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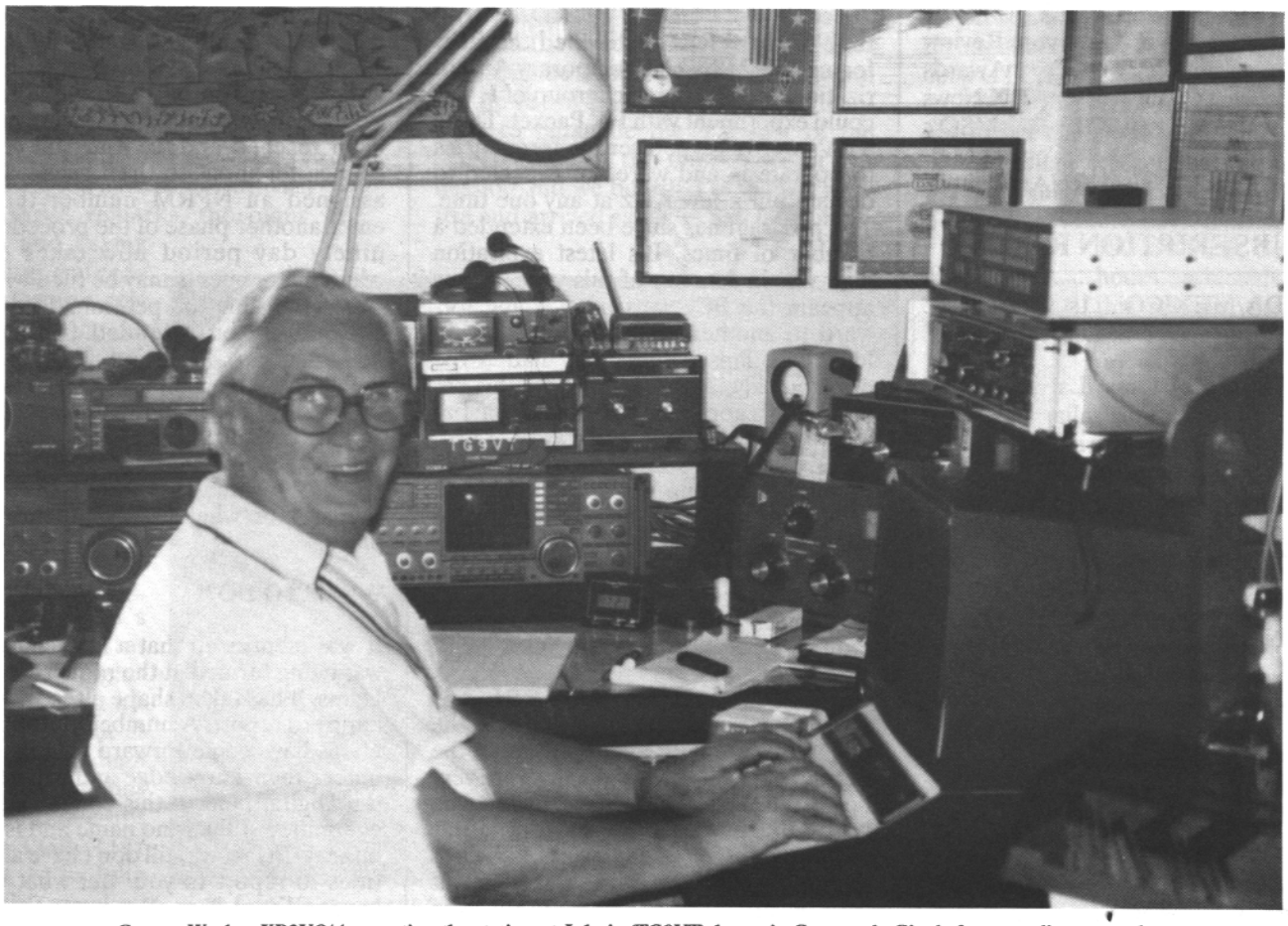
WESLEY WINS



George Wesley, KB2VO/4 operating the station at John's (TG9VT) home in Guatemala City before traveling on to the Galapagos Island where, using the callsign HD8S, he won the 1989 SARTG RTTY Contest. See George's story on page 3 and the SARTG RTTY Contest results starting on page 8. Congratulations to George for a great effort.

