO "ARTS" HAS EXPIRED.

If you have not already renewed your subscription to the Amateur Radioteletype Society Bulletin "ARTS" we suggest that you do so as soon as possible so that you will not miss any of the teleprinter articles and news which so many around the country have found invaluable.

We want the bulletin to be outstanding in every way. You can help by contributing news items, activities and technical information pertaining to printer operation. Our editor, Clay Cool, W2EBZ, 163 West 13th Street, New York 11, N. Y., will be most happy to hear from you. Naturally our staff is at the disposal of our subscribers in helping to acquire equipment and in many other ways.

Subscribers may submit FREE ads of 15 words or less for swapping or selling their teleprinter equipment. Larger ads also accepted...inquire about our reasonable rates.

Keep your files complete and up-to-date. Renew NOW...\$3.00 for next 12 issues. Send cash, check or money order made out to Amateur Radioteletype Society. Use enclosed envelope for your convenience. No stamp required.

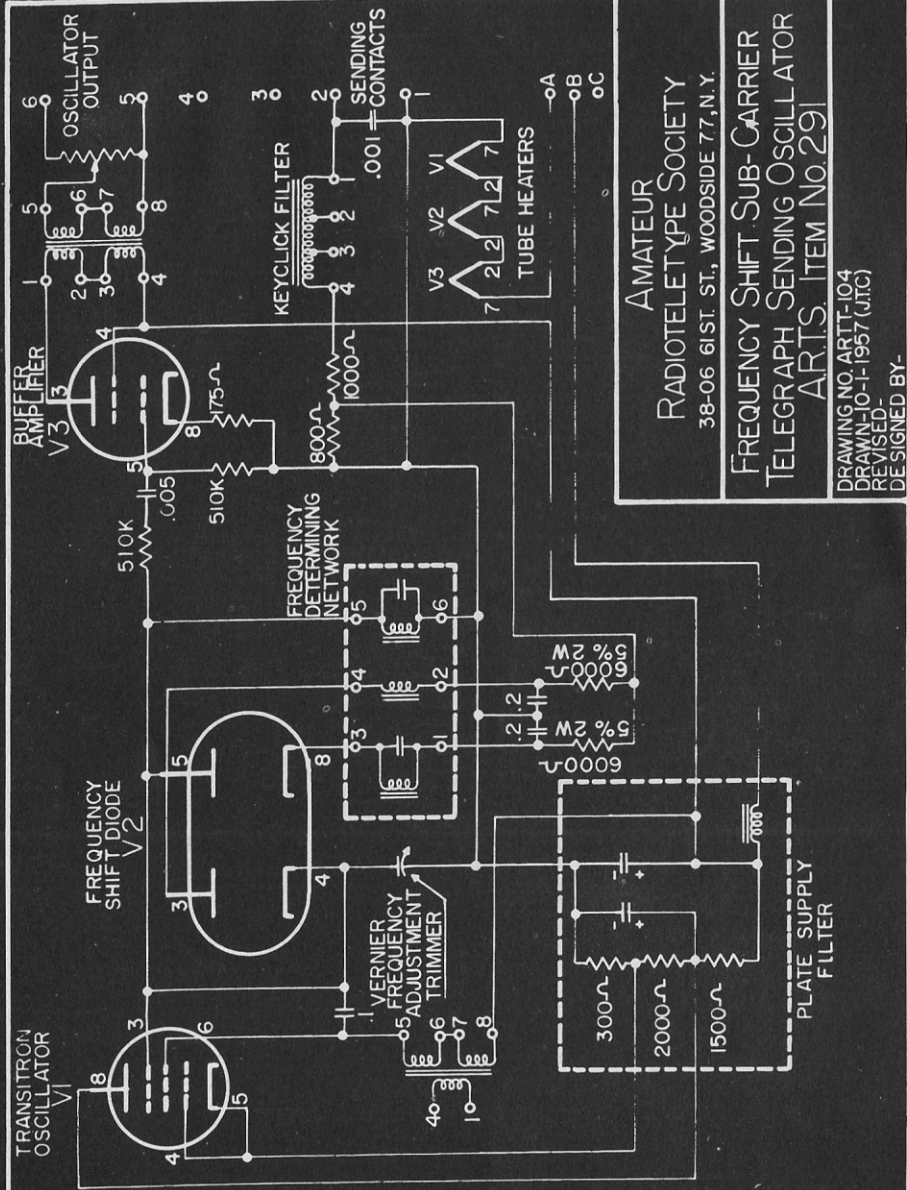
KEEP 'EM PRINTING

Andrew G. Stavros W2AKE  
Subscription and Circulation  
Departments

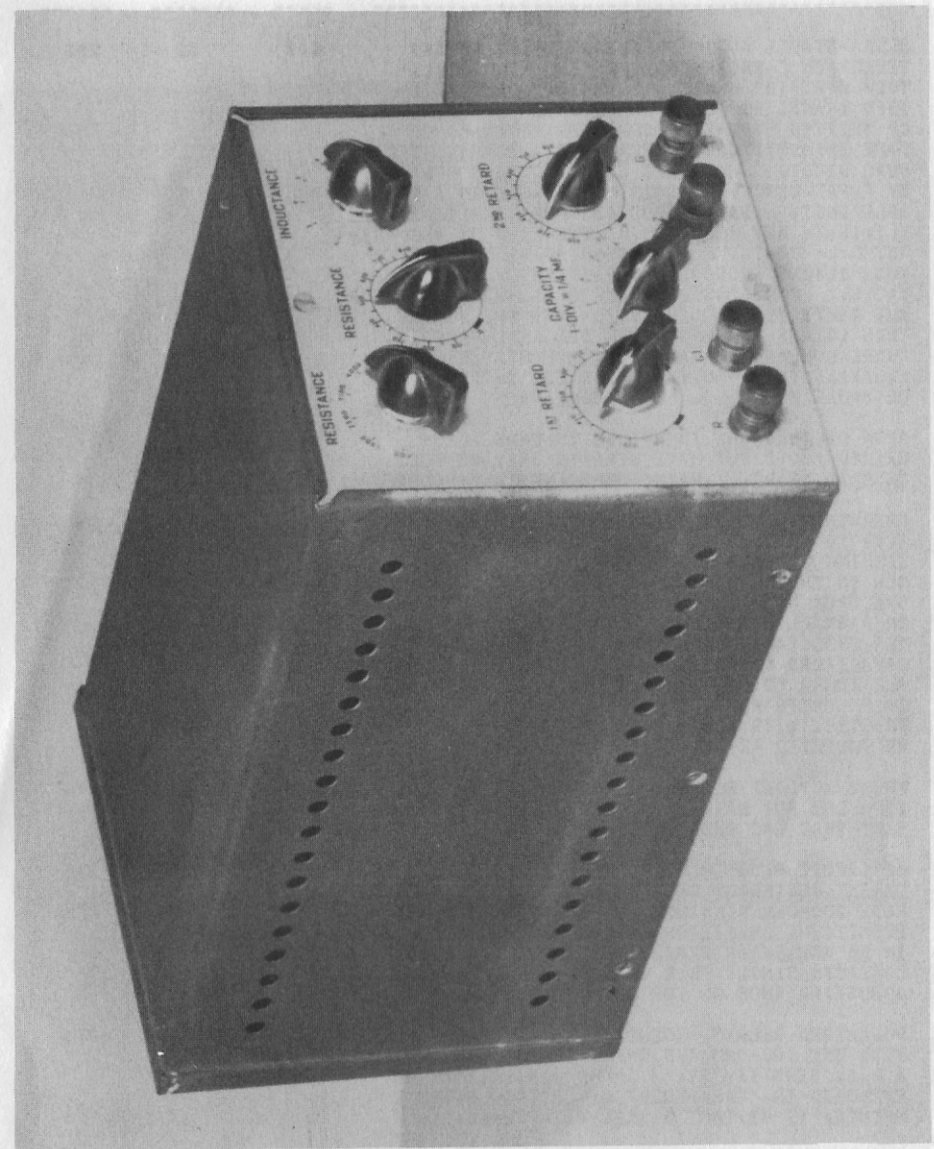
AMATEUR RADIOTELETYPE SOCIETY -- VHF TELETYPE SOCIETY  
 HEADQUARTERS:- 38-06 61ST STREET, WOODSIDE 77, N.Y.

