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RTTY JOURNAL

October 1978

VOLUME 26 NO. 8

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"VE7 AKW at shack of WB6CYA.

CONTENTS

RTTY in South East Asia
AZCD Illustration
Another use for the 555 time

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RTTY JOURNAL

Dee **Crumpton,** , **Editor & Publisher**
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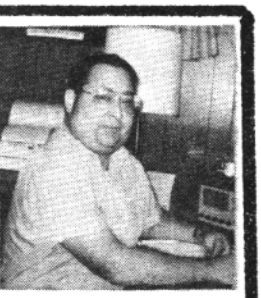


Arny Gamson, K6PXA, 8034 Gentry

N. Hollywood, CA 91605

Hope the summer doldrums are over and many who were on vacation and away from RTTY and Club meetings will return.

Our local SCATS Club has had a good response so far from the 'Silent Majority' by RTTY print and mail to expenditures, pictures and Constitutional problems as mentioned in last months column. In Southern California we've had 20 RTTYers now sporting 28 ASR's which they obtained at a very low price through S.C.A.T.S.. Club quantity purchase. Also TTY paper has been distributed through this means. Your Club should investigate the powers of Club quantity purchasing - it really saves. Our Club is still very active in Public Relations averaging a demo-lecture a month, where many thousands have been 'exposed' to RTTY; Such as Orange County Fair, ARRL San Diego National (more on that in Novembers issue).

Public Relations is becoming more and more important particularly with The World Administrative Radio Conference (WARC) just around the corner. WARC will determine Amateur, in fact all radio operation, until the end of the century. Please keep us informed of your RTTY activities, especially in the P.R. field.

We were disappointed to see the FCC drop the ball and return the issue of legalizing ASCII-8 level to the amateurs. They want to hear more from us before they approve it. Unfortunately many Computers are eagerly needing this approval to continue their advancement of technology; and that is what Amateur Radio is supposed to be about.

QST Mag (Sept) left us a cliffhanger with its potential revolutionary concept of Narrow Band Voice Modulation (NBVM). This system will double the amount of channels available; however it will require the same drastic change we went through converting from AM (remember that?) to SSB on the lo bands. This system if accepted will only require a modification to the external audio input and speaker output, NO internal radio modification. Tests will be made within the next few months If widely accepted we'll have to throw away our obsolete FM rigs and go SSB. We're wondering if this system will permit several channels of RTTY operation where only one can be utilized now.

We've reproduced one of seventy status files on the WR6ACA Repeater-Computer.

STATUS ## de W6RLL

FILE ## K6PXA

CU ENJOY ARNY

KEYBOARD OPERATED RELAY

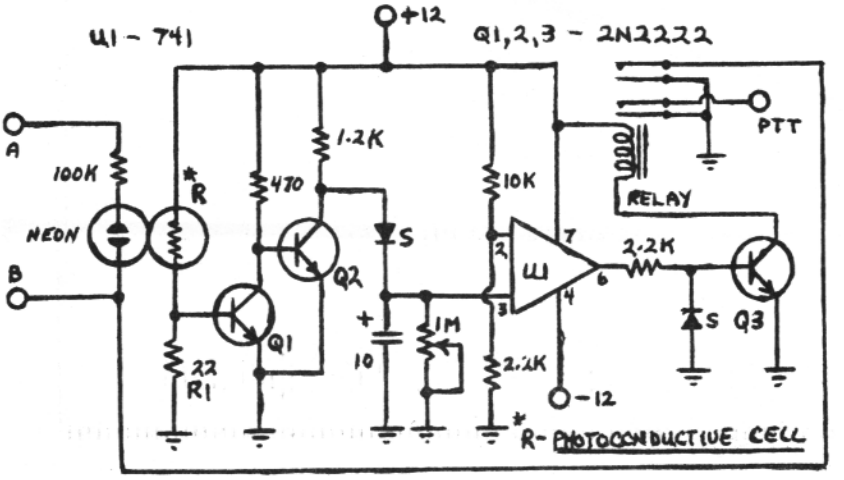
This gadget will put such luxuries as VOX for SSB ops and Break-in for CW ops in the hands of RTTY enthusiasts. The heart of the gadget is the character director. A study of the loop circuit reveals only when a character is punched on the keyboard does full supply voltage appear across the loop terminals on the teleprinter. A neon bulb connected across the printer as illustrated will flash each time a character is punched on the keyboard.

The neon bulb in this unit was glued directly on the face of the photoconductive cell, and the assembly mounted inside a 35mm film can which is bolted onto the circuit board. When the neon flashes, the resistance of the photocell drops applying sufficient voltage to the base of Q1 that it conducts. When Q1 is conducting, the potential at the base of Q2 is 0, allowing the 10ufd capacitor to charge through the 1.2K resistor and the diode. This raises the potential applied to pin 3 of the LM741 I.C. above that which is on pin 2, and the output swings from negative to positive. Q3 then conducts pulling in the relay, and placing the transceiver via the PTT line in the transmit mode. In a T.U. without antispace, a second set of contacts on the relay holds the loop supply reliably closed. When the last character is typed, the capacitor begins to discharge through the pot at a rate determined by the setting of the pot. As the potential on pin 3 of the LM741 drops below the potential on pin 2, the output of the I.C. swings negative again turning off Q3. The relay drops out, and the transceiver returns to the receive mode. The drop time is adjustable up to about 20 seconds.

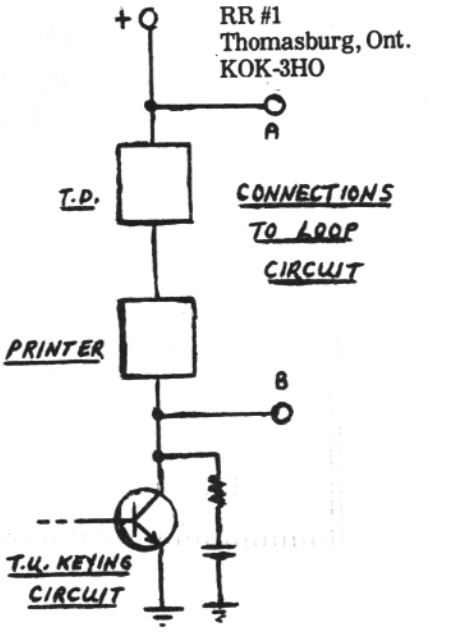
The photocell in use is of junkbox variety with dark resistance of approx 10K ohms and light resistance of approx 400 ohms. Different photocells may require different values of R1.

The unit has operated reliably, and makes break-in RTTY possible, especially on 2 meters.