IN THIS ISSUE

RTTY JOURNAL

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RM 7248 EDITORIAL

co-authored by:
Dale Sinner, W6IWO , Editor RTTY Journal
Buck Rogers, K4ABT, Editor Packet Column CQ Magazine

In the Hits & Misses editorial last month, there were lots of comments regarding the ARRL Petition to the FCC for "Unattended Automatic Operation" in specified portions of the Ham bands. The editorial generated lots of mail with diverse views. However, it appears there are still many who do not understand what is at issue. Some even think we are "ARRL Bashing", which is not true. A better choice of words would have been, "Challenging". On to a short review of the events.

In 1987 the ARRL petitioned the FCC for an "STA" (Special Temporary Authorization), so that a select group of Hams could experiment with HF Packet. These STA's were assigned certain frequencies to operate in and were not expected to deviate but a few KHz at any one time. The program has since been extended a number of times. It's latest expiration date was in January of this year. It now appears the FCC was not looking forward to another extension after such a long time lapse. Something had to be done quickly. The ARRL chose this petition as it's approach to the program but included all the digital modes in the request. Whatever studies that were made by the STA group up to this time had never been published, so no one seems to know if the program was a success or not (i.e. substantiated with facts). Nevertheless, in December of 1989 the ARRL filed their Petition for "Unattended Automatic Operation" with the FCC.

No announcement by the ARRL was made and it was some time before the Digital Community found out about the Petition. Needless to say, many were very upset putting it mildly. Those of you who watch the BBS's on Packet, our surely aware of all the traffic generated by this petition. The RTTY/AMTOR gang was very upset because they were not even polled. Some in this RTTY/AMTOR group had been operating "Automatic" but attended for over ten years with thousands of hours of experience behind them. The real uproar stems from the inability of RTTY/AMTOR and Packet to operate successfully in the same proximity. With only 10 KHz suggested, chaos will definitely result and all parties concerned may very well go back to the "old way" of attended automatic operation.

Since all this took place, the FCC has now assigned RM 7248 to the Petition and a thirty (30) day response period was put into effect. Unfortunately, the FCC assigned the RM number on February 6, 1990 and again no announcement from the ARRL. So most everyone didn't find out until the end of February about the Petition which left little time to prepare responses. However, there has been much input to the Journal which tells us that many responses were mailed in time to meet the deadline of March 8, 1990. *What happens next?*

The FCC must now decide to either reject or assign an NPRM number to the Petition. If rejected, then square one has been reached and we may still get our chance for input to the League. If it is assigned an NPRM number then we enter another phase of the procedure. A ninety day period now takes effect wherein comments may be filed with the FCC regarding the petition. This could conceivably be extended further and drawn out for a long time. Whatever the outcome at this point in time, we can only sit back and wait until the FCC takes action or wait for an NPRM number to assigned. *But should we sit back and do nothing?* We think not. Now is the time to prepare for whatever eventuality takes place.

WHAT TO DO?

It was mentioned that a new committee was being formed at the request of many Hams. It has taken shape already, we are happy to report. A number of prominent Hams have come forward willing to volunteer their knowledge and expertise in the Digital field to this committee. The committee still has no name and is in it's infancy. In fact we still don't have all their titles to report to you. But what we do have is listed here. We know there are many others who should be on this committee but to form a large committee would only make for other problems. Please keep in mind we must all communicate via mail, FAX or telephone at present and that alone is monumental. However, there is not a single person on the committee who wishes to slight anyone. If you have input, they want to hear from you. Pick the name of the person

