

# **ARMED FORCES DAY 16 MAY 87**

The annual Armed Forces Day communication test is set for Saturday, 16 May 1987 and marks the 38th anniversary of this event which emphasizes a continuing climate of mutual assistance and warm esteem between the military and amateur radio communities. The traditional military - to - amateur cross band operation and broadcast of the Secretary of Defense message are the featured highlights and include operations in CW, SSB and RTTY.

These tests give both amateur radio operators and short wave listeners (SWL) the opportunity to demonstrate their individual technical skills. Special commemorative acknowledgement (QSL) cards will be awarded to those amateur radio operators achieving a verified two - way radio contact with any of the participating military radio stations. Interception of these contacts by SWLs are not acknowledged by QSL cards, however, anyone who receives and accurately copies the armed forces day CW and/or RTTY message from the Secretary of Defense can qualify to receive a special commemorative certificate from the Secretary. See details on page 14.

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ARMED FORCES DAY

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| <p>RTTY JOURNAL<br/> Dale S. Sinner, W6IWO<br/> OWNER - EDITOR - PUBLISHER<br/> ALL CORRESPONDENCE TO :<br/> 9085 La Casita Ave.<br/> Fountain Valley, Ca 92708<br/> TELE: 714-847-5058</p>  | <p>SUBSCRIPTION RATES</p> <table> <tr> <td>USA</td> <td>\$10.00 per yr.</td> </tr> <tr> <td>CANADA/MEXICO surf</td> <td>\$10.00 per yr.</td> </tr> <tr> <td>CANADA/MEXICO air</td> <td>\$12.00 per yr.</td> </tr> <tr> <td>FOREIGN surf</td> <td>\$10.00 per yr.</td> </tr> <tr> <td>FOREIGN air</td> <td>\$15.00 per yr.</td> </tr> </table> <p>All monies in U. S. currency only</p> | USA | \$10.00 per yr. | CANADA/MEXICO surf | \$10.00 per yr. | CANADA/MEXICO air | \$12.00 per yr. | FOREIGN surf | \$10.00 per yr. | FOREIGN air | \$15.00 per yr. |
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## KAM REVIEW

by: Noel E. Chenoweth, AL7FL/4  
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Davie, FL. 33024

I own or have owned the following: Hamsoft Vic 20, Hamsoft C-64, Hamtext C-64, MBATOR, AIRDISK, The Interface, HAL ST-5000, HAL CRI-200, KPC-2, Infotech M-200E TU, Infotech M-300 keyboard. As an exclusive HF digital mode operator I was asked to be a field test site for the Kantronics All Mode (KAM) terminal unit. The initial prototype I received was a KAM with HF packet only capabilities.

I quickly became a KAM believer when I had 3 connects at one time in some of the heaviest SSB QRM I have experienced. I literally sat at the C-128 with my mouth hanging open in amazement muttering, "I don't believe I'm doing this". Eventually I received a prototype KAM with two radio ports in the back. Total confusion, chaos, fear, amazement, and let me at the monitor commands (all 14 of them), I have to turn something off! The packet information was flowing by so fast I couldn't read it, 2 radios, 1 KAM, 1 computer, and 1 amazed operator.

After some brief experience I turned on the standard KAM 'gateway' and announced its presence to the world in my VHF and HF beacons. It didn't take long to wake up the gang on 2 meters. The 'DAVGAT' gateway is now in everyday use in this area and its presence is appreciated by the local hams as well as tourist hams who use it to call back home on 20 meters.

## SPECIFICATIONS

Suggested retail \$319, HF and VHF radio ports with simultaneous operation, dual modems, VHF <-> HF gateway, RS-232 or TTL levels, AFSK or FSK keying, two watchdog timers, software programmable baud rates for RTTY/ASCII with 1 baud increments, software mark/space/ tone selection of any tones, 12 pole programmable switched capacitance input filter, 32K RAM, EEPROM for parameter storage, CW 6-99 wpm, RTTY/ASCII 45-300 baud, ARQ, FEC, SELFEC, Listen ARQ, VHF & HF Packet 1200 and 300 baud respectively, 10 LED tuning indicator, 7 LED Status indicators, optional message system and more. User provides his own computer terminal program (terminal programs are available from Kantronics dealers). Connection to a hard copy dumb terminal is possible.

## HOOKUP

The KAM comes with all the cables and plugs necessary to connect to two radios and one computer. The user must provide his own microphone connectors, FSK hookup (if used), Computer interface connector, and CW jack plug. The manual provides a step by step check out and familiarization procedure (DO IT). Commodore users MUST change the internal TTL/RS232 jumper to provide TTL level signals.

Users should determine if their radio uses an amplified microphone. If their microphone has an amplifier in its circuit somewhere (not necessarily in the mike itself) then the ASFK level internal jumper should be put on 'High' for this radio.

(cont. next pg.)

Users of the following Icom radios may experience trouble getting rigs to key-up properly: I-720, I-730, I-740. If you do have trouble with these rigs, I suggest you run on VOX or install an outboard reed relay in the PTT line to key these radios in digital modes. Some VHF radios (especially handy talkies) have exotic PTT methods. I suggest you check your local bulletin board for hints on the hook - up for the numerous types of radios.

### OPERATING

Since the KAM operators both radio ports simultaneously it is possible to be running CW, RTTY/ASCII, or AMTOR on the HF radio while the VHF radio runs in Packet providing digipeater, and the mailbox service.

The user must expect to spend many, many hours with the manual and a few months operating the KAM before he is proficient. If you have no digital experience (RTTY, ASCII, Packet) or are new to computers then the KAM is not a good unit to start with. There are so many inter-dependent parameters in the KAM that if one doesn't at least know some of the terminology of digital Ham radio then one is in trouble.

### CW

The CW operator may change many parameters in the KAM. He may change from the computer keyboard his CW tone, CW bandwidth, and speed. Once he has selected his favorites and 'permed' them in the EEPROM they will stay that way until 'permed' again.

To operate, the User types in command mode 'CW'. This puts him in CW mode at his selected CW speed. If he wishes to enter CW at some other speed he types 'CW 25' for 25 wpm. The KAM auto-tracks the received signal from -20 to + 20 wpm from the users selected speed.

I found the CW copy to be as good or better than other units I have used. No computer CW system can copy sloppy fists but the KAM does an excellent job trying. (It's not really a sin to use computers on CW is it? hi)

### RTTY/ASCII

This mode allows the KAM to show off its software changeable parameters. You may change the shift to any legal value, the tones may be any legal value, and the baud rate can vary from 45-300 baud. Autostart is provided.