J.R. Eadie VE3DCX
RR #1
Thomasburg, Ont.
K0K-3H0



-KEYBOARD OPERATED RELAY-



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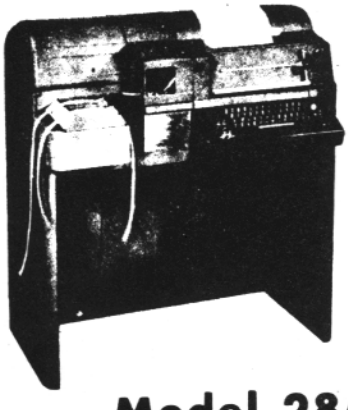

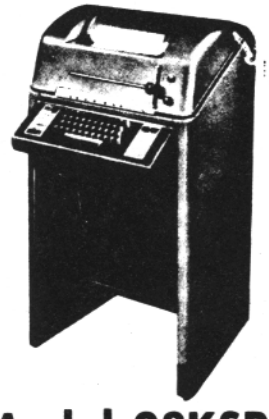

Model 28ASR **Model 28KSR**

WA6PMA DOUG

RTTY in South East Asia.

S.E. MOLEN

For years my XYL has suffered me working DX on various modes, SSB and CW mainly. She has become familiar with strange names and strange places. About five years ago I became involved in RTTY, how that happened is another story. But I now find that XYL is reading my mail, on numerous occasions I have returned from work to be met with a discussion on last night's QSO's and my bad spelling. It could almost be called an invasion of privacy, but apart from that she had really started to get to know some of the people really well, and she also could remember some of the XYL's names. With all this, things came to a pretty pass, and I felt that I would have to do something about it. So with great care and of course complete innocence, I decided that we should go overseas, maybe to the Far East (as it is called). The XYL agreed that it would be a wonderful idea, and so the trip was arranged, so that we visited some of the larger cities in the area.The XYL was estatic with joy. The fact that most of the places that we would visit were the homes of ALL the RTTY operators in the far east took Jean all of thirty seconds to realize. She must be getting slow in her old age.

So having pacified the XYL and convinced that bank manager that it was my overdraft, and such it was up to me to worry about it, and not him. We set out for our overseas trip on a cold, wet, wintry day the 3rd of June. For a good start the taxi driver got lost on the way to the airport. Oh well it was early in the morning.

The first point of entry to the far east was Singapore, unfortunately, the amateurs that I had hoped to meet there, were, like ourselves overseas. I did try to find some other amateurs by contacting the radio branch, but we seemed to have communications problems, they could not understand my English (Australian) and I certainly could not understand them. So unfortunately, i did not meet any amateurs there and as we only had three days there I did not have time to go aerial hunting.

So on to Kuala Lumpar. Actually there are no active RTTY operators there, but Colin, 9M2CR lives at Port Dickson, 100 Km away, it was my intention to hire a car and drive down there but after surveying the traffic habits of the locals, we hired a car and were driven down to Port Dickson.

If you ever have looked for a perfect QTH, Colins place would be near as you could get. His QTH is situated right on the shore, sufficiently far out from Port Dickson to miss the noises and Hurley Burley of the town, and also its electrical noises.

From his shack, Colin can operate and look out to the ocean, watch the shipping heading for Singapore and other places enjoy the view and relax.

Inside the shack, Colin has several rigs for he has the choice of the Creed model 54 or the HAL electronic keyboard and VDU, . For aerials he has the dipoles for 40 and 80 meters and a home made three element for 20, but it is tucked away in the trees that surround his house. But even so as you would know if you have ever worked him, the trees do not seem to detract from his signal.

Colin is ably supported around the house by his delightful XYL, Pat. Our overnight stay with them was well worth the drive to see them. This visit made a wonderful start to our trip to see the RTTY boys in South East Asia.

On return, we saw the sights of Kuala Lumpur and then on to Peneng.

On arrival at the hotel, we found a message from Mal 9M2MW, who incidently was the first 9M2 on RTTY, so I rang him and made arrangements to meet him the next day. Mals XYL IS ALSO NAMED Pat. Again the hospitality was wonderful. Mal's house is in one of the suburbs of Georgetown, the capitol of Peneng, and while it is a very nice house he does not have a lot of room for his aerials. Mal has just put up a three element beam Yagi and there is just enough space for it to rotate between his house and the house next door, but again he gets out very nicely or maybe its just that we listen harder for the 9M2 boys. Mals shack is well equipped with a Creed54 and a TS520 and the demodulator, and it shows that a lot of hard work has gone into setting up his gear and getting onto RTTY. Especially when you consider that the 9M2 boys have very little information and even less references (apart from books), it shows perservance must be one of their traits to achieve the good signals that they have.

Aside from the technical side of things, Mal and Pat showed us around Peneng, and some of the more exotic eating places, and also some of the more exotic special foods. Our stay was an enlightening experience and we enjoyed ourselves immensely.

Arriving in Hong Kong was something different, with the rush of traffic, the hustle and bustle of the airport, immigration, health and customs etc., it was rather surprizing to hear a voice say VJ2SG? I'm VS6AQ and VS6EK is around here somwhere. Well, that was marvelous, then VS6EL appeared and I felt that my day was complete. After a high speed discussion the travel agent was trying to get us to our hotel, we agreed to see Drake the next day.

The next day we hired a taxi to take us to Drake's place, 13.4 miles out of Kowloon. For awhile I thought that the taxi driver was going to ask for a police escort, as I doubt if he had been that far out of town before.

Drake has a lovely view and a wonderful takeoff--to the southwest and China, but in about any other direction he fires into the side of a mountain, and at close quarters too. He has thought about putting his beam on top of the mountain, but that would take about 2000 feet of coax and control wires. So for the moment the beam is near his house.

Drake and his XYL Ailuen, gave us a great welcome, and while Ailuen kept my XYL happy strolling around the garden, Drake and I were looking at the contents of his shack. Another Creed 54 was the machine in use but I did notice bits of machinery around the place so maybe Drake is going to change his gear shortly. The shack again, showed that time and effort had gone into the operation of the RTTY gear,as you would know from his good signal. So with the sun setting over China it became time to return to the hotel, but Drake and his XYL would not hear of our hiring a taxi back so they drove us into town, you might notice that I did not say back to the hotel, because they had other ideas, and we spend a pleasant evening at their favorite Chinese cafe. I am not too sure just what we ate that night, and please do not tell me, but it was a happy night and we all had a good time.

The next day Tony, VS6AQ and Drake took me to their special spare parts street---oh for a place like that in Sidney. Any bit you needed was there and at unbelievable prices, but when one is traveling, HOW much bits and pieces can one aquire, and still remain within the weight limits? What a marvelous street to have at ones back door.

While traveling with Tony and Drake, I saw a sight that would make any hardened amateur cry. There was an 18 story block of flats with approximately 300 or more TV aerials on the roof, and there in the middle of it all was an I8AVT, I think it belonged to VS 6BB, boy, he must be a brave man.

Well after dashing around Hong Kong and looking at the goodies for the afternoon, we all repaired to the Chinese cafe where we teamed up with the rest of the RTTY boys. The full compliment was then:VS6AQ and XYL, VS6EK, VS 6GW (Pat), VS6HF (Hify), VK2SG and XYL. I am not too sure what we ate that night either, but again whatever it was it sure made good eating. So we had a wonderful meal with some delightful people.