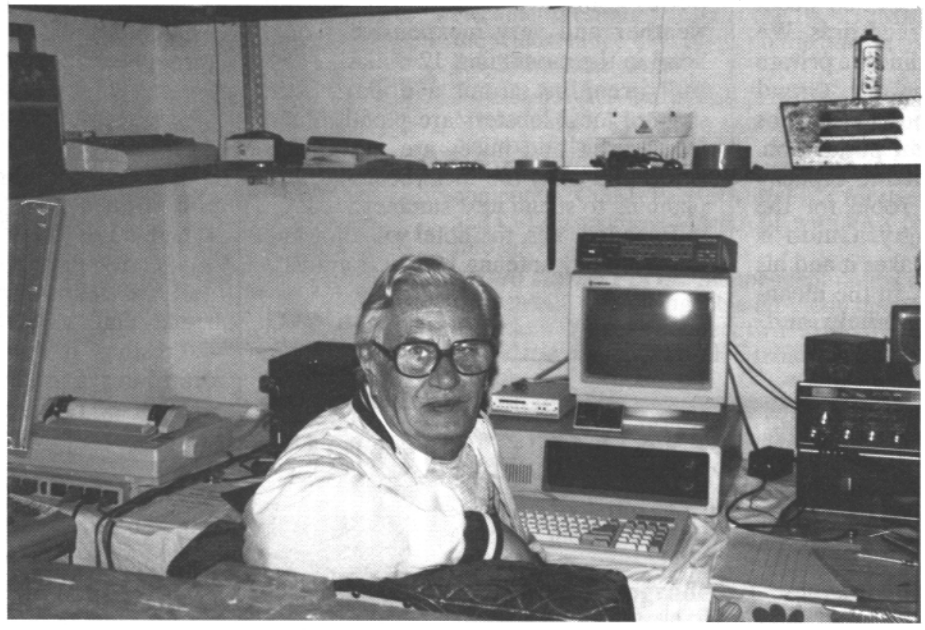
Continued on page 7

HOW TO WIN A RTTY CONTEST

AND HAVE FUN DOING IT

by George Wesley, KB2VO
2803 SW 14th Ct.
Deerfield Beach, FL 33442

It all started in Dayton at RTTY Hospitality Suite where John TG9VT, Ted HC5K and I had the usual conversation about our digital hobby. I always manage to learn something from those experts in the digital modes. Having no specific plans for the Summer vacation, I casually asked them about the hotel rates in their countries. To my surprise, both of them stated very seriously that there are no hotels either in Guatemala or Ecuador!!! "You wish to visit our countries, you have to stay with us!" Well, from those remarks, the plans were made and as my darling wife is game for any adventure, we began our trip at the beginning of August. Arriving in Guatemala City we were met at the airport by John and his two young sons. We spent a whole week sightseeing, working John's magnificent station, more sightseeing, visiting his summer retreat at Lake Atitlan, high in the mountains and more pile-ups from TG4. Our thanks go to John and his gracious XYL for their hospitality.



The radio station at "El Junco" ready to go with George, KB2VO prepared mentally to win. When it was all over, George had run up a score of 864,300 to win SARTG 1989.

A pleasant trip via Panama and Colombia got us to Guayaquil Ecuador where one of Ted's ham friends picked us up and drove us to our hotel. Next day, a short flight brought us to Cuenca. Ted was waiting for us at the airport and after a short drive to his home in the highlands, we met his wife Chela and daughter Cynthia. A small gathering of closest relatives (about 30 people!) arrived in the afternoon for a party in the garden. Next day we attended a wedding with 400 guests at a nearby resort. To get ready for the S.A.R.T.G. RTTY contest in Galapagos, we took the Wednesday flight and after a scare at the airport (our names were not on the list of passengers????) we managed to persuade the manager of the SAN Airline of the importance of our mission and we boarded at the last minute and arrived safely in San Cristobal.

There we met Abdon HC8AG, Manager of the "SAN," Guido HC8GR, baggage manager, and HC8VB Diego, the technical ham and computer expert. We were lodged at the Grand Hotel, a pleasant place on the beach at the end of town.