To enter RTTY, type 'RTTY 45' to go into 60wpm or 'RTTY 75' to enter 100wpm. Translation from baud rates to WPM is

provided in the manual. The built-in tuning indicator in the KAM makes tuning RTTY/ASCII signals easy.

To enter AMTOR ARQ, type 'AMTOR ALFL' for example. To listen to ARQ or FEC, type 'LAMTOR' or to enter FEC, type 'FEC' or 'FEC ALFL'. The AMTOR in the KAM works just great. I worked many DX stations during the field test with excellent results. A delay timer parameter is provided for those that like to change this to fit the distance and conditions for operating. Having used two other vendors AMTOR unit and the first question I asked of Kantronics was 'Where are the rest of the commands?'. One of the other AMTOR systems I used had 3 pages full of commands. The KAM has 1 command other than the ones used to enter this mode. I found that I was not limited by this lack of commands. I can do virtually everything with the KAM that I used to do with a system with 3 pages of commands including 'break-in'.

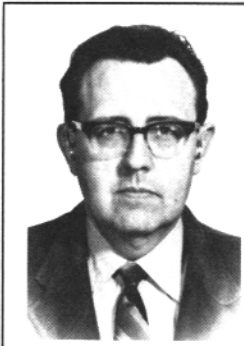
### PACKET

Packet is the only mode in the KAM that operates on the VHF radio port. The HF radio port will operate on all modes. All parameter changes and mode selection must be done in the command mode. There are over 180 possible commands or parameter settings. The default parameter settings in the KAM seem to favor the VHF operator. I found that I didn't agree on many of the HF default values so I have my own values 'permed' in now. Since Packet is the normal power on mode you don't need to type anything to enter Packet. If all your hookups are correct and you went thru the check-out procedures in the manual you should be copying Packet signals right away.

### CONCLUSIONS

The KAM is the finest Terminal unit on the market in my opinion. Its many, many features are far and above any other unit I have seen advertised. Its simultaneous use of the radio ports and its standard gateway are not found in any other units on the market and its optional Personal Mailbox is unique to Kantronics.

The KAM is an excellent unit for the experienced operator. I must say again it is not for beginners. The KAM almost demands a user that has at least operated some RTTY or Packet before. Of course all this versatility makes it an outstanding performer once the user has mastered the KAM. de Noel, AL7FL/4



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## CONNECTIONS

The plan was to start this month's column by saying it has been very quiet with no mail coming in. Now today is March 30th and this column is due at Dale's place tomorrow; but when I got home from the salt mine this evening, there was a letter from Ted, W0ULK asking about a general purpose Commodore C128 terminal program that would drive his new PK-232 in RTTY mode with split screen and 80 column capability. He does have a Packet program that works nicely but he wants to take advantage of the multiple modes in the PK-232. So does any reader have information/sources for such a C128 program? There are several programs for the C64 that will work on the C128, including a nice Packet program (TNC64) from the Texas Packet Society (Tnx K6YDW) but it only provides a 40-column screen. I am sure that John, K6YDW as well as Ted would be interested in programs that will provide an 80 column screen when running on the C128. Please let us know if you are aware of such programs. Remember that this type of program would allow the C128 to work with any serial port unit such as the Kantronics KAM or the MFJ TNC.

### INSTRUCTION MANUAL REVIEW

I mentioned last month that it was time to talk of something other than Packet radio, for a change. Because I had access to an AEA CP-100 instruction manual, I read it carefully, looking for something to nit pick. The CP-100, like its predecessor, the CP-1, is a computer or terminal-to-transmitter/receiver interface unit. It includes a demodulator for reception of RTTY, CW and AMTOR signals and an AFSK generator for transmit keying. With such a broad application capability, it naturally requires a good deal of interfacing discussion and application instructions. It did a good job of covering all bases in the area of connecting everything together.

Talking to several users of the interface indicated they had no problems getting things going. The only thing I could find to complain about was the lack of an index. Now there is nothing unusual about an instruction manual

without an index. Unfortunately it seems to be the rule rather than the exception. A good index is an absolute necessity in any technical publication larger than ten pages in size. And the CP-100 manual is twenty pages of very high density technical information. A good index can save an enormous amount of time when you are looking for some specific bit of data, like connector pinout, or particular specification, to name just a few instances. Most of the time a "table of contents" just won't serve the purpose of an index, because it is too general, while an index is very specific. In the not too distant past, creating an index was a lot of hard work. However, in this age of computers and excellent word processing programs, the creation of an index is really easy to do. I use Microsoft WORD (Version 3.1) word processing program for writing this column and it has an excellent method of creating an index while writing. So, to you vendors out there - no more excuses for not incorporating an index in your instruction manual.

### IT ONLY WORKS WITH THE C64

During some eavesdropping on the bands, I ran across a question "Why does my AEA Pakratt-64 only work with the C64 computer? I would like to use it with a different (non Commodore) computer." The answer is that the Pakratt does not contain a microprocessor of its own. Instead it uses the C64's internal microprocessor to run the programs required for RTTY, AMTOR, CW, or Packet. Also, the program PROMS inside the Pakratt are written specifically for the C64 microprocessor and would not even run on most other computers. This is the reason that AEA produced the PK-232 and the PK80, so that, by means of the RS232 interface combined with its own internal microprocessor and program ROMS, these units will work with any computer or terminal. Naturally, the addition of the microprocessor and associated support circuits adds quite a lot to the cost of producing something like the PK232 but I think the resulting versatility is worth it.