So after five days in hectic Hong Kong we flew to Bali. UNfortunately I missed Warren, YBØACB in Jarkarta as our aircraft did not land there. I was really sorry about that as I would have liked to see Warren as well as the rest of the boys in the area. It was not to be, so it was off to Bali for a rest after all of the

Cont.

wonderful hospitality that we had enjoyed on the trip. In Bali I could not find any amateurs, let alone RTTY operators, so it was five days of sight seeing and then back to freezing Sidney, and the holiday was over.

I can not thank all of the wonderful people enough for the bright vacation we had.

But wait a minute...who says that there were no RTTY operators in Bali while we were there???

I was on the air about ten days after returning home and was printing WA9WJE who had just returned from his holidays and would you believe it He was staying in Bali at the same time as we were, at a different hotel. Gosh isn't the world small??

de VK2SG S.E.MOLEN 13 Pendle Way Pendle Hill 2145 Sydney, Australia.

9M2CR, VK2SG

VK2SG,VS6EK, VS6HF, VS6NIW

VS6EK, VK2SG AND FRIEND

SERGE REMY, F6ALL
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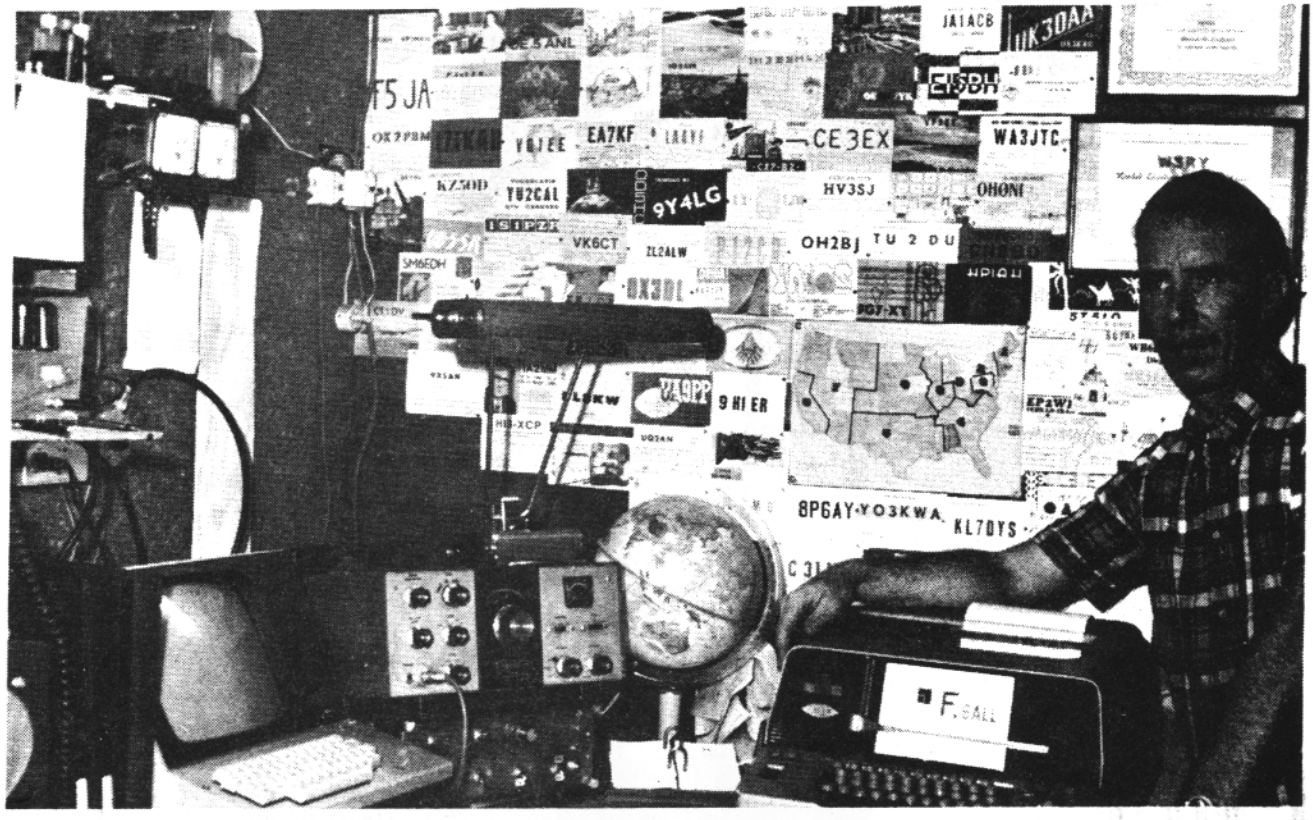
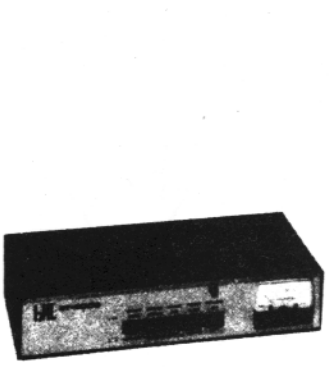
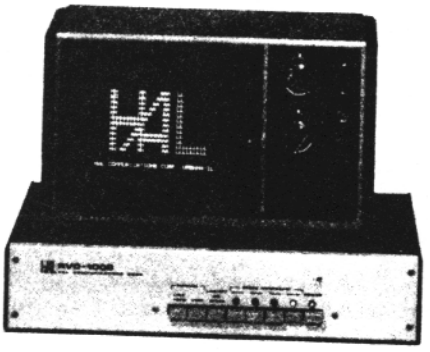
WORKED 121 COUNTRIES
101 CONFIRMED



A Component System for RTTY



ST-5000



RVD-1005

DKB-2010

Active amateur, short wave listener, beginner, or old-timer—you'll enjoy RTTY with the HAL component system. Shown above are our ST-5000 Demodulator, RVD-1005 Visual Display Unit, and DKB-2010 Dual-mode Keyboard. The RVD-1005 is a time-proven display generator that converts BAUDOT coded RTTY pulses into a video display. It receives the 4 standard RTTY speeds (60,66,75, and 100 words per minute) and generates a 25 line, 40 characters per line display. The low-bandwidth video output can drive either a TV monitor or a modified TV Set (power transformer and video connection required). The DKB-2010 will transmit these same four RTTY speeds as well as MORSE code at 8 to 60 wpm. The DKB also features N-key rollover, adjustable CW weight, HERE IS message, and internal CW side-tone oscillator. The 3-key standard buffer can be extended to 128 keys with the EMO-128 buffer option. The ST-5000 is the newest of HAL's line of RTTY equipment, offering 2-shift operation with high-performance active filter circuitry. It also has built-in AFSK oscillator and loop supply and can be factory tuned for either the "High" or "Low" frequency tone pairs. Autostart and printer control circuitry make the ST-5000 ideal for both electronic and mechanical RTTY terminals. For a high-performance and cost-effective RTTY station, the RVD-1005/DKB-2010/ST-5000 combination is hard to beat!