Friday morning, Aug. 19, Diego, Guido and his family, Maj-Britt (my XYL) and I were loaded into a truck and delivered to the famous El Junco at the top of a mountain. One look at the towers and monobanders gave me a feeling of confidence. We unpacked and installed the rig, amplifier, computer and PK-232. El Junco actually is in the clouds and the air was dripping with humidity. Everything worked fine, but no signal on RTTY. We took the PK-232 apart and with the help of Maj-Britt's hair dryer dried the boards, hooked it up again and sure enough it worked. Made a couple of calls to check the propagation and all was OK. 599 from Europe and the States...

Guido's wife Chelita took charge of the kitchen and we had delicious meals throughout the weekend. At the stroke of 0000 UTC, first contact and beginning of a pile-up. The problem turned out to be not to get calls, but to be able to read them through the colossal pile-up. The rig, TR7 runs OK, Drake amplifier behaves and the first 8 hours shift brings me 192 contacts. Second 8 hours ends with 341. In this session, the amplifier power supply gives up with a bang. Diego takes it apart and replaces the burned up resistor with a fuse??????! Yes it works!! Later on, he taped and glued together a capacitor in the amplifier and it too kept working!!? The power in Galapagos goes off at midnight and comes on at 6 am. Arrangements had been made in advance for us to have the power on for all sessions. The alarm clock is set for 1:30 am. Here comes a surprise... no lights... someone at the power plant misunderstood, kept the power on until 2 am, shut it off and went home!! Lots of calls on the HT's and we got the power back two and half hours later.... 80 meters is dead by then and only 14 calls on 40. Grim but determined, I keep plugging away and the end of the contest finds me with 438 contact, 134 multipliers, 64,500 points for a total score of 864,300. Is it good enough???

We pack all our gear and go back to town. Guido, whose house is not too far from the hotel, has a nice antenna and Icom 720, no RTTY but I spent many hours on SSB enjoying the pile-ups. Our plans called for another 5 days on the island. We took a small boat trip to see the seals, turtles and rare birds. Just before arriving at our destination the shaft broke and we were dead in the water. Two small boats picked us up and delivered us to the shore... Going back we were divided into two groups and boarded two boats that had their own passengers as well, and very slowly we started the trip back. The boats were very deep in the water and the crew tried to console us by stating that the sharks have plenty of food here and do not like humans???? Lucky for us the Hospital Rescue boat arrived and we headed back to the dock in comfort. Next day, back to Guido and more SSB.

It is Wednesday and the plane from the mainland is due to pick up passengers from the Cruise ship. It arrives, makes a circle over the airport and heads back without landing. Apparently, there is a small revolution going on. "Locals" occupied the runways and burned tires. We are finding out that the Airline is a private enterprise that also owns our "Grand Hotel." Tourists pay about six times higher fares then the local population. No wonder planes are filled to capacity with tourists leaving, no room for the natives. The town is angry. Guido is afraid about his truck, he takes it and his whole family to El Junco. In the meantime, a crowd arrives in trucks and builds a barrier across the road to the hotel. Boulders five feet in diameter. Our supplies are cut off but we are getting police protection. The barrier is taken down the next day under police guard and we get news that we will be evacuated by military plane. No more radio for me. That depresses me, but otherwise the spirits are good. Everyone seems to enjoy the adventure.

And so, Saturday we are bussed to a military installation, then to the airport that is guarded by troops in camouflage uniforms, machine guns and even bayonets. The military Hercules plane arrived and we were loaded into it, ladies first, four prop engines started and we are on our way to the mainland. Arrived in Quito the same evening. Took this opportunity to stay a few days and see the beautiful city. Then back to Cuenca for another stay with Ted, HC5K, more radio, more shopping for hand woven rugs, gold jewelry and mementos. The whole month passed and we headed home to Florida.
We fell in love with Ecuador. Friendly people, beautiful mountains, cool weather and very inexpensive. Local hotel in the mountains, 12 dollars a day. Full breakfast about a dollar. Fish, shrimp, local lobsters are plentiful and fresh. Fruit and juices are out of this world and so is the local beer. We are planning to spend next summer vacation in Ecuador. Yes, the hotel will allow me to put up any antenna I wish... paradise!

de George, KB2VO

CONNECTIONS

Cole Ellsworth, W6OXP
10461 Dewey St, Garden Grove, CA 92640

Here it is - deadline time for the column and I am just getting started! Time goes by too quickly anymore. (Ed: You can say that again Cole.)