DESCRIPTION OF APPARATUS OBTAINABLE AT COST	PRICE TO US	PACKING CHARGES	ITEM NUMBER
TAPE FACSIMILE SEND-RECEIVE UNIT. THESE COMPACT INSTRUMENTS HAVE FACILITIES FOR BOTH SENDING AND RECEIVING FACSIMILE COPY ON TAPE. PRIMARILY INTENDED TO REPRODUCE PRINT AT HIGH SPEED BUT WILL RENDER GOOD DETAIL ON HALF-TONES. SIMILAR TO THE "HELLSCHREIBER" SYSTEM USED IN EUROPE ON RADIO AND WIRE. SHOULD BE CAPABLE OF INTERCEPTING "HELLSCHREIBER" MESSAGES. CONNECTS, BY MEANS OF JONES PLUGS AND CABLE, TO SEPARATE SENDING-RECEIVING AMPLIFIERS (LISTED AS ITEM 285). CONTAINS ONE SYNCHRONOUS MOTOR FOR SCANNING AND ONE FOR TAPE ADVANCE. 110-VOLT A.C. 60-CYCLE.	\$65	\$2	284
AMPLIFIER-OSCILLATOR UNIT FOR TAPE FACSIMILE UNIT, ITEM 284. PICKUP FROM TAPE, WHEN SENDING, AMPLITUDE MODULATES A BUILT-IN HIGH STABILITY OSCILLATOR IN THE MANNER WHICH HAS BEEN STANDARDIZED FOR ALL WIRE-LINE FACSIMILE. RECTIFYING THIS TONE AND APPLYING THE VARYING D.C. TO THE RADIO FREQUENCY-SHIFT KEYS IS ALSO STANDARD PRACTICE. RECEIVING AMPLIFIER ACCEPTS THE PHOTO-MODULATED AUDIO SIGNAL AND BOOSTS ITS LEVEL TO OPERATE THE RECORDER. CONTAINS BUILT-IN POWER SUPPLY AND IS FURNISHED WITH CABLE TO CONNECT TO SEND-RECEIVE FAX UNIT.	\$30	\$2	285
STROBOSCOPIC "STOP-MOTION" TEST UNIT. SIMILAR IN APPEARANCE, SOMEWHAT, TO THE GENERAL RADIO STROBOTAC, USED FOR A SIMILAR PURPOSE. MOUNTED IN CUBICAL METAL BOX WITH CARRYING HANDLE. HAS POLISHED PARABOLIC REFLECTOR WITH HIGH-INTENSITY "STROBOTRON" LAMP EMITTING SHORT DURATION LIGHT FLASHES. CONTAINS BUILT-IN MEANS TO SYNCHRONIZE THE FLASH WITH TELEPRINTER SIGNALS SO THAT HIGH-SPEED MOVING PARTS CAN BE SEEN IN APPARENTLY STATIONARY CONDITION OR MADE TO APPEAR TO MOVE AT SLOW SPEED. UTILIZES DC OF TELETYPEWRITER CIRCUIT, POLARITY MUST BE OBSERVED. HAS "PHONE" PLUG AND CORD FOR PATCHING TO PRINTER CIRCUIT.	\$20	\$1	286
CARRIER-TELEGRAPH AND CARRIER-TELEPHONE SELECTIVE BAND-PASS FILTER INDUCTORS OF .75 HENRY INDUCTANCE. CORE MATERIAL IS EITHER HIGH-SILICON OR MU-METAL LAMINATIONS OR POWDERED-IRON OR PERMALLOY (CUP-CORES). A PACKAGE WILL HAVE ALL SIX INDUCTORS OF SAME CORE MATERIAL BUT DIFFERENT PACKAGES MAY HAVE OTHER TYPE CORES. A FEW PACKAGES MAY HAVE TOROIDAL CORES. THESE ARE NOT THE TINY COILS OF THE TELEPHONE LOADING-COIL VARIETY BUT ARE LARGE SIZE PHYSICALLY AND ARE NOT POTTED. FURNISHED WITH TERMINAL STRIPS FOR CONNECTION.	\$6	\$1	287 (FOR PKG OF SIX)
CARRIER FILTER INDUCTORS, SIMILAR TO ABOVE BUT ARE .95 HENRY INDUCTANCE.	\$6	\$1	288 (FOR PKG OF SIX)
CARRIER FILTER INDUCTORS, SIMILAR TO ABOVE BUT CONTAINS A BUILT-IN .005 MFD CAPACITOR AND IS SHARPLY SELF-RESONANT AT 2550 CYCLES, THE MID-FREQUENCY BETWEEN OUR STANDARD MARK AND SPACE	\$6	\$1	289 (FOR PKG OF SIX)
STROBOSCOPIC TEST SETS. SAME PURPOSE AS ITEM 274 BUT OPERATES AT HIGHER SPEED FOR INSPECTION OF DISTORTION IN SINGLE TELETYPE PULSES. POWERED BY BODINE SYNCHRONOUS MOTOR THROUGH GEARING. HOUSED IN SMALL METAL CASE.	\$15	\$1	290