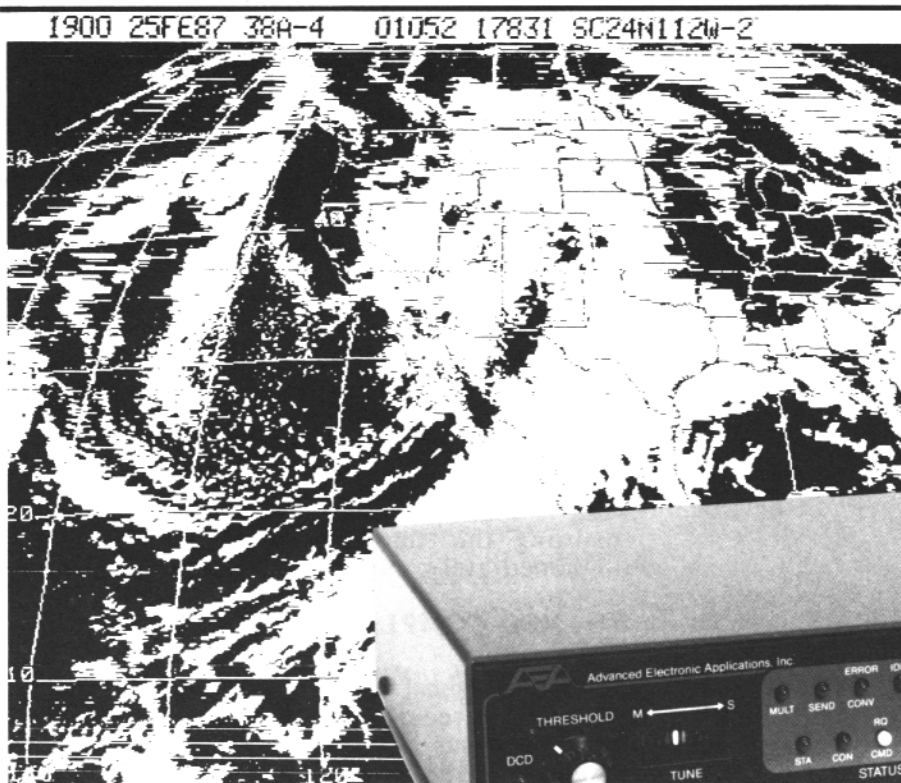
### MORE ON NULL MODEMS

The RS232 connection diagram in my January column that illustrated the application of a null MODEM was probably simplified too much and could give the wrong impression. In actuality, a null modem assumes many different forms in the way it is configured. For example, in the book RS232 MADE EASY, the Computer to Peripheral Appendix of connection diagrams shows a total of 42 different connection diagrams. Of these, 22 are Null MODEM diagrams where only the pins 2 and 3 crossconnect are the same in each diagram.

(cont. pg. 10)

New PK-232 Breakthrough

# Six Digital Modes - Including Weather FAX



A new software enhancement makes the AEA PK-232 the only amateur data controller to offer six transmit/receive modes in a single unit.

- \* Morse Code
- \* Baudot (RTTY)
- \* ASCII
- \* AMTOR
- \* Packet
- \* Weather FAX



**\$319<sup>95</sup>** AMATEUR NET  
\$379.95 AEA RETAIL

Your home computer (or even a simple terminal) can be used for radio data communication in six different modes. Any RS-232 compatible computer or terminal can be connected directly to the PK-232, which interfaces with your transceiver. The only program needed is a simple terminal program, like those used with telephone modems, allowing the computer to be used as a data terminal. All signal processing, protocol, and decoding software is in ROM in the PK-232.

The PK-232 also includes a no compromise VHF/HF/CW modem with an eight pole bandpass filter, four pole discriminator, and 5 pole post detection low pass filter. Experienced HF Packeteers are reporting the PK-232 to have the best Packet modem available.

Operation of the PK-232 is a breeze, with twenty-one front panel indicators for constant

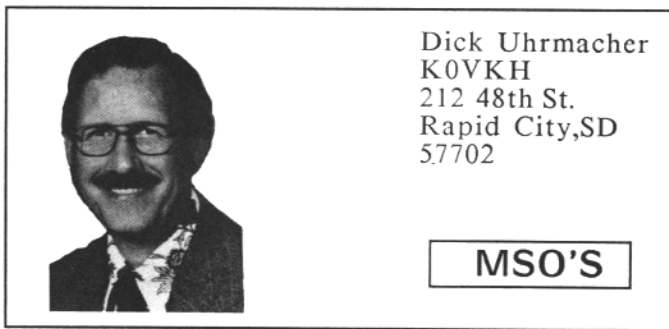
status and mode indication. The 240 page manual includes a "quick start" section for easy connection and complete documentation including schematics. Two identical back panel radio ports mean either your VHF or HF radio can be selected with a front panel switch. Other back panel connections include external modem disconnect, FSK and Scope Outputs, CW keying jacks, and RS-232 terminal interface.

The RS-232 connector is also used for attaching any Epson graphics compatible parallel printer for printing Weather Fax. Weather maps and satellite photos, like the one in this ad, can be printed in your shack.

Contact your local AEA dealer today for more information about the one unit that gives you six modes for one low price, the PK-232.

**AEA** Brings you the Breakthrough

2006-196th St. SW  
Lynnwood, WA 98036  
(206) 775-7373



**HI Gang!** Welcome to Spring, where the hearts of young men and women turn to towers, antennas, DXpeditions, Etc! And, this year being no different than others, the annual migration of the Amateur radio species to Dayton, Ohio, begins in earnest! Two important events for us digital-types will take place this year, the "RTTY Dinner", held on Saturday evening, 1830 hours, at the "Radisson Inn Dayton", (see "RTTY Dinner" file in K0VKH/KRKOZ/WAIIUF MSO's), and the "Digital Digest", (formerly known as the "RTTY Forum"). This panel oriented discussion group will hopefully provide a lot of insight on what is happening in the digital communications area, including panelists from both manufacturing and user groups. It takes place at 1300 hours at Hara Areana, (check your program for the specific location). Here's your chance to really ask questions that concern digital communications, and receive answers from those in the know!

#### MSO HINTS

**M**any times I have been asked on-the-air to assist other stations in equipment frequency calibrations. In many of these instances, it is determined that the other station has some form of "station monitor", but really doesn't understand how to use this device for very accurate frequency calibrations. It would take hours to relate all of the intricacies of frequency measurement. However, there is one point that should be made that will assist you when trying to place your transmitter on some other stations frequency, with a bit of accuracy. The "MARK" tone has traditionally been displayed as the horizontal ellipse on a monitor scope, and the "SPACE" tone as a vertical trace. If you are confident that the mark and space filters and decoders in your demodulator are set at 2125 and 2295 Hz, (for 170 Hertz shift), you can quite accurately place your transceiver on another stations frequency by simply making his mark tone appear as a horizontal ellipse on your station monitor.

**O**ne of the most common tuning error that I observe deals with the use of the "R.I.T." (receiver incremental tuning) control. It

should always be "off" when you are zero-beating another RTTY station. If it is left "on", it is likely that your transmitter will be some place other than where your receiver is, and this causes the other station to attempt to tune to your mark tones. You respond by attempting to tune to his mark tones, and there you go, leap-frogging across the band! Leaving the RIT off when using the MSO's is also encouraged, as it is very important that your tones match those of the MSO, for proper operation.