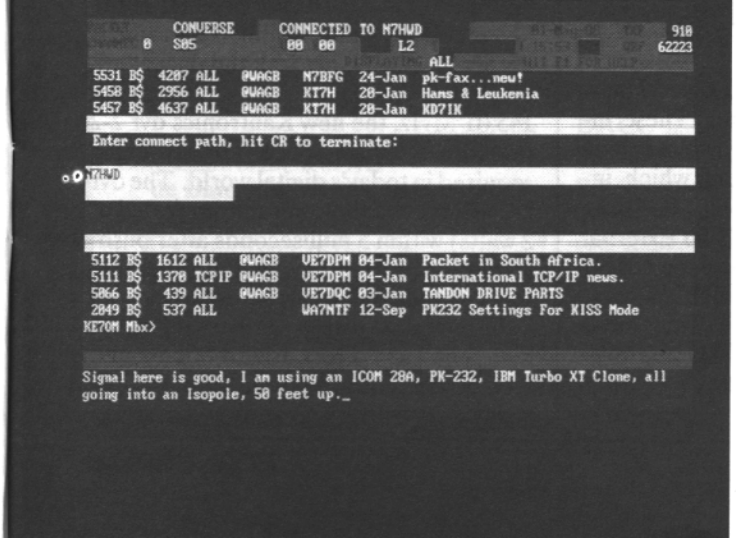
TAPR ANNUAL MEETING AT TUCSON, AZ

I had the great pleasure of attending the Tucson Amateur Packet Radio (TAPR) meeting on the 23/24/25 th of February. About 100 TAPR members attended, as well as several packet radio equipment manufacturers. The results of the mail ballot for directors were announced and the new slate of Officers was presented to the members. Incoming TAPR President, Lyle Johnson WA7GXD, presented outgoing President Andy Freeborn, N0CCZ, in behalf of the membership, with a plaque of appreciation for his work. All of Saturday plus Sunday morning was devoted to presentations on the status of development of various TAPR projects plus status reports from ARRL SW Division Director Fried Heyn WA6WZO and Notes from Newington by Jon Bloom, KE3Z. Most of the TAPR projects are on the leading edge of packet development and some are better described as being on the "bleeding edge." Attendees included TAPR members from throughout the U.S. and Canada as well as three Hams who made a special trip from Tokyo, Japan to attend this meeting. They were Tadayuki Tominaga, JF1UMK, representing CQ Publishing Co (he is a Senior Editor of CQ HAM RADIO magazine, the QST of Japan); Hajime Nakamura, JR2BNF; and Shigeki Matsushima, JK1RJQ/W6. There is a rising interest in Packet Radio throughout Japan.

Among the many presentations, I found the sessions on Microsat by Doug Loughmiller KO5I, TCP/IP by Phil Karn KA9Q, HF Packet by Steve Hall WM6P, and the 56kbs repeater in Ottawa by Doug Yuill VE3OCU, to be especially interesting. It was obvious that TAPR members are doing a tremendous amount of research, development, and testing.

During my stay in Tucson, I found great friendliness, very interesting technical discussions and just fine people in general. Contrary to the impressions left by a few mavericks on the HF bands, packeteers in general and TAPR members in particular do not "wear horns." Special thanks go to Andy Freeborn N0CCZ, Pete Eaton WB9FLW, and Lyle Johnson WA7GXD, for making it a first class meeting. I am looking forward to attending next year's meeting. I only regret that Richard, the Journal's Packet Columnist was unable to attend due to work and that our Illustrious Publisher, Dale was in the midst of mailing the February issue.

AEA's NEW PK-232MBX With PakMail™



Now AEA's popular PK-232 multi-mode data controller has new features you've been asking for...PakMail™ Mailbox with selectable third-party traffic, seven-character AMTOR (CCIR R.625) call identity, TDM (Time Division Multiplex) receiving for SWL's, and Prioritized Acknowledgement (ACK) protocol for improved packet performance. Compatible with almost every computer or asynchronous data terminal, you can enjoy the full spectrum of amateur digital communications with AEA's new PK-232MBX.