**A. R. T. S.**  
 AMATEUR RADIOTELETYPE SOCIETY  
 443 WEST 47TH STREET  
 NEW YORK, 36, N. Y.



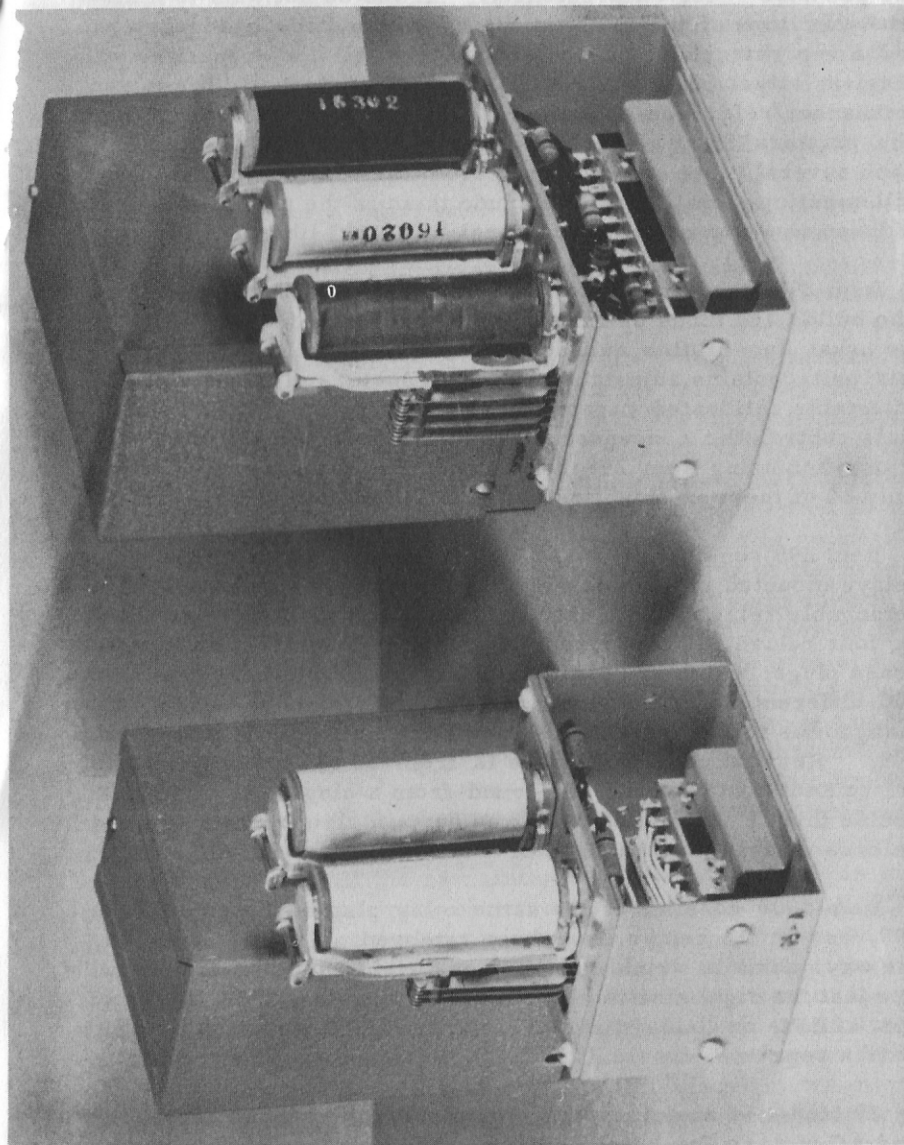
AMATEUR  
 RADIOTELETYPE SOCIETY  
 38-06 61ST. ST., WOODSIDE 77, N. Y.  
 FREQUENCY SHIFT SUB-CARRIER  
 TELEGRAPH SENDING OSCILLATOR  
 ARTS. ITEM NO. 291  
 DRAWING NO. ARTT-104  
 DRAWN 10-1-1957 (JTC)  
 REVISED  
 DESIGNED BY-