ST-5000

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ST-5000 ..... **$275.00**
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RVD-1005

- 4 RTTY Speeds (60, 66, 75, 100 wpm)
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RVD-2110 Quasar TV **$150.00**
(Shown above)

DKB-2010

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- Automatic FIGS/LTRS for RTTY
- Internal CW Sidetone Oscillator
- 120/240V, 50/60 Hz Power

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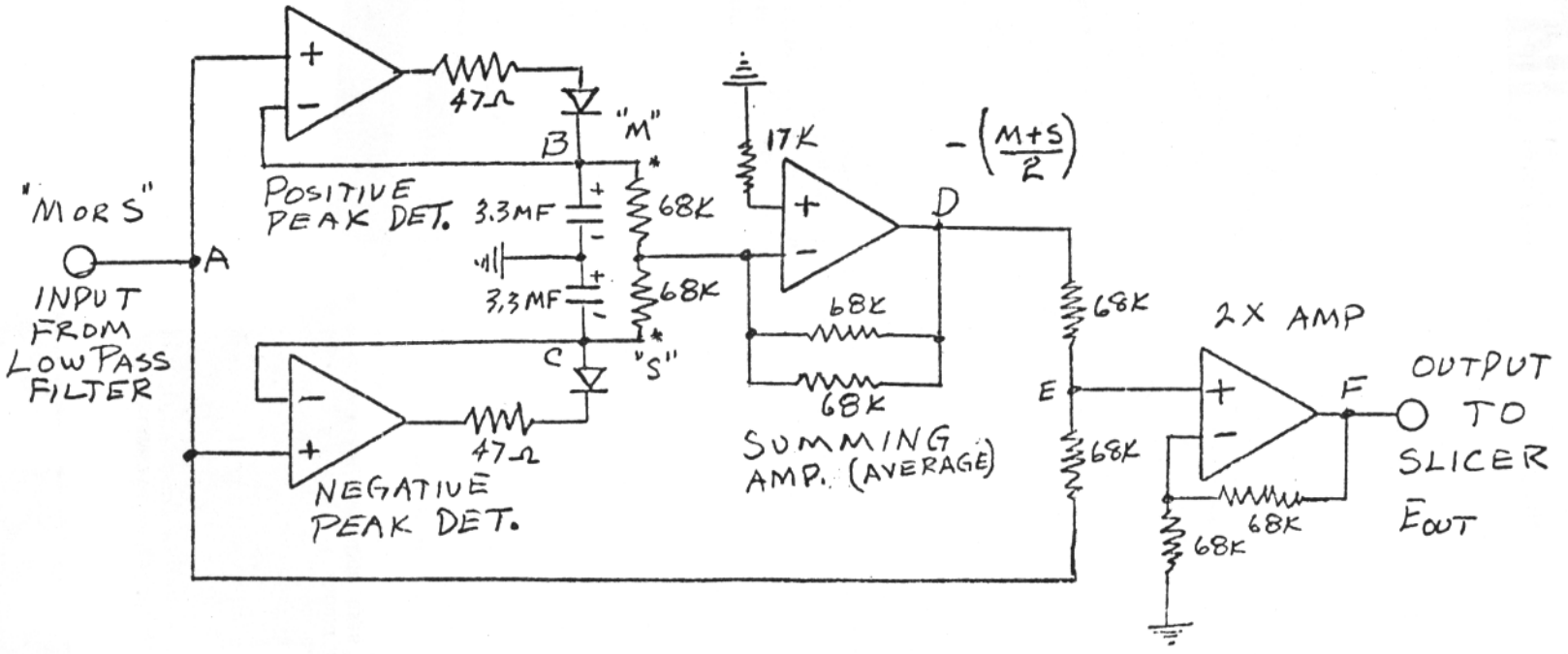

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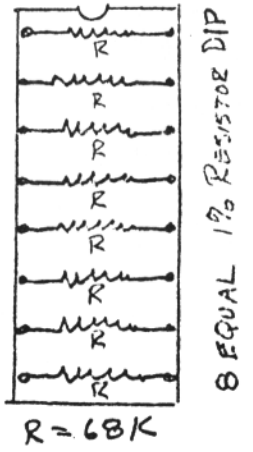

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HITS & MISSES

From The Editor and his Mail

CHUCK EDWARDS W6MNO

4726 Barbarossa Drive -

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Very few inputs this month. I did though get a lot of mail from persons wanting to make up that 'AZCD' automatic zero centering device. We goofed, and did not get the schematic in with the article. Anyway the schematic is in this issue so put it with last months issue. It does look like a very interesting device and think that as soon as I get some time I will make one up. It sure sounds like it should be a real asset to the shack.

Finally decided to grab the bull by the horns and bought a KIM-1 microcomputer. As luck would have it, when I got it home and made up the power supply as per KIM, why it would not clear to DA "00" when I put in adresses 1700 or 1800. Durn thing went to "FF" rather than "00" like it is supposed to. Finally decided that it was in one of the proms or roms and as such had to go back. They gave me another one in exchange. The new one has worked perfectly so gess it was one of those infantile mortality casualities. I also bought one of those new micro's called VIM-1 made by Synertex Systems Inc. (see Kilobaud September) I think, I will like it better than the KIM as it has sockets fer the IC's and also has extra, built-in, sockets for expansion.

I think that it will be a lot easier to Program than KIM although the KIM programs can be used with the VIM with a cross reference.

I plan to write an article on my experiences with the KIM and VIM and how they relate to the new ASR 35 that I will use them on. The article will encompass all the trials and tribulations encountered with interfacing and programing and what all! It should make interesting reading especially to those who are on the verge of trying their luck with micro-computers. I can tell you right now, that it sure is a lot easier than I thought it would be, to adapt a RTTY machine. I had put it off many times due to apprehension. Sure sorry that I did it as it actually is a piece of cake especially when ya have some one to give you a helping hand like Pete Bertelli "Mr UT-4 parts and KIM expert" has been of great help.

By the time you read this the San Diego ARRL Convention will be history, but just in case it isn't plan to attend. It will be one of the biggest affairs in RTTY History. There are three or four RTTY technical discussions and continous RTTY demonstrations with several different types of actual running RTTY. Don't forget that we have a RTTY JOURNAL Hospitality suite where we can all have an eyeball and a hi-ball at the same time.

We have again had troubles with our columnizer justowriter tape gear that we use to type up the originals for the JOURNAL. I should say the machine that poor Dee uses to type all the material herein. It sure does cost an arm and leg to get it fixed each time that it goes bad-- always over 500 dollars. Feel sorry for Dee, every time that she starts to see a meager profit bingo goes something and she starts all over again.