**A**nd on another subject, MSO remote users should be familiar with the traditional "shut-off code" of four N's, (NNNN). In most of the MSO's on the National Autostart Frequency, reception of the four N's will close the MSO. Also, if there is an active file open, (the MSO has properly received a ".WRITE (Filename)" command), the four N's will close the file, while also closing the MSO. Consequently remote users should be cautious about imbedding the four N's within their text, as it will immediately cause the MSO to close.

#### MSO COMPLAINT DEPARTMENT

**O**ne of the most frequent complaints about MSO's that I receive deals with the sometimes long, repetitious and redundant MSO "sign on" messages. Frequent users of the MSO's see these sign-on messages many times a day, and object to the time they have to wait while this sign-on message runs, time and time again. I can understand that SYSOP's like to provide assistance to remote users, provide current information on some subject, or alert users of some coming event. However, might I suggest that these sign-on messages be as brief as possible, and that once the particular messages has run for a month or so, that most everyone has seen it several times, and it should be removed for the sake of more proper frequency usage.

**S**econdly, if a SYSOP desires to draw attention to some particular event or subject, a SHORT MSO sign-on message, directing attention to a file in his DIRECTORY on that subject, not only improves frequency usage, but also allows the SYSOP to better provide details.

**A**nd, on a more personal side, I'd like to once again stress the age-old operating technique of LISTENING on the frequency, BEFORE transmitting. This operating habit will do more to prevent unintentional QRM, operator embarrassment, and less than desirable QSO efficiency, than any I can think of, and should be cultivated by all operators, regardless of the mode. Poor band conditions, coupled with ever-changing propagation, makes copying difficult at best. (cont. pg. 8)

I N T R O D U C I N G

# KPC-4 DUAL PORT



## KPC-4 Gives Simultaneous Connects, Digipeating, and Gateway On Two VHF Radio Ports

KPC-4™ is your GATEWAY into VHF Packet flexibility. KPC-4 features **two fully functional packet ports**, digipeating on each port, VHF gateway between ports, and an RS-232 computer port.

What's more — digipeating and gateway operations occur simultaneously while you're connected on one or both ports.

KPC-4's RS-232/TTL terminal interfacing provides universal compatibility to all computers, including Commodores and PC compatibles. Stream switching provides for access to both radio ports, each of which

supports the ARRL adopted AX.25 protocol.

KPC-4 also contains the popular Personal Packet Mailbox™ feature, (optional on all other Kantronics Packet Communicators). You or others can leave and retrieve messages from the Personal Packet Mailbox.

Only KPC-4 lets you bridge two frequencies on one band, and operate crossband.

For more information about KPC-4 Dual Port Communicator, contact Kantronics or your Kantronics dealer.

**Suggested Retail \$329.00.**

### KPC-4 Dual Port Features

- Two simultaneous operable VHF radio ports, both ports operating at 1200 baud.
- Automatic gateway operation between ports.
- Command driven, like KPC-2 or KAM, with over 100 software commands.
- Kantronics Personal Packet Mailbox feature included.
- External modem connection point provided for future use.
- RS-232 or TTL level operation by jumper selection.
- 32K bytes RAM, 32K bytes EPROM, 512 bytes EEPROM, 63B03X processor.
- Kantronics' industry standard extruded aluminum case.
- ARRL adopted AX.25 protocol.
- FCC part 15 compliant.
- Each port includes watchdog timer.

**Kantronics**

RF Data Communications Specialists

1202 E. 23 Street Lawrence, Kansas 66046 (913) 842-7745

**(MSO's cont. from pg. 6)**

However, you may not hear a station using a MSO, only to have the MSO loud and clear at your QTH. A little listening on the frequency will pay handsome dividends!

**MSO RAMBLINGS**

John Troost, TG9VT, reports that he's worked his 169th DX country, and he's running hard! Congrats John! --- I see a couple of fellows "selling" information on how to convert the Kenwood and Icom transceivers, (TS-430S, TS-440S, IC-751, etc.), for continuous frequency transmit capabilities. Please be aware that this information is available without charge in the K0VKH "Technical Data Library", in the K0VKH MSO. For those of you who desire this information, a short note in this MSO is all that is required to obtain it. --- I've had several requests from individuals who are looking for a public domain software program, and interface schematics, that would enable them to run Packet Radio on a IBM (or clone) computer. If you know of such a program, please let me know, and I'll pass that information along. --- Don, W5QXK, has returned his MSO to the air, with the HAL DS-3100 System. He can be found on the National Autostart Frequency during the daylight hours. --- Larry, KA0JRQ, has been experimenting with various ways to more fully intergrate the HAL DS-3100 System with Packet Radio and MSO service. Give Larry a shout on the National Autostart Frequency if you have questions.

That's it for this month Gang! Hope to see many of you in Dayton later this month, or on RTTY. Let me know if there's anything you'd like to see in this column. 73 de Dick, K0VKH  
ED: See Dick's listing of DX and AMTOR mailbox activity taken from the DJ4KW mailbox in the next column.

**NEW PACKET MAILBOX EPROM**

Kantronics has announced a new plug-in 256K EPROM that allows you to leave messages, collect messages, and even allows others to leave and collect messages in your Kantronics Packet Communicator. All other functions of your Packet unit continue to be available at the same time. The commands used are familiar ones, such as, send, list, read, kill, and bye. The Mailbox option is currently available for KAM, KPC-1, KPC-2, and KPC-2400. This new option retails for \$39.95 plus \$2.50 shipping direct from Kantronics or contact your local Kantronics dealer. The package also contains a installation/operations manual.