ITEM 298: L-R-C DECADE AND SUBSTITUTION BOX. ADJUST-  
 ABLE HIGH-Q INDUCTORS, CALIBRATED CAPACITORS, RESISTORS

ADDITIONS TO THE "DIRECTORY OF OBTAINABLE EQUIPMENT"

DESCRIPTION OF APPARATUS OBTAINABLE AT COST	PRICE TO US	PACKING CHARGES	ITEM NUMBER
ULTRA-STABLE AUDIO FREQUENCY SHIFT (AFSK) TELEGRAPH CARRIER-CURRENT SENDING OSCILLATOR-AMPLIFIER UNITS. CONSISTS OF STABILIZED TRANSITRON OSCILLATOR WHICH IS FREQUENCY SHIFTED BY THE TELEPRINTER KEYBOARD OR TAPE TRANSMITTER, BY MEANS OF A COMPENSATED DUAL DIODE. MARK AND SPACE TONES CONTROLLED BY A FREQUENCY-DETERMINING NETWORK IN A DETACHABLE UNIT. HAS OUTPUT (BUFFER) AMPLIFIER TO ELIMINATE ANY REACTION OF THE LOAD ON THE FREQUENCY. CONTAINS WAVE-SHAPING FILTER TO REMOVE CLICKS PRODUCED BY PRINTER SENDING CONTACTS. CONTAINS COMPLETE PLATE-SUPPLY FILTER BUT RECTIFIER NOT INCLUDED (WAS EXTERNAL). THIS LOT IS BRAND-NEW, IN ORIGINAL WRAPPINGS, (WIRE COMPANY REPLACING WITH MINIATURIZED EQUIVALENTS). SUITABLE FOR USE IN RELAY RACK OR TABLE MOUNTING. HANDSOME PAINT JOB.	\$17	\$2	291
AFSK OSCILLATORS IDENTICAL TO THOSE DESCRIBED ABOVE BUT HAVE BEEN IN SERVICE FOR SEVERAL YEARS. PAINT JOB GENERALLY POORER.	\$12	\$2	292
FREQUENCY DETERMINING NETWORK. THESE ARE SIMILAR TO THE UNITS INCLUDED WITH THE ITEM 291 SENDING OSCILLATORS AND ARE AVAILABLE BRAND-NEW IN THE ORIGINAL PACKING. COVER THE AUDIO SPECTRUM FROM 300 TO 3000 CYCLES AND CONTAIN, ON A SMALL CHASSIS, 3 HIGH-Q TAPPED AUDIO FILTER INDUCTANCES AND TIE-POINTS FOR THREE TUNING CAPACITORS (CAPACITORS NOT FURNISHED AS UNITS ARE TUNED TO FREQUENCY AT LOCATION). NOTE:- THESE UNITS ARE NOT POTTED, AS IS THE USUAL PRACTICE WITH AUDIO FILTERS, SO THEY MAY BE RECONNECTED AS STRAIGHT AUDIO FILTERS.	\$5	ZERO	293
FREQUENCY DETERMINING NETWORKS. IDENTICAL TO ITEM 293 BUT HAVE BEEN REMOVED FROM EQUIPMENT THAT HAS BEEN IN SERVICE.	\$4	ZERO	294
MINIATURE PLUG-IN POLARIZED RELAYS WITH TRANSPARENT DUSTPROOF CLEAR VIEW COVERS. TWO SEPARATE 200-OHM WINDINGS. OPERATE ON 5 M.A., PERMITTING OPERATION IN CONVERTERS USING 12AU7 IN DC AMPLIFIER STAGE INSTEAD OF TWO 6V6 TUBES. CONTACTS SINGLE POLE DOUBLE THROW. PLASTIC BIAS ADJUSTING KNOB ON TOP OF CASE.	\$4	INCLUDE POSTAGE	295
POLARIZED RELAYS, IDENTICAL TO ITEM 295 BUT WITH ONE 500-OHM AND ONE 3-OHM WINDING. ABOUT 4 M.A. SENSITIVITY. 3-OHM WINDING MAY BE EMPLOYED IN "MARK-HOLD" CIRCUIT TO SILENCE PRINTER IF DISTANT SIGNAL DISAPPEARS.	\$4	INCLUDE POSTAGE	296
TELEPRINTER SENDING RELAY WITH MICROMETER ADJUSTMENTS. UNLIKE RECEIVING TELEPRINTER RELAYS, WHICH ARE POLARIZED, THESE RELAYS WILL KEY THE SENDING FSK OR AFSK CIRCUIT WITH A MAKE-BREAK CURRENT FROM THE KEYBOARD OR TAPE TRANSMITTER OF AS LITTLE AS 5 M.A. MICROMETER THUMBWHEEL ADJUSTMENTS ON CONTACTS, SPRING TENSION, MAGNET AIRGAP, ETC. IN PLASTIC PLUG-IN HOUSING WITH CONTACT-VIEWING WINDOW AND HINGED ACCESS DOOR. RELAY MAY BE REMOVED FROM CASE AND MOUNTED IN RADIO TRANSMITTER. SINGLE POLE DOUBLE THROW CONTACTS.	\$3	INCLUDE POSTAGE	297