All Operating Modes. The PK-232MBX includes all authorized amateur digital modes available today...Morse, Baudot, ASCII, AMTOR/SITOR 476 and 625, Packet, WEFAX receive and transmit, as well as commercial standard NAVTEX automated marine information services.

Superior Modem. An eight-pole Chebyshev bandpass filter limiter- discriminator modem improves the signal-to-noise ratio at the detector and virtually eliminates interference from adjacent signals. System performance has been proven superior to that of PLL modems designed for telephone line services.

PakMail.™ PakMail™ mailbox with selective control of third-party traffic is now a standard feature. Your friends can now leave you messages around the clock. Your local full-service BBS can automatically forward your messages directly to your PK-232MBX.

WEFAX Transmission and Reception. AEA brought you the first multi-mode controller to send and receive WEFAX (weather facsimile) charts. The PK-232MBX directly supports the widest range of printers on the market using the optional RS-232/printer cable.

Host Mode. Only AEA provides the type of full-featured Host Mode preferred by many professional programmers for efficient control of the PK-232MBX. AEA's Host Mode programs include PC-Pakratt with FAX for the IBM PC's and compatible MS-DOS computers, COM- Pakratt with FAX for the Commodore C-64 and C-128, and now MacRATT with FAX for the Apple Mac-Intosh.

Two Radio Ports. Independent radio connection ports allow convenient, interchangeable all-mode operation regardless of port selection. You can connect two VHF/UHF radios, an HF and a VHF/UHF radio, or two HF radios, selectable by a front-panel switch.

Signal Analysis. The PK-232MBX's internal software features AEA's exclusive SIAM (Signal Identification and Acquisition Mode). The PK-232MBX automatically identifies Baudot, ASCII, AMTOR/SITOR and TDM signals, then measures signal speed and polarity. A simple "OK" command automatically switches the PK-232MBX to the recognized mode and starts the data display.

PakMail™ Upgrade Kit. The easily-installed PakMail™ upgrade kit includes a plug-in board and new software EPROMs, and is fully compatible with all existing PK-232's. Please contact factory for details.

You Deserve The Original. AEA produced the first multi-mode data controller. The PK-232 continues to be the standard against which all other multi-mode controllers are judged; the choice of critical amateurs, commercial services and government agencies. Don't settle for less than the best.

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Equipment manufacturers attending the meeting included DRSI, represented by Andy Dimartini KC2FF, PacComm, represented by Gwyn Reedy WA1BEL, Kantronics, represented by Phil Anderson W0XI, and Grace Communications; with each firm showing their latest goodies.

WE HAVE MAIL

Gene Wagner, WA7RCR, 2440 46th Ave, Longview, Washington 98632 has been having some problems with the HAPN (Canada)packet board (fits IBM PC slots). He mentioned he had some problems which HAPN said could be fixed by upgrading the software, which he did. Then he received another letter saying to update again, which did not set too well, but he did upgrade again. Now he finds that it will lock up sometimes in the receive mode. After several more letters and long waits, he still does not have the problem solved. I still have a HAPN board that I bought 2 or 3 years ago and which I used until I acquired my PK-232. I did upgrade the software once. I have found that it takes a very long time to get answers by mail from HAPN. I imagine that at least part of this problem is due to HAPN being run by volunteers. If anyone has a phone number for HAPN, I am sure Gene would like to know of it. Likewise any fixes that someone may be aware of would be appreciated. Perhaps someone would be interested in forming a HAPN special interest group on Compuserve? Or, open a section on Compuserve HAMNET devoted to HAPN? Does anyone know if HAPN has their own landline BBS?

As some of our readers perhaps have not heard of HAPN before, the letters stand for Hamilton Area Packet Network, Box 4466, Station D, Hamilton, Ontario, Canada L8V 4S7. They produce an IBM PC compatible plug-in packet adapter card, the HAPN-1 as part of the clubs projects. I gather they are a non-profit group similar to TAPR. They also provide various types of software drivers, protocols, etc. The last communication I have received from them was dated 22 August, 1989, wherein they described new and/or improved software.