We should have a lot to talk about after the convention is all over. All the people that we saw and the new equipment and products. So until then have a good one.

73 de W6MNO CHUCK.

Another use for the 555 timer.

This simple circuit will pass ordinary TTL-Level RTTY signals without effect but when a space longer than 300 milliseconds appears on the input, the 555 will time out and the imput line will go to the mark state. I used it as an anti-space circuit in my RTTY demodulator. It is also very useful as a break timer circuit to process the signals from your keyboard, so that the break key will not send out a continous space.

Another Use for the 555 Timer.

G. Mills, VE4CM
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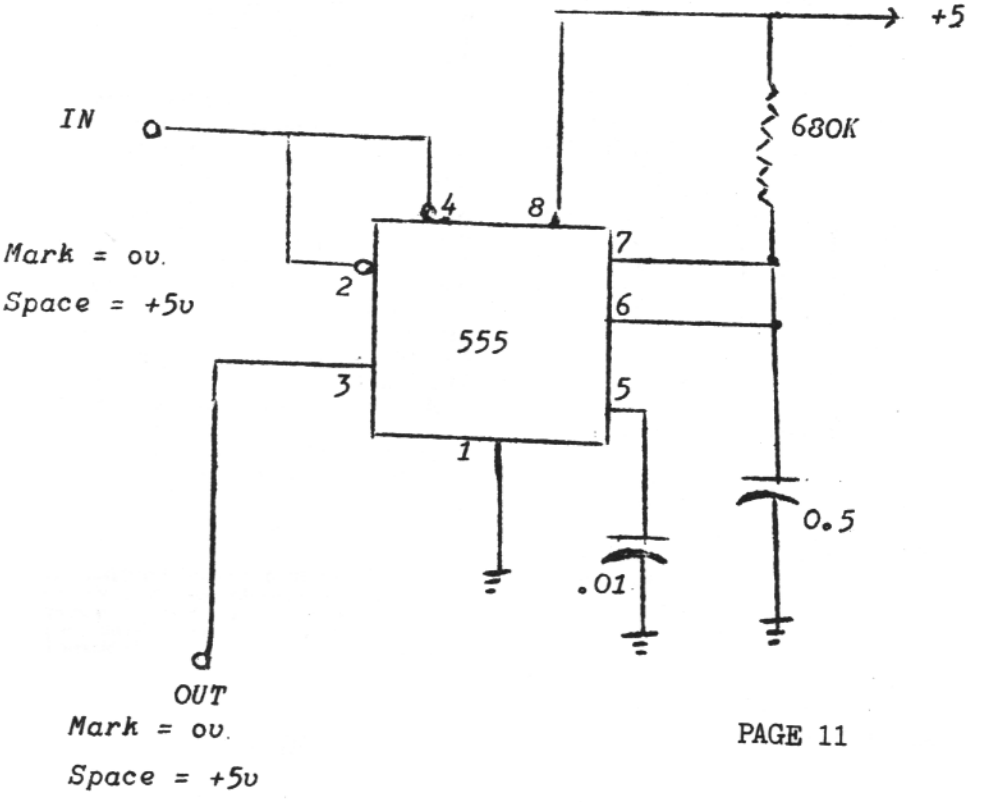
R3M 2B5



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UT-4 COMPONENTS and PROMS... FC33512 FIFO now $12.00. TMS6011 NC or AY-5-1013A Uart $6.00. Postpaid. See Sept. issue for others. Peter Bertelli, W6KS, 5262 Yost Place, San Diego, CA 92109. 714-274-7060.

UT-4 KITS NOW Available. Enough components to fill board. All necessary logic, resistors, diodes, transistors and capacitors. Complete documination. Commercially made boards. Price $109.95. UT-4B Board alone $17.95 with documentation. Special mini parts package for UT-4 board includes resistors, capacitors, diodes and transistors. Price $8.95. M4D Power Supply for above. Kit $31.95. Add $1.00 for shipping. Daytapro Electronics, formerly NuData Electronics, 3029 Wilshire Lane, Arlington Heights, IL 60004.

RTTY ID GENERATOR. Accepts 5 or 12 volt supplies, 31 characters available, please include letters, figures, spaces etc. Your preprogrammed answer-back must be supplied with order. Example: DE K9WRL Neil ARL HTS ILL. Board same size as ST-6 boards. $34.99 kit. Board alone $8.50. 5V power supply for above $11.95. Daytapro Electronics (formerly NuData Electronics), 3029 Wilshire Ln., Arlington Heights, IL 60004.

ELECTRONIC KEYBOARD CABINETS. Six sizes available. Depth 8.4 in. Height 3 in. Width 14 in. $15.20, Width 17 in. $18.35, Width 20 in. $19.25. Depth 11.4 in Height 3 in. Width 14 in. . $16.50 Width 17 in. $18.80 Width 20 in.$ 20.75. Alum top and base. Shipping included in prices. Blue base with choice of black or white top. 10 minute timer kit, variable 1-20 minute $8.95 kit. Board alone $3.95. Daytapro Electronics, (formerly NuData Electronics) 3029 Wilshire Ln., Arlington Heights, IL 60004.

ATTENTION FAKSIMILE OPERATORS A list with more than 200 frequencies of faksimile weather stations transmitting on SW is airmailed to you for $3.00 or 10 IRC. It includes frequency, callsign, name, drum speed and cooperation index of each station. Write to: Joerg Klingenfuss, Goethestrasse 14, D-7400 Tuebingen 1, West Germany.

TD 11/16 tape, yellow oiled. Carton of 10 rolls $3.00 Add UPS 13lbs. Carton of 40 rolls $10.00 Add UPS 47 lbs. Harmon, 5628 10th Avenue South Birmingham, ALA 35222.

TELETYPE PAPER–50¢ per roll or $5.00 per case. You pay shipping charges. 54 pounds per case. Call (714) 276-3182 or Write:Skip , W86CYA, 3611 Merrimac Avenue, San Diego, CA 92117.

CRYSTAL CONTROLLED XB-6 clock boards for the UT-4. Single sided PC board has provisions for two clocks from one crystal. May also be used for NuData/Daytapro, UT4B boards. . Board size 4 1/2 x 6 1/2 inches. Price $8.95. Complete kit $26.95.. Daytapro Electronics (formerly NuData Electronics), 3029 Wilshire Ln., Arlington Heights, IL 60004.

TU LOOP SUPPLY BOARD. Contains all necessary for plus 12 minus 12 low voltage supply with provisions for high voltage loop supply. Similar to that of ST-5. Ideal for most TU's including DT-500 and DT600 units. $5.95 per board plus 90¢ for shipping. Daytapro Electronics, (formerly NuData Electronics), 3029 Wilshire Lane, Arlington Heights, IL 60004.