ITEM 299: PLUG-IN MULTI-CONTACT TELEPHONE RELAY ASSEMBLIES

## SAVE THESE EQUIPMENT LISTS!

The latest additions to our "Directory of Equipment Obtainable at Cost" is printed in this issue of our "ARTS Bulletin". The page should be removed and attached to the "Directory" pages you have received previously. If you do not want to mutilate your copy of the Bulletin write to Woodside headquarters and a separate sheet will be sent you. All too frequently we receive letters asking for the "latest" Directory. These are permanent reference sheets, fellers, don't throw them away. The printers' ink was not yet dry on the "additions to the list", when several more came through from the wire companies. We will mention them here and include them in the next permanent addition sheet on gear your national RTTY HQ liberates for you.

Item 298 should prove to be a very handy tool for the RTTYer who builds and tunes up his own selective audio filters. Unlike the usual substitution and decade boxes available to amateurs, this unit contains adjustable high-Q inductors in addition to the adjustable calibrated capacitors and resistors. The "retard" dials control the condenser loss factor, an important consideration when using Item 298 box as one arm of a capacity bridge. Only 20 of these in this first lot. Get yours now for just \$16.

Item 299 consists of two or three high quality telephone-type relays mounted in a small metal box with removable cover and removable relay chassis base. Some of the units have as many as four relays. The boxes plug in with 18 or 33-contact male Jones plugs, which are mounted on the bottom. There are over 200 different relay combinations mounted in these boxes, too many for us to list individually, so we are listing them all as Item 299. Resistance of the relays is from 50 to 24,000 ohms and all contact combinations are found from a single pair to 6-pole double throw. Some of the boxes contain slow operate or slow release relays. A package of 4 of these boxes is had for \$10.

Item #300 consists of the same relay plug-in boxes as Item 299, except the relays have been removed. These boxes, by the way, come in wrinkle enamel or bright cadmium finish and are just the right size to house a set of plug-in RTTY filters of the W2BFD or Gates variety. Narrow FSK work can be done with a separate plug-in filter. 4 to a package costing \$2.50.

29 Model 14 tape printers, complete with covers, keyboards and AC motors are being released and will be available by the time you read this. Most of the last three batches of these machines have been modified by amateurs to Model 14 Typing Reperforators, which perforate the tape and type the same information on the tape in ink characters. Available on a "first-come, first-served" basis, so act fast if you want one. They are \$65.