F.C. James, W4IVB, 124 S. St. Cloud Ave., Valrico, Florida 33594, has a model 43 Teletype machine. I believe this is an 8-level ASCII machine using dot matrix print head technology (as opposed to the model 42 which apparently was a 5-level Baudot machine of the same mechanical construction). He would like to hear from anyone who has the model 43 up and running.

Wayne Wilson, N3UN, 452 Klee Mill Rd., Sykesville, MD 21784-9623 is searching for someone who has modified a Kenwood 830S for FSK. He is using a Kantronics Interface II and has the 830S working fine on receive mode. Anyone out there using the 830S on FSK? Wayne would surely like to hear from you. He notes that the Hams in his area have a Packet Cluster going for DX news. He says VHF packet is great for BBS type operation and traffic but feels it is a lousy mode for HF. Especially for Keyboard QSOs. In fact packet is not all that great for VHF QSOs. Wayne is an active DXer; I heard him calling an LY2 on 20 meter RTTY last night!

Bob Meyer WA9AKT, 400 Briar Place, Libertyville, IL 60048 is looking for a replacement XITEX video display board for his IRL FSK-1000 RTTY terminal. IRL used the XITEX SCT-100 video display board and mounted it inside the FSK-1000 terminal. Apparently XITEX is no longer in business and he needs either a replacement SCT-100 or a copy of the XITEX schematic for same. Bob has already talked to Jon Severt, WB8JYF, New Albany, Ohio, who repairs IRL equipment but does not have this board, as it was not used in all FSK-1000s. I expect that Bob would consider a used IRL FSK-1000 if it contained the XITEX video board in working condition. Bob is very active on RTTY DX - he really needs Zone 26 on RTTY!

NEW PRODUCTS

PacComm has announced several new items of Packet Equipment. These include the PacComm Narrowband 9600 Baud Packet Radio System which includes the NB-96 internal MODEM Card, available now; the NB-96 External MODEM, available now; and the NB-96 Integrated Packet Radio which is a complete high-speed packet unit - Integrated digital transceiver, packet TNC, and 9600 baud modem ready to attach to your computer or terminal and antenna. This integrated product is still in development.

The new item that really made this writer drool, however, was the PacComm HandiPacket Portable Packet Controller. It is so very tiny (1.28 by 2.55 by 4.15 inches) and comes complete with computer and radio cables. Just the thing for mobile packet in my station wagon. It is available in three models: the IBM model with 25-pin RS-232 connector, the Laptop Model with 9-pin RS-232 connector, and the Universal Model for most non-IBM computers and terminals. This super small TNC comes with battery pack, charger, radio and computer cables, Personal Message System and manual. Price class is $220 with 30-day return privilege. PacComm has a new February 1990 product brochure. PacComm Packet Radio Systems, Inc., 3652 W. Cypress St., Tampa, FL 33607-4916

KANTRONICS has announced the "de 56" Data Engine which is expected to be available in May of this year. The de 56 data engine is a dual port data-over-radio platform, providing high speed full or half-duplex operation. The open architecture allows developers to provide custom firmware designed for specific applications. The firmware is provided in a 64 K-Byte EPROM, but provisions exist to allow up to 512 K Bytes of EPROM space, as well as accommodating up to 512 K-Bytes of static RAM. The platform as shipped will include packet radio firmware and a VHF modem installed inside the unit. At the heart of the system is the PC-compatible V-40 processor (10 MHz) and hardware HDLC is provided by the 85C30. This hardware will support up to 56 KB operation through both radio ports, as well as supporting up to 19.2 KB through the serial port to your computer.