NEW CW ID UNIT. Includes many extras, on board interface for FSK and AFSK plus H.V. interface, 10 minute timer, variable speed 5-24 WPM, on board 7805 allows 5 or 12 volt use. $37.50 kit. Mini version of above, ID only with 7805 regulator $21.95 kit. Board alone (same for both units $9.45. Power supply for above 5V @ 1AMP $11.95 kit. Daytapro Electronics, (formerly NuData Electronics), 3029 Wilshire Ln., Arlington Heights, IL 60004.

YOU NEED INFORMATION ON COMMERCIAL RTTY STATIONS? News Agencies, Telex, Weather . . . on shortwave? I have up-to-date frequency, callsign, schedule, code lists. Write for details. Joerg Klingenfuss, Goethestrasse 14, D-7400 Tuebingen 1, West Germany.

PRINTED CIRCUIT BOARDS: RTTY Selcal with TTL logic, (73 magazine, Nov. 72) $12.00. ST5A-W/P.S. (2 boards) $6.25. AK-1 (AFSK) $4.25. CW IDer (Feb.73, 73 magazine) $4.75. New CW IDer(dec. 76, 73 magazine) $8.50. Synthesizer-75-S Collins rec. (Dec.75 Ham Radio)(2 boards) $12.50. Digital capacitance tester - W/PS (Radio elec. Dec 77) (2 boards) $11.00. Speech compressor (QST Mar.76) $9.50. New logic probe (board and parts) READ:TTL-open -low-high $6.95. Hefty 12v. supply regulator 5A.-50A $2.50. Warble alarm/siren (5w) (board & parts) $3.95. Instructions and parts list included: S.J. Zalewski, 29307 Red Cedar Dr., Flat Rock, MI 48134. 313-782-9316.

FOR SALE: MODEL 35 ASR $500., 28 KSR $250., 28 printer $60., 28 LPR double shift $75., Punch block $20., Stunt box $5., typebox $15., LESU $15., power supply $5. Wanted; I.F. Strip for R-390A. Ed Wagner, 1018 Birch-Haven Circle, Monona, WI 53716.

AFSK GENERATOR Direct replacement board for AK-1 IN ST-6. Has CW ident with your call. 170 shift only. Other shifts available. Stable output. Special at $29.95. Allow three weeks for delivery. Sulfun Electronics Services, PO Box 1475, Weaverville, CA 96093.

NEWS-NEWS-NEWS- Amateur Radio's Newspaper 'Worldradio'. Trial subscription - Two issues for one dollar. 'Worldradio' 2509-F Donner Way, Sacramento, CA 95818.

CRYSTAL CONTROLLED XB-6 Clock boards for the UT-4. Single sided PC board has provisions for two clocks from one crystal. May also be used for NuData/Daytapro UT4B boards. Board size 4 1/2 X 6 1/2 inches. Price $8.95. Complete kit $26.95. Daytapro Electronics (formerly NuData Electronics), 3029 N. Wilshire Ln., Arlington Hts., IL 60004.

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AFSK GENERATOR direct replacement board for AK-1 IN ST-6. Has CW ident with your call.170 shift only. Other shifts available. Stable output. Special at $29.95. Allow 3 weeks for delivery, Sulfun Electronics Services, PO Box 1475, Weaverville, CA 96093.

RM-300, THE COMPLETE TU and AFSK generator on one board. Your CW ID generated from on-board PROM. Thinking of VHF RTTY through your local repeater? This premium quality board is ideal. Complete documentation$2.00.RM-300 board just $21.25.. Complete RM-300 kit)less PROM)$71.25 PROM programmed with your call $7.00.RP- 400 power supply (plus 5v. & plus and minus 12v. and dual loop supply) board only $21.25. Complete kit with heavy duty transformer and solid state autostart relay $71.25.Calif. residents add 6%. Postage and handling $1.00. Eclipse Communications, 5 Westwood Drive, San Rafeal, CA 94901.

WHAT! THE ST-5 improved? You bet! The MEG-1 RTTY Demodulator is designed to be built by the beginner, modular, and easy to work on. Curious? For information and prices write to the Midnight Engineering Group, PO Box 349, Galesburg, IL 61401.

PRINTED CIRCUIT Board drill bits! You can now get carbide printed circuit board drill bits for a reasonable price. 1/8" shank , approximately 1" long. Four sizes available; .047"(approx. #56 drill), .043" (#57) , .033"(#66), and .030" (approx. #68-69). $1.25 each, includes shipping, Minimum Order Is Two Drill Bits. Illinois residents add 5% sales tax. Midnight Engineering Group P.O. Box 349, Galesburg, Il 61401.

WANTED: MODEL 28 Teletype Transmitter/Distributor (TD), 7.42 code, preferable 100WRM, single or double head, sync motor, Contact Gilbert Bosse, P.O. Box 185, Riviere au Renard, P. Que, Canada GOE 2AO. Telephone 418-269-3256 or 418-259-5686.

WANTED: KLEINSCHMIDT Teletypewriter parts, also Mite and Teletype Corp. Send listing for my quote. Phil Rickson, W4LNW, Rte 6, Box 1103G2, Brooksville, FL 33512.

model 28 ASR's: 60 or 100 wpm, Auto CR/LF, typing reperf$325.Model 28 KSR with three speed gearshift $225. Larry Simoneau, WA1QFP, 31 Derby Street, Pawtucket, RI 02860.

Government Surplus Sig. generators AN/USM27B & other electronics RTTY, for SALE cheap or trade; spools for Teletype, Kleinschmidt equip. 50¢ plus postage; QSL's reg & double, Printed low cost; SASE details. D. Testa, Jr., 'mark RJ', 390 Lincoln Ave., Newark, NJ. 07104.

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DOVETRON TSR-200 teleprinter speed converter-signal regenerator is a 5" by 5" card designed as the digital heart of the MPC-1000CR terminal unit. May be simply interfaced to other tus. Consists of programmable UART regenerator, dual crystal controlled clock and a CMOS bilateral steering section. Power requirements: 5/15 volts at 20 mils. Price $99.50 postpaid. Add $15.00 for front panel BCD speed switch and cable. DOVETRON, P.O. Box 267, South Pasadena, CA. 91030. 213-682-3705.

EXPERT REPAIR WORK done on Noncommercial Teletype machines. Chicago area only. Trouble with working machine $20.00 plus parts. Others done by estimate. Call 312/870-0555 and ask for Neil.

NS-1A PLL DEMODULATOR W/T $26.95 ppd. Parts kit including board $19.95 ppd. SASE for info. Nat Stinnette Electronics, Tavares, FL 32778.

88 mH toroids 5/$3.85 ppd. Nat Stinnette Electronics, Tavares, FL 32778.

HAL COMMUNICATIONS will buy 88 MHY toroids (unpotted, as furnished in the ST-6 Kit). Contact Jim, Box 365, Urbana, IL 61801. (217) 367-7373.