## AMATEUR RADIOTELETYPE MEMBER, W7JLF OLYMPIA, WASHINGTON

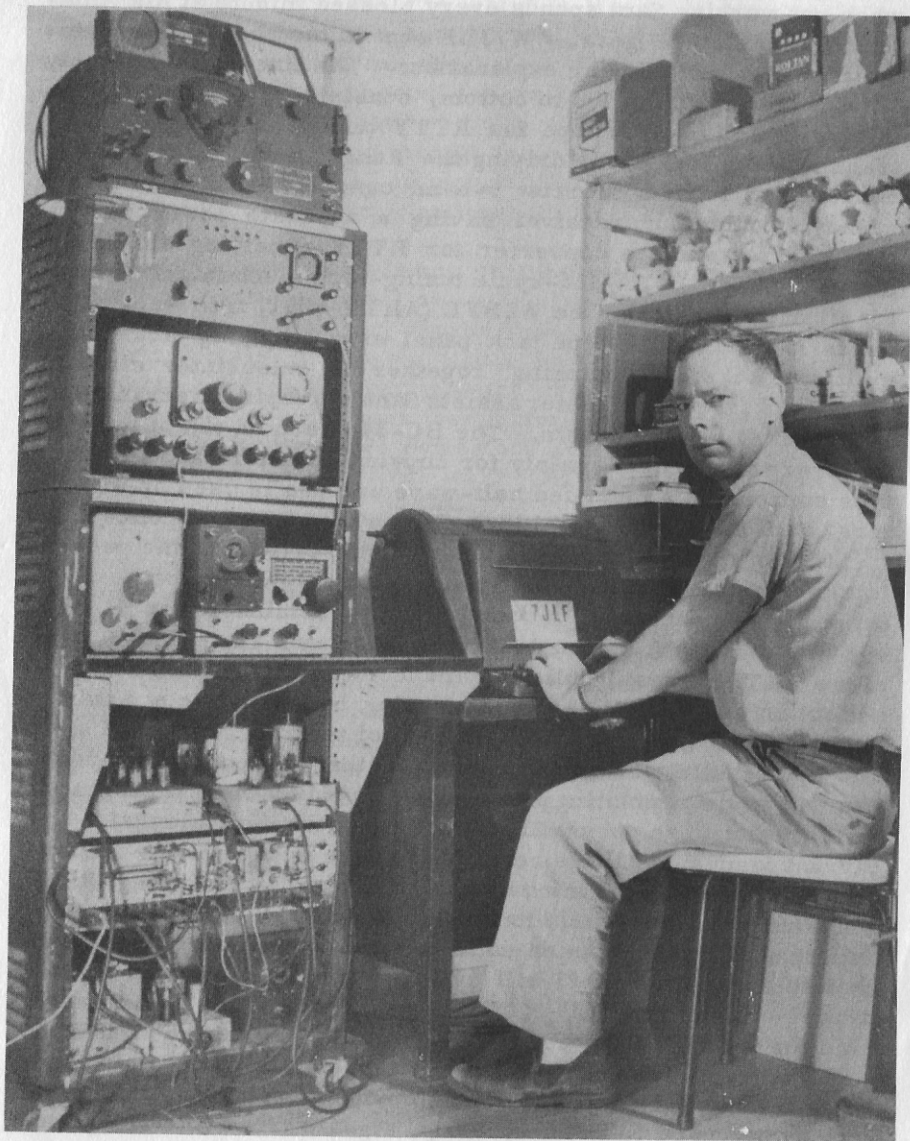
(PHOTO NEXT PAGE)

Sam P. Carroll, W7JLF, spends his working hours as transmissionman for the Pacific Telephone and Telegraph Co., but when not working Sam spends every blessed minute at his Amateur Radioteletype gear. W7JLF sent in the photograph of his station with the following explanation:- The line-up in the relay racks, reading from top to bottom, consists of (1) Antenna tuning panel and oscilloscope for RTTY tuning (2) Viking Ranger transmitter (3) VFO for driving the Ranger on FSK, a receiver constructed from a Morrow 5-band converter with a low-frequency "command" receiver having a separate power supply. (4) Tape tests and a converter for RTTY receiving similar to the W4TJU job (5) A 425-cycle tuning-fork mechanical oscillator after the fashion of the W2BFD (ARTT-6091) frequency standards (6) Telephone-type jack panel with 8 looping jacks and 8 multiple jacks for "patching" together all teleprinter circuits. An LM-13 frequency meter assists Sam in keeping his transmissions where he wants them. The BC-348 seen on top of the rack is a spare and is used mainly for copying commercial radioteletype stations. An end-fed half-wave antenna is used on 40 meters. Sam has a lot of ambitious plans where RTTY is concerned.