**AMTOR MAILBOX ACTIVITY**

| <u>C/SIGN</u> | <u>AC/CODE</u> | <u>F/MONITORED</u>   |
|---------------|----------------|--|
| DF3AV         | DFAV           | 3589   |
| DH2FAA        | DFAA           | 28136  |
| DJ4KW         | DJKW           | 3588-7030-14075<br>14078   |
| DJ60V         | DJOV           | 7040-7041-7042   |
| DJ9JC         | DJJC           | 3581-7038-14075<br>14078-14079-21081<br>21115-28075  |
| DK4PR         | DKPR           | 3582-7040-14073<br>14075-140790<br>21090-21115-28077   |
| DK9PG         | DKPG           | 3582-7040-14073<br>14075-14079   |
| DL1WX         | DLWX           | 7035-14099-14103<br>14107  |
| DL2FBJ        | DFBJ           | 3580 THRU 3588   |
| DL5FAP        | DFAP           | 28080  |
| DU1UJ         | DUUJ           | 14073.5  |
| G3PLX         | GPLX           | 3587.5-3588-<br>3588.5-3589-7030<br>7031-10140-10141<br>14075-14076-14077<br>21075-21076-28075 |
| HB9AK         | HBAK           | 3586-3588-7030<br>10146-14072-14075<br>21075   |
| HB9BJJ        | HBJJ           | 10140-10146-14075<br>14084   |
| K2PEQ         | KPEQ           | 14077-14080  |
| LA9OK         | LAOK           | 3588-7030-10146<br>14073-'14075  |
| OH1NHN        | ONHN           | 3584   |
| PA0RYS        | PRYS           | 3588-3589-7030<br>14073-14077-21075<br>28075   |
| PA2AGA        | PAGA           | 14075-21075-28075  |
| SK6SA         | SKSA           | 3581   |
| SK7CS         | SKCS           | 3582-3585  |
| ST2SA         | STSA           | 14072 THRU 14078   |
| VK2AGE        | VAGE           | 7045-14074-14075<br>14077  |
| YB0AQT        | YAQT           | 14075-14073<br>14077-14079-21075<br>28075  |

This information courtesy of Russ, K1DOW/4 and George, W1DA





Roy Gould, KT1N  
P O BOX DX  
Stow, MA. 01775

**DX - NEWS**

Well the BARTG is behind us, I operated single operator and ended up with 455 QSOs. There was a great deal of activity and even a RTTY DXpedition to VP2E, Anquilla by WA4WIP, Dick and KP2N, Ron. Thanks guys for making a new one available to us. QSLs for this one go to WA4WIP. Also active with a special call sign of HD5G, was Ted, HC5KA. QSLs for this one come to me. A contest is always a good way to add to your country totals and this one was no exception. Some of the countries heard and worked were A22, 5H, ZL7, ZC4, 3C1, VK, ZL, J88, CN8, UW0 and others. What was noticeably missing was the Russians from Europe, I never heard a one, as a matter of fact I have not heard Dima UT4RP in months! Has anyone? I have not, as I write this, totaled up my score, but if you like, why not send your totals in here to me and we will list them in an upcoming column. Don't forget to send those logs in to the BARTG.

Speaking of the BARTG, I received a sample copy of the new RTTY Awards book from Ted Double, G8CDW. It lists over 60 RTTY Awards, many of them illustrated and is 80 pages in length. Very nice indeed. Order information is via: Mr. J. Breddie, GW6MOK, BARTG Components Mgr., "Flynnonlas", Salem, Llandeilo, WALES, SA19 7NP. Members price is 5.95 pounds, non members 6.50 plus postage which is 70 p via surface and 2.00 pounds via Air. Surface should take about 4 to 5 weeks and is a great deal less expensive as you can see. A real nice book to help you chase all those beautiful RTTY awards.

**CQ/RTTY JOURNAL CONTEST**

Well the announcement last month has generated a great deal of excitement in the RTTY world. I have received many favorable comments on the format and the timing. This should be a real good contest as is the BARTG. Many are already making plans! TG9VT, John is planning a multi-op all band effort with Jules, W2JGR and Joe, W3HKN joining him in TG land. Let us hear from others who plan to participate. Maybe we can even get a few DXpeditions mounted for this one.

Walter appeared as announced from Sierra Leone as DJ6QT/9L. He was on SSB and CW as well as RTTY. QSL cards go to DJ6QT CBA. Walter also sends along a note saying that from ZB2IN in the WAEDC RTTY contest he had 420 QSOs, the reason he did not work many USA stations was that he was on the far side of the rock and signals were not good. This is the first time ZB has been on RTTY he thinks. Walter has also operated from the following over the years on RTTY and if you need a card, he is the route for these rare ones! C5AAN, 3B8RS, 3B9RS, DJ6QT/CT3, 8Q7CC, 3V8AS, D44BC, 5V8WS, D68WS, 4U1TU, and EA8AD. He has put them all on RTTY. He has also operated from the following but not on RTTY, T22AB, T22AC, XT2AB, XT2AC, TY9ABC, ZD3N, ZD3P, LX3QT, HB0XSV, DJ6QT/5U7, DJ6QT/5T5, DJ6QT/LX, ON8CT, C5ABN and 8Q7BP. So if you have any of these in your log and wondering where to get the card, it is our friend Walter, DJ6QT, a real true blue RTTY Dxr. Thanks Walter for all your efforts.

Chatman islands, ZL7DE, Tony has been active once again, look for him around 0200-0400 UTC and 1200 - 1400 UTC usually on 14.090.

J73EH continues to be active at various times and frequencies. Dick WA4WIP is now his QSL manager.

FO0JF, has been active and QSLs via F1BBD.

A22BW, Botswana, was very active in the BARTG contest and likes 21 Mhz. as well as 14.

U.A.E. A61XL is still active and does QSL, I have it in hand, now if we can only get some documentation to make it count.

5N0ANE, Nigeria was active during the BARTG contest and has been worked since. He likes 14.085.

CHINA!!! Joe, K4ZIP has permission to operate BY1PK and will be in there April 11. He planned to operate AMTOR if possible at 2300 - 0130 UTC on the 11th. So if you worked BY1PK on AMTOR at that time it was for real!!

San Andres, HK0HEU.. the equipment sent by WA4WIP has arrived and is still in customs, at this writing, hopefully by the time you read this he will have received it and is on the air.

Saipan, NV7L/KH0 reports that he will try to operate as much as possible around the following times: 2030 - 2200 UTC during the week and 0200 - 0400 UTC weekends. He will as time permits also try to be on from 2000 - 2200 and 0200 - 0900 UTC, but the problem is, he is adjacent to a 100KW Shortwave Transmitter that is rather loud in his shack. Dan says the frequencies to look for him are: 14.075 and 7.025 AMTOR and 14.080 RTTY. He also has Packet with him. (cont. on pg. 10)

(DX-NEWS cont. from pg. 9)

Guam, KE4FE/KH2 has now gone QRT.

Jim Smith, VK9NS is working on the cards from his recent CoCos Keeling and Christmas Island trip and should be in the mail soon. He also has left the RTTY gear behind with VK9XP, who, it is hoped will put it to use.

Aland Islands.. A team from Berlin will put this on all bands and modes, including RTTY, from April 17-25. QSL to DL7AKC, call sign not given for the operation, perhaps their DL call and / OHO.

FP5HL .. is still active and contrary to my last months comment about QSL cards being hard to get from him, I got mine in 2 weeks.