ELECTRONIC EQUIPMENT hotline is a new classified advertising newsletter for buying and selling professional, industrial, and surplus electronic equipment. Subscriptions $6/year, ads 50¢/word. Prepublication offer: $1.00 off subscriptions and 20% off all ads postmarked before Oct.1, 1978. Electronic Equipment Hotline, PO Box 4768, Panorama City, CA 91402.

TELEPRINTER Parts, manuals, gears, ribbons, paper, tape, converters; toroids. SASE for list. Wanted TT, KL, parts; 2BP1/etc., tubes. Typetronics, Box 8873, Ft. Lauderdale, FL 33310

TELETYPE FOR SALE: Model 28 ASR's, KSR's, typing reperfs, and TD's. New and used parts available including cabinets, tables, mod kits, gears and gearshifts. Paper, ribbons and supplies. Send SASE for complete list and prices. K9WJB, Lawrence Pfleger, 2141 N. 52nd Street, Milwaukee, WI 53208.

MODEL 28 ASR's — KSR's, Repurfs - Keyboards, TD's - Printers, Parts - All priced for Hams. All in excellent condition. A.D.M. Communications, Inc., 1322 Industrial Avenue, Escondido, Ca. 92025. (714) 747-0374

SPECIAL — MODEL 28 compact receive only teletypes with 32/33 pedestal and sply with 3-speed gearshift only $175.00. Model 28 ARS's $350.00, with printing perforator $375.00. Model 28 receive only in console $175.00. Model 28 typing, printing perforator's w/32/33 pedestal $50.00. TWX units add $50.00 for modem. Send SASE for list. Goodman, 5454 South Shore Dr., Chicago, IL 60615, (312-752-1000)

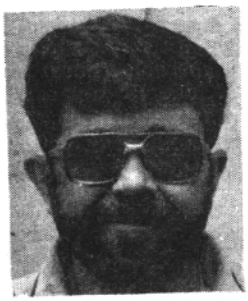
MODEL 28 ASR friction complete with TD and keyboard perf $400., with reperf $460. Model 28 KSR friction $200. For answerback add $50. For 60-75-100 gear shift add $100. Model 28 LPR reperf with keyboard $150., with 60-75-100 gear shift $225. Model 28 LPR reperf (no keyboard) with 60-75-100 gear shift $150. Model 28 LXD stand alone TD $100. All above rewired and ready to plug in. Bill Parker, 984 Amelia Ave., Akron, OH 44302.

WANT ADS CONTINUED ON NEXT PAGE.

• RTTY-DX •

SKIP PRINSEN WB6CYA 714-276-3182

3611 Merrimac, San Diego, Calif. 92117



GRETINGS TO ALL:
Al, WA6QFN was active as S8AHC for one weekend and he may be able to make another trip there soon. The weekend of the 16th of this month Al will be operating from Sesotho in Africa signing as 7P8BC. His address is PO Box 999, Secunda, TVL, Republic of South Africa. He will be going to Botswana also in the near future.

I enjoyed the SARTG Contest as many others seemed to. There didn't appear to be as much activity during this contest as in some of the previous ones.

While on the Contest subject;
7th & 8th Oct. VK/ZL/Oceania DX RTTY Contest, 1st annual.
21 & 22 Oct. CARTG Contest
11th & 12 Nov DARC RTTY Contest
2nd & 3rd Dec Volta RTTY Contest.

I hope to see more of you on during these up and coming events. Don't forget that 15 meters is now open a lot of the time. And at present it is 1400 local time and Jake K5WTA and his XYL Chris WB5TWK are working stateside stations on 10 meters and the fone portion of the band is loaded with signals. So folks lets check in out there
with signals. So folks lets check out those higher frequencies. Incidentally, 20 meters was in terrible shape so when on 20 and it looks bad start taking a peek on those higher frequencies.

Two DXCC's were earned this past month.: # 31 goes to F6ALL, Remy, Serge, Chemin de la Orlanande, 84600 Valereas, France.

the second goes to F5JA and is #32 Jean Alliaume, LaMerinerie, Buxreuil 37160 Descartes, France.

Two WAC all on 20 meters also were earned: #58 to Emilio Sterckx, ISØ-ESS, Casella Postale 190,07026, Olbia (SS), Sardegna, Italy.
#59 goes to K5GH/W5KHP George Huling, 721 White Drive, Garland, TX 75040.

DXCC Honor Roll will run again in the January issue (NOTE from the Publisher--will get these and other back-logged plagues and certificates as soon as possible). Please don't wait until the last minute to give me your scores. If you get any last minute QSL cards a short note or call me on the band for updates or just to say hello and give me your status. Remember don't wait until the last minute due to lead time required is at least six weeks. I must have your inputs no later than the third week of the month to be included in the next months issue. In other words Christmas would be the latest that I should get inputs to be printed. For the newcomers I need two sets of numbers from you for listing, they should be 28/13, meaning that you have worked 28 countries and confirmed 13 of them.

I recently received a letter from Mac, K7BV who pointed out to me that rule 9 of the countries had changed to read'all stations must be contacted from the same DXCC Country.

In view of the fact that we are utilizing the rules of the ARRL for DXCC this rule will also apply. Those persons affected who desire that all previous contacts count together please send me a duplicate list in alpha-numerical order of all claimed cards. If I have a conflict with the records I have on hand I will notify you. If you wish to ensure that all is in order send the cards along with your lists.

The ARRL Countries list which includes all of the rules etc. can be obtained by sending an S.A.S.E. to ARRL @@% Main Street, Newington, Connecticut USA 06111 and ask for operating aid #7.

Here is some info on QSL addresses and some operating stations for the past month or so.: SN2AMT, 5Z4PD, 5Z4RT, GU5TU.
KV4AQ Dr. Randall N. James, Christranslot, St. Croix, Virgin Island,, 00820.
VP2AR, Hickey, Box 550, Antigua, West Indies.
A4XFW, Robby, bOX (*!, Muscat, Sultinate of Oman.
6Y5SS, Rick, Knox College, Spaldings, Clarendon, Jamica, West Indies.
CT1EM, Paul, AV D Vasco Da Camara 9-A, Portugal.
GD3YED, Rich Hillsboro, Selbourne Dr., Douglas, Isle of Man.
KZ5BH, Bill, Box 262, Albrook, Canal Zone.OD5JW, Wassim, POBox 14-5449, Beirut, Lebannon.
TF3SB, Doddi Sigurbjorn thos Bjarnason, Skeejagata 17, 105 Reykjavik, Iceland.
HP1PM, Peter, Box 603035, ElDorado, Panama.
LA6E, Emil Aasveien, 48/A, 4620 Vaagsbygd, Norway.

Here is a partial listing of stations that worked during the SARTG from the west coast:SM-JR-JA-CE-VE7-DK2--1-HB-F-EA8-9M2--IsØ-YO3-EA-G---TgØ.

Other stations heard from the east coast during the month were: YU1 OE4RZA, KP4DJT/T13, PA3AFK, and YV5ZZ also several LU stations were printed working the east coast.