Many of our newcomer members, subscribing to the present (4th) series of the ARTS Bulletin, are completely unaware of the three earlier series. A bound volume, obtainable for \$2 from our Woodside, N. Y. headquarters, contains a reprint of many of the ARTS series-1 bulletins and a few of the VHFTS series-2 collection as well. These pioneering bulletins are not only of historical value but have a great deal of technical material also. The early bulletins were larger than the present-day standard size so, in the reprinting process, we have had them photographically reduced so they will fit on your bookshelf alongside the current issues. All the remaining space in the volume is jam-packed with technical information on filters, tape winding, RTTY converters, machine maintenance, etc., etc. We plan on publishing additional volumes until those of you who have come on radioteletype since 1948 will have the complete story of the activities of your National RTTY Organization from 1946 onward. Send for your \$2 copy of ARTT-6078 today and know your RTTY.

14 more of the double transmitting distributors, which may be used optionally, for sending automatic high speed Continental code or standard radioteletype tape signals from both faceplates individually or simultaneously, have been released and can be had for \$33 (price includes packing). This system of sending Continental or Teleprinter codes on the same dual transmitting-distributor has been described in detail in Data Package ARTT-6045 and is in use in many Amateur Radioteletype installations.





TELEPRINTER EQUIPMENT FOR SALE TO AMATEURS FOR AMATEUR USE ONLY  
 Waiver required for printers and perforators. All equipment is tested.  
 Prices include packing charges. Money promptly refunded for items  
 out of stock.

**POLAR RELAYS**

215A xclnt condx . . . . . \$4.75  
 228A . . . . . 3.25  
 255A xclnt condx . . . . . 5.75  
 209FB xclnt condx . . . . . 9.25  
 D91711 xclnt condx . . . . . 9.25

**MODEL 12**

Typing unit, 115 vac sync  
 motor . . . . . \$20.00  
 Table, w/ jackbase . . . . . 12.00  
 Cover, small size . . . . . 8.00  
 Motor, 115 vac, for typing  
 unit . . . . . 9.00

**MODEL 14**

Keyboard . . . . . \$35.00  
 Motor, 115 vac sync w/base . . . . . 25.00  
 Printer cover . . . . . 20.00  
 Typing Unit, sync motor . . . . . 50.00  
 Typing reperforator (price de-  
 pends on condition)  
 Motor, ac governed, used . . . . . 5.00

**Model 15**

Keyboard . . . . . \$37.00  
 Motor, 115 vac sync, w/base . . . . . 25.00  
 Printer cover . . . . . 31.00  
 Typing unit, w/base xclnt  
 condx . . . . . 162.00  
 Base, w/ sync motor . . . . . 65.00  
 Complete, w/ sync motor . . . . . 245.00  
 Motor, ac governed, w/  
 lamp and switch, new . . . . . 10.00

**MODEL 19**

Complete, w/ sync motor  
 and table . . . . . \$600.00  
 Keyboard perforator . . . . . 125.00

**MODEL 400** tape printer, sync  
 motor . . . . . \$35.00

**MODEL 26**

Complete, w/ sync motor and  
 table (NYC delivery only) \$75.00  
 Keyboard . . . . . 35.00  
 Motor, 115 vac sync . . . . . 22.00  
 Printer cover . . . . . 10.00  
 Typing unit, w/ sync motor . . . . . 40.00

**TAPE PERFORATOR**, 5-unit code,  
 complete w/ tape cover, end-  
 of-line indicator, and  
 paper holder . . . . . \$51.50

**MULTIPLEX** auto-control 1-A  
 w/ jack base . . . . . \$5.00

**PARTS** . . . . . 50% discount from list price  
 Parts for Models 1-A, 1-B, 24-A, 14, 14 reperf, 15, 15 perf, 19,  
 20, 24, 25, Wheatstone or Kleinschmidt Morse perf, TD

**PAPER TAPE**

For 14 and 19 reperforator, oiled, 10 rolls . . . . . \$2.50  
 For 14 and 400 printers, 10 rolls . . . . . 2.50

**SOCKETS** for 215A or 255A relays . . . new \$1.00

**TRANSMITTER-DISTRIBUTOR**, w/ sync motor  
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