3G87PAX was a special call sign for Pope John's visit. If you worked it you worked Chile and cards go to BOX 72, Valparaiso, CHILE.

Pakistan, AP2KS was heard and worked from Massachusetts on 25 March at 1140 on 14.093. A new call to RTTY.

Vatican, HV2VO, brother Edmund is now QRT from the Vatican and will be in Aricona for at least one year and is N7FUV. He plans to be back as HV2VO after the year in W7 land is finished.

9M2 .. 9M2MW and 9M2AX have been active and worked from the west coast and Europe recently.

AMTOR , OX3HX would like info on AMTOR, he hangs around 14.083 weekdays after 1500 UTC

And from our AMTOR watcher, VE7VP Tom comes his report of stations worked recently: LA3FE, 5H3ZO, GW4LVQ, 4X6RA, UW1YY, AH6V, OX2CO, these stand out as well as many Europeans.

Well gang, I do not have a Bandpass for you this month as the computer that sorts it out has quit on me for the time being; will try to get another expanded one for next month. Hope to see you in Dayton and come back with some photos of a few of the RTTY DX gang. Thanks and a Tip of the DX Hat to, DJ6QT, TG9VT, W1DA, VK2AGE, VK2SG, WA4WIP, KP2N, W0LHS, I8AA, VE7VP, W5HEZ, The Dx Bulletin and the ARRL DX Bulletin. 73 and good Dx.  
de Roy, KT1N

(CONNECTIONS cont. from pg. 4)

No two diagrams are the same in regards to the connections on the remaining pins. No wonder people have problems with RS232 connections when the manual leaves out essential connection information ( or when one makes a connection error).

This diagram (figure 3 on page 5 of the January issue) illustrates the serial connection between a PC and a printer. I have since found that when making this connection between certain types of PC asynchronous serial adapter cards and the printer, the line between pin 20 (DTR) of the printer and pin6 (DSR) of the computer must also be connected to pin 5 (CTS) of the computer before the computer will output data.

### SERIAL INTERFACE PROBLEMS

Last month I mentioned that John, K4VDM was having a problem connecting a printer to an Infotech 200F. After putting a scope on the output of the 200F, he found that the ASCII output was 7 bit, while his COSMOS serial - to - parallel converter has an eight bit input, and apparently neither unit is programmable in this area. He is now considering building a speed/bit converter using a UART and associated components to get things straightened out, and this will also eliminate the need for the serial/parrallel converter. John is to be commended for his persistence.

### SUBJECTS FOR FUTURE MONOLOGUES

It may be hard to believe that a windy guy like me has run out of material, but its true. If someting does not come up soon in the way of column material, I am going to be forced to discuss subjects like FCC and Politics, or the Sad State of Affairs in U.S. Industry. Either that, or relinquish this space to someone itching to become a journalist who has not yet realized that the main requirement is to have a good line of Taurine Chips.

So, Gentlemen (and of course, Gentladies), 'til next month, the ball is in your court.  
very 73 de Cole, W6XP

### ARMED FORCES DAY TEST ENTREE ADDRESSES

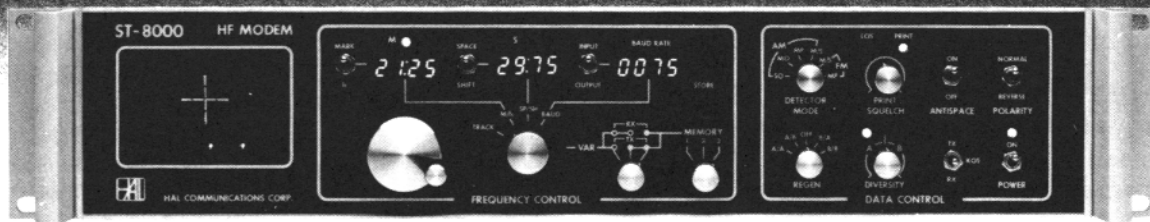
Station: NAM, NAV, NPG  
Address:  
Armed Forces Day Test  
Naval Communication Unit  
Washington, DC 20397-5161

Station: AIR  
Address:  
Armed Forces Day Test  
20451SG/DOJM  
Andrews AFB,DC 20331-6345

Station: AAE, AAG, WAR  
Address:  
Armed Forces Day Test  
Commander, USAISC  
ATTN: AS-OPS-OA  
Fort Huachuca, AZ 85613-5000

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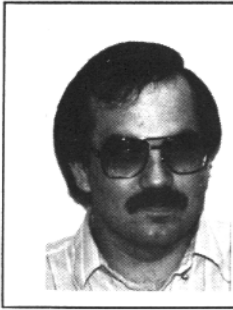
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Danny Wilson, N6IHQ  
4818 Pearce Ave.  
Long Beach, CA 90808

## PACKET

Hello again! Hope that all of you who worked the BARTG contest had a good time and wonderful success! After handling some pressing family matters (which prevented me from a multi-op effort with Dale, W6IWO), I did get my station on the air for a few contacts before the contest was over. I hope to be able to make a better effort in the CQ magazine/RTTY Journal DX contest in September, and I also hope to see you there too!

Before beginning this month's column, I need to go back a month and make an addition and correction to last month's column. First, the address for the distributor of the YAPP terminal software program is: Wes Morris, K7PYK, 7422 E. McKinley St., Scottsdale, AZ 85257. Also, a copy should be available for downloading from Hamnet on Compuserve. There was one correction that should be noted as follows: In the beginners column regarding the TNC set up parameters, the TXD setting should read TXD 30. This will set the transmit delay to 400 milliseconds.

### THE BEGINNERS COLUMN

If you have been involved with RTTY for any length of time before giving Packet a try, one of the first things you will notice is that the conversational aspect (keyboard to keyboard) is quite different than anything you may have experienced with slow speed baudot. Packet radio when used in a keyboard to keyboard status is similar to duplex operation. In other words, you can be typing away to your friend across town and at the same time be receiving his Packet on your screen. Even when attempting to send the text you typed by pressing RETURN, the only time you cannot receive is obviously during the short amount of time the TNC is keying the radio. This brings up a sometimes confusing situation while in QSO: While typing on a subject, your friend may send a Packet and if you do not have a split screen (incoming text separated from your outgoing text) his text will be mixed up with yours on the screen and the result is a big mess. There is a way to minimize this confusion by using the "other case". If your friend is using the upper case format, then you

can use the lower case, or vice versa. Eliminating confusion for the most part this way can save time trying to decipher who typed what.