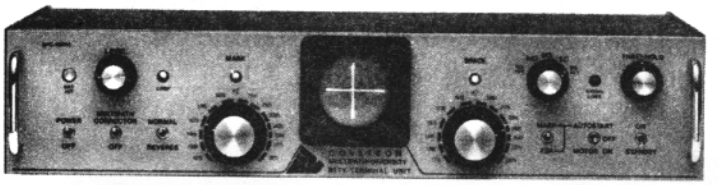
I would like to thank the following for their inputs which have helped to make this months articlw what it is. Any and all help is greatly appreciated,: WA2PSU, JA1ACB, WA6 MJZ, and K6WZ.
73 de SKIP.

WANT ADS CONTINUED

PLEASE, DEAR Santa Clause, I teach a class of 15 wonderful junior high students who are deaf. They could learn to communicate better through the thrill of RTTY in the classroom and at home. They need several Model 15's one Model 28 ASR (paper tape for slow typists & to make copies for everyone), one transceiver (Collins KWM-2, etc.), Are you out there somewhere, Santa? Sincerely, Grant Grover, Lucas Valley Road, Nicasio, CA 94946.

TELETYPE Equipment and supplies. Another shipment of fresh new roll paper just arrived at the same old prices. 4 1/2 inch diameter $19 per case of 12. 5 inch diameter $23 per case of 12. Excellent surplus ribbons 50¢. 11/16 inch tape 40 roll case $14. Checked 14 TD(syncronous motor) on 60,75 or 100 speed while they last $40. Slip base $5. Model 28 ASR, KSR, RO's on hand. Also 28 ROTR, TD and keyboard reperforator stand alone units. Assemblies for all above including cabinets. Most 14,15,19, 28 parts on hand. SASE for equipment list. Inquire regarding specific assemblies and parts. Please include shipping. Excess refunded. All items FOB Rochester, MI. Paul Andersen, 115 Boyken Road, Rochester, MI 48063. 313-652-3060.

DOVETRON

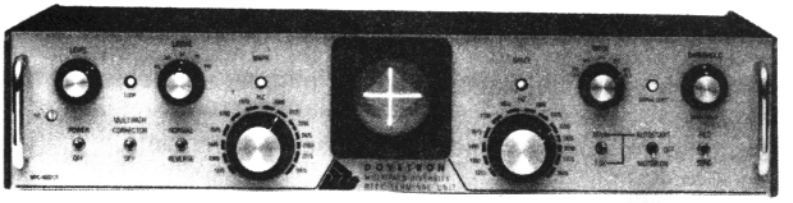


MPC-1000C

Multipath Correction
In-Band Diversity &
AFSK Tone Keyer

Amateur Net: $545.00

Standard features include CONTINUOUSLY tuneable Mark and Space channels (1000 Hz to 3200 Hz), Dual Mode (MARK or FSK) Autostart and internal high level neutral loop keyer (20 to 60 ml). Both EIA and MIL FSK outputs are provided for direct interface to microprocessor and video terminal peripherals.

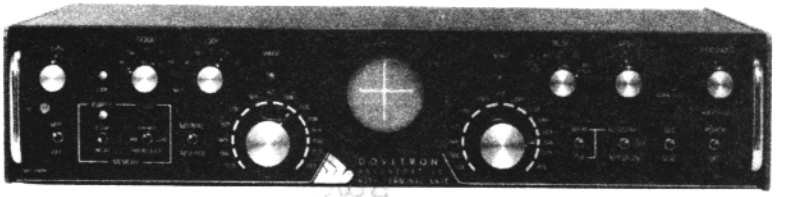


MPC-1000CR

Signal Regeneration &
Speed Conversion

Amateur Net: $645.00

A front panel switch permits internal TSR-200 Signal Regenerator-Speed converter assembly to electronically "gear-shift" between 60, 67, 75 and 100 WPM. All incoming and outgoing signals are regenerated to less than 0.5% bias distortion. Also available with DIGITAL Autostart (TSR-200D): Amateur Net: $695.00



MPC-1000R/-TSR-500

Dual UART Regeneration,
Speed Conversion, 200
Char. Memory, Word Correction & DIGITAL
Autostart

Amateur Net: $895.00*

The MPC-1000R/TSR-500 provides Preloading and Recirculation of the 200 character FIFO Memory, a keyboard-controlled Word Correction circuit, Variable Character Rate, Tee Dee Inhibit, Blank/LTRS Diddle, a Triple Tone-Pair AFSK Tone Keyer and a Character Recognition/Speed Determination DIGITAL (DAS-100) Autostart mode.

***The MPC-1000R is also available without a TSR assembly and functions as a MPC-1000C with a Triple Tone-Pair AFSK Tone Keyer. This "Basic-R" permits future expansion with a TSR-100, TSR-200, TSR-200D or TSR-500 by simply lifting the lid and plugging in the appropriate TSR assembly: Amateur Net (Basic-R): $595.00**

Your QSL will bring complete specifications, or call: 213-682-3705.

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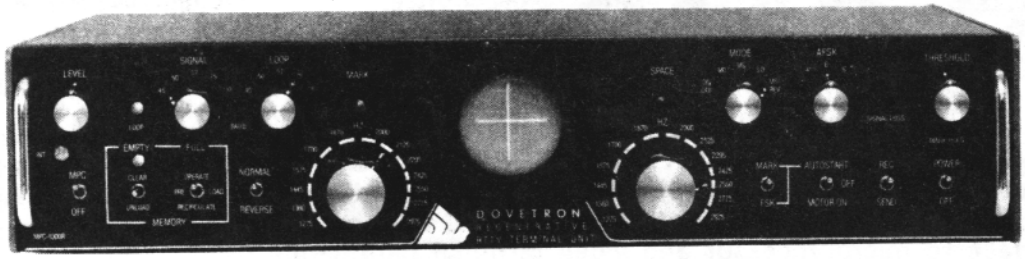
SOUTH PASADENA, CA. 91030

MPC-1000R BY DOVETRON

MULTIPATH CORRECTION, IN-BAND DIVERSITY, SIGNAL REGENERATION, UP-DOWN SPEED CONVERSION, 200 CHARACTER FIFO MEMORY, KEYBOARD-CONTROLLED WORD CORRECTION & DIGITAL AUTOSTART



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The DOVETRON MPC-1000R is a complete Transmit-Receive modem designed for optimum radio teleprinter communications on land, sea and in the air.

Standard features include a high level loop supply and keyer (neutral or polar), EIA and MIL FSK outputs, a phase-continuous AFSK Tone Keyer with three selectable Mark - Space - Shift tone pairs, Mark, FSK & Digital Autostart, Automatic Markhold, an internal RY Generator for terminal unit Self-Test and circuit adjustment, and a Signal Loss Alarm circuit.

The MPC Series is available in six different models to meet your exact requirements.

Complete specifications are available on your request, or call 213-682-3705.

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