In most cases I tend to shy away from live QSOs on Packet and use the mode for either leaving or retrieving messages to and from others. The TNC is left on at my QTH 24 hours a day. At my convenience I will check the memory of the TNC for any messages and at that time answer them. Also at the same time I will check my home bulletin board system for any messages intended for me and check the message listings for anything interesting. You can see that Packet does not have to be time consuming to operate. I only spend about 20 minutes a day "playing Packet" and the rest of the time I have for Amateur radio is spent in other modes. Packet gets to be like a useful tool. A wonderful way to stay in touch with friends at my convenience.

When leaving a TNC on the air while away from the shack, it would be a good idea to program a connect message. This message is programmed into the TNC to be transmitted to any station that establishes a connect to your station. Use the following sequence to install the message into your TNC;  
**FROM THE COMMAND MODE TYPE:**  
**CTEXT (YOUR MESSAGE) (RETURN)**

It would be a good idea for the message to say you are not at the computer right now but please leave a message and that you will return one. Keep the message brief, as you do not have a lot of room in this message buffer (check your manual for just how many characters you can put into this buffer). Being creative with what you put into this buffer can add some fun to every ones daily Packet activity. In my local area, one operator posts a brief trivia question in the connect text buffer that is changed daily. Another operator is keeping us posted on the status of his XYL and overdue baby. Still another puts short stanzas of humorous poetry dealing with leaving messages in his buffer. There can be a little "human" in the computer talking to computer world.

One of the other useful tools that Packet offers is the Packet Bulletin Board System (PBBS). This month I am going to describe basically what they do, ask you to choose a 'home BBS', and next month go into some detail on how to effectively use your home BBS system.

The WORLI/WA7MBL mailbox systems are linked together in a network that spans the entire country. The benefit of the network is the store and forward capabilities. (cont. next pg.)

**(Packet cont.)**

This means you may tell your home BBS to send a message to another BBS either across town or across country. The message then can be picked up by the addressee when he checks his home BBS for messages. The network is maintained by the BBS SYSOPs and the network list is updated as new BBS come on line and others go off line. When you connect to one of these BBSs, you are in essence plugging yourself into a very wide area network as an end user with some pretty powerful options. You may designate a message for a single operator, you may send a Private message that will not show up on any message directory listings but will show up on the addressee's listing readout and you may designate a message be sent to all BBSs in a QST form.

It is important that you choose a home BBS. There is no reason to check into more than one because the systems carry essentially the same files. So you are not really missing anything by just utilizing one and calling it home. Try to select a BBS that is within connecting range of your station without having to digipeat. This will save valuable time when transmitting files and listings. Remember you want to fit your station into the Packet network and not be a burden. When you make your selection, you may want to let the SYSOP know of your intentions. Once you learn how to use the BBS, you might want to leave him a brief message to let him know that you will be 'adopting' his system. This is helpful to the SYSOP as it is nice to know who is operating on his BBS (the BBS would tell him who is using it anyway, but still a nice gesture), and also he can help you if you are having difficulties. So find a BBS, connect to it and give it a try. If you have questions, next month's column might answer some of them. For those willing to wait, I hope to have you on a BBS and enjoying a powerful part of Packet radio. See you next month!  
73 de Danny, N6IHQ



Dale Sinner, W6IWO  
9085 La Casita ave.  
Fountain Valley, CA.  
92708

**HITS & MISSES**

Putting this issue together has been a real challenge and I hope you like it. There just was so much input this month that the cutting and pasting took more time than usual. However, I'm not complaining. Anyway, here I am, on the back pages trying to say in a few words what I would like to relate to you in

much more space. But, as I have said before, I will not sacrifice news just to write an article. Enough said!

I received a nice letter from Jay Townsend, KE7PN after my request for log checkers from the West Coast for the upcoming CQ magazine/RTTY Journal RTTY/DX Contest. Jay and his wife Betsy, KE7PL along with Hal, WA7EGA (I think) have volunteered to help out. Thank you very much, I know these avid DX/contester hams will do the job admirably. Jay and Hal operated in the BARTG as a multi-op entree and they represented a great effort from the Northwest. Jay indicated he would submit an article soon on contesting and I'm sure it will include some little tricks for all of us.

Maybe you will think I'm beating a big drum about militarism by giving the front cover this month to the Armed Forces Day coming up in May; I hope not, because that is not my intent.

Each year the U.S. Armed Forces Day signals an excellent opportunity for us radio amateurs to really test our equipment and skills in operating. Cross-band operation is not as simple as 'one' on 'one' on the same frequency. You'll find this to be fun and challenging, so why not give it a try. Ten military stations will be on the air at various times during the test period, some of them operating three modes (CW,SSB,RTTY). If you contact a military station on CW, you receive a QSL card, if you contact the same station on RTTY, you receive a QSL card and so on. Take a good look at the list of stations, modes, and frequencies listed in this issue. I figured if I worked real hard I could receive upwards of thirty QSL cards from military stations for my efforts during this short test period. Then there is the special message from the Secretary of Defense. Be sure to send it as you receive it, don't try to alter or correct any part of it. Good luck.

It's high time I gave credit to my cover artist who has done a great job adding a little humor to serious subjects. If you look closely at the signature on the January 87 and March 87 issues, you'll find the name 'Sinner' someplace. This signature belongs to my youngest daughter Susan and I really appreciate her contributions to the pages of the Journal. She told me to mention that she is available to those interested in her artistic talents. But, she also said that you should be warned, if speed is your criteria don't call her because this is not her style. She works slower but this is a big plus for those not in a hurry, because she works CHEAP! To clear up any doubt, these were her words.

That's it for this month. 73 and have a good one. de Dale, W6IWO

# ARMED FORCES DAY 1987

## CROSS BAND CONTACTS

Time: From 1300 UTC 16 May 1987 to 0245 UTC 17 May 1987.

### MILITARY STATIONS PARTICIPATING

#### AIR

2045th Info. Systems Group  
Andrews AFB  
Washington, DC

#### AAE

HF/MARS Radio Facility  
Fort Sam Houston, TX

#### NMN

Coast Guard Comm. Sta.  
Portsmouth, VA.

#### NPG

Naval Comm. Sta.  
Stockton, CA.

#### NAV

HQ Navy/Marine Corps  
MARS Radio Station  
Cheltenham, MD.

#### NMH

Coast Guard Radio Sta.  
Fort Meade, MD.

#### NPL

Naval Comm. Sta.  
San Diego, CA.

#### NZL

Marine Corps Air Sta.  
El Toro, CA.

#### NAM

Naval Comm. Area  
Master Station LANT  
Norfolk, VA.

Military stations will transmit on the below listed frequencies and announce the specific amateur band frequency being monitored.

| FREQ. (khz) | EMISSION | STATION |
|-------------|----------|---------|
|-------------|----------|---------|

|        |     |     |
|--------|-----|-----|
| 4001.5 | LSB | NPG |
| 4010.0 | CW  | NPG |
| 4015.0 | CW  | NMH |
| 4018.5 | LSB | WAR |
| 4021.5 | LSB | AAE |
| 4025.0 | LSB | AIR |
| 6970.0 | CW  | NPG |
| 6995.5 | CW  | AIR |

6997.5  
7301.5  
7306.5  
7309.5  
7315.0  
7346.5  
7365.0  
7372.5  
7375.0  
7382.5  
7393.0  
9990.0  
10259.5  
13927.5  
13975.5  
13986.5  
13992.5  
13997.5  
14375.0  
14385.0  
14389.5  
14400.0  
14403.5  
14408.0  
14400.0  
14480.0  
20937.5  
20992.5  
20994.5  
20998.5  
21460.0

|         |     |
|---------|-----|
| CW      | WAR |
| LSB     | NPG |
| RTTY    | AIR |
| LSB     | AAE |
| LSB     | AIR |
| LSB     | NMH |
| CW      | NPG |
| RTTY    | NAV |
| RTTY    | NZL |
| RTTY    | NPL |
| VARIED  | NMH |
| RTTY/CW | AAE |
| CW      | NPG |
| RTTY    | NPG |
| CW      | NPG |
| RTTY    | AIR |
| RTTY/CW | WAR |
| CW      | AIR |
| USB     | NPG |
| USB     | NPL |
| USB     | NAV |
| VARIED  | NAM |
| USB     | WAR |
| USB     | AIR |
| RTTY    | NMH |
| USB     | NZL |
| USB     | NMH |
| USB     | AAE |
| USB     | WAR |
| CW      | NPG |
| USB     | NPG |

### RECEIVING TEST

The CW and the RTTY broadcast will be special Armed Forces Day messages from the Secretary of Defense to any amateur radio operator or SWL desiring to participate. A 10-minute tuning call will precede each transmission. The CW Broadcast will be transmitted at 25 WPM beginning at 0300 UTC 17 May 1987. The RTTY Broadcast will begin at 0345 UTC 17 May 1987 and transmitted at 60 WPM using 170 Hz shift. Both the CW and RTTY broadcast will be transmitted from the following stations on the listed frequencies.

### TRANSMITTING STATION AND FREQ. Khz

AAE  
HF/MARS Radio Facility  
Fort Sam Houston, TX.  
4018.5, 6988.0, 9990.0

(cont. pg. 15)

## CLASSIFIED ADS

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BACK ISSUES: A duplicate of any back issue of the RTTY Journal may be obtained from: Red Wilson, WB0ESF, 4011 Clearview Dr., Cedar Falls, IA. 50613, \$1.50 PPD & SASE. Reprints of both UART articles \$2.00 PPD.

FOR SALE: Real-Time HF WEFAX Maps on a dot matrix printer. Available for Commodore, IBM, Apple, Atari, and CoCo. See March 86 QST magazine for circuit details. Kit \$22.15, Assembled \$39.95 - Software for Apple, Atari, and Commodore \$10.00, IBM \$15.00 plus \$2.50 shipping. For Info, large SASE to: A & A Engineering, 2521 W. La Palma #K, Anaheim, CA. 92801, (714) 952-2114

NEWS -NEWS- NEWS - Amateur Radio's Newspaper "WORLD RADIO". One year subscription is \$11.00. Contact: WORLD RADIO P.O. BOX 271309, Escondido, CA. 92027-0770

RTTY FREQUENCY LISTS AND BOOKS: We have a complete selection of worldwide RTTY frequency books and lists. Press, weather, government, clandestine etc. Write for free catalog. Universal Electronics, Inc. 4555 Groves Road, suite 13 - Columbus, OH. 43232 (614)866-4605

FOR SALE: Dovetron MPC-1000R. Mint, in original box, first \$550.00 gets it. TYPETRONICS, BOX 8873, Ft. Lauderdale, FL. 33310. Buying unused Teletype repair parts, M-28 and later. Send SASE for list of teletypewriter gears, paper, etc.

(ARMED FORCES DAY cont. from pg. 14 )

**AAG**  
HF/MARS Radio Facility  
Presidio of San Francisco, CA.  
4021.5, 7309.5, 13994.5

**AIR**  
2045 th Information Systems Group  
Andrews Air Force Base  
Washington, DC  
6995.5, 13997.5

**NAM**  
Naval Communication Area  
Master Station LANT  
Norfolk, VA  
4005.0, 7393.0, 14400.0

**NAV**  
HQ Navy-Marine Corps MARS Radio Sta.  
Cheltenham, MD.  
7372.5, 14389.5

**NPG**  
Naval Communication Station  
Stockton, CA.  
4010.0, 7365.0, 13975.5

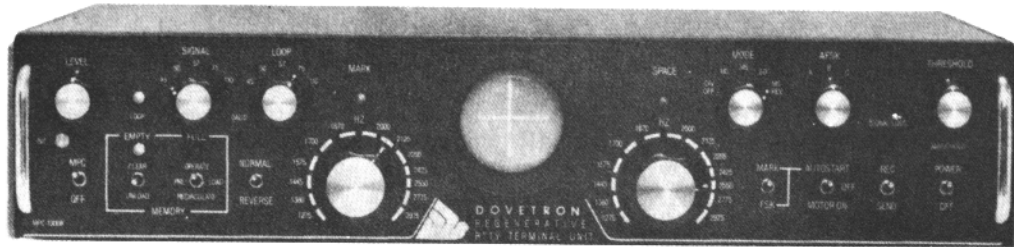
**WAR**  
HQ Army MARS Radio Station  
Fort Meade, MD.  
4028.5, 6997.5, 14403.5

### SUBMISSION OF TEST ENTRIES

Transcriptions of the CW and/or RTTY receiving tests should be submitted "as received". No attempt should be made to correct possible transmission errors. The time, frequency and call sign of the military station copied as well as the name, call sign and address of the individual submitting the entry must be indicated on the page containing the test message. Entries must be postmarked no later than 23 May 1987 and submitted to the respective military commands. (cont. pg. 10)

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