Another new Kantronics product is the "dvr2-2" Data/Voice Radio. This radio is designed specifically with the packet enthusiast in mind. Factory equipped for 145.01 MHz, the new Kantronics dvr 2-2 provides the high speed T/R switching required in today's digital world. The dvr 2-2 will reach full power output (rated at 2 watts) within 5 milliseconds after push-to-talk is activated. In addition, other features include quick carrier detection (10 milliseconds), direct varicap input for high speed and direct drive modems, and low power consumption. Pin for pin

compatible for all Kantronics TNCs and usable with other manufacturers units. Ready to operate with 1 crystal channel installed and tuned on 145.01, power cable, and data port cable. Price class is $240 and is available now.

NEXT MONTH

I hope to write a review of the new Hal Communications PC-AMTOR PCI-3000 Multi-Mode HF Data Modem card and the SPT-2 Spectra-Tune Tuning Indicator next month. First looks indicate a very fine optimised-for-AMTOR system for your IBM PC or compatible with very good CW and RTTY capability. The software looks outstanding with excellent screen displays, pull down windows, and of course with split screen capability. Until next month then, very 73

de Cole, W6OXP

RM 7248 Continued from page 2

nearest you or the one who you think would best represent you and write directly to that person. If you would like a reply, be sure to include an SASE. Their addresses are not listed this month because of lack of space but look for them next month. Until then, use their call book address if you have one or sent your input to the Journal and indicate where you want it to go. Again, remember the SASE.

The committee's only purpose in this endeavor is to come up with a solution which will be equitable to all the digital modes. Again we are not interested in ARRL bashing.

Here is the Committee name list: (at present) (not in any particular order)

Dale S. Sinner, W6IWO (Chairperson) Buck Rogers, K4ABT (Co-Chairperson) Bill Henry, K9GWT, Jay Townsend, WS7I, Bob McGwier Jr., N4HY, Tom Clark, W3IWI, Travis Braunn, WA5RGU, Dick Uhrmacher, K0VKH, Mel Whitten, K0PFX, Don Royer, WA6PIR (Attorney at Law) Steve Waterman, K4CJX, Bob Slomka, WD4MNT & Cole Ellsworth, W6OXP.

de Dale, W6IWO & Buck, K4ABT

The **May/June** issue of the Journal will be directed to the beginner in the Digital modes. Each columnist is preparing an article now. If you have a special request, write to the columnist involved today.

AWARDS

Betsy Townsend, WV7Y
POB 644 Spokane, WA 99210

We start the listing of new awards this month with the W.A.C. (Worked All Continents) group.

Bob Coomler, KI6OT and **Rod Hallen, 5Z4BH** snagged two W.A.C.s this month. We are proud to add our wallpaper to their collections. Rod's W.A.C. was done on 10 Meters!

Moving on to W.A.Z. (Worked All Zones)

Bob Stanek, W0HAH, J.W. Watson, W7MI, Jules Freundlich, W2JGR and **Dean Showalter, WA6PIR** are the hardworking souls who confirmed all zones. Jules achieved his WAZ on 20 Meters just to make the award interesting. The WAZ can be one of the most difficult awards to achieve in any mode.

Now for DXCC! We had six new awards for DXCC this time.

Peter Styles, VK3EBP, Akio Umeda, JE2GAL, Eddie Schneider, W6/G0AZT, Bob Canning, G0ARF, Crawford MacKeand, WA3ZKZ, and **Dean Showalter, W6PJR**, each put in for the RTTY Journal DXCC (Akio's on 15 Meters). As I have yet to confirm RTTY DXCC for myself, I know what these gents have achieved in confirming over one hundred countries on RTTY. One of these days, I may yet to join their ranks.

I am receiving excellent input on the DXCC listing. Hams are sending their updated totals to me, which helps me give proper credit. Hopefully I haven't missed anyone's updated info. New totals can be sent to me at the above address for inclusion in the next listing. 73 de Betsy, WV7Y

ED: *The Journal is happy to present these awards. Congratulations to all.*

Updated RTTY DXCC List March 1990

CALL	CONFIRMED	WORKED
I5FLN	292	
W0HAH	250	
WA6PIR	249	253
K6WZ	248	258
W6JOX	242	252
TG9VT	234	246
W2JGR	228	234
I5WT	226	
I8AA	225	
W0LHS	218	230
W3KV	210	
K7BV	210	
ON4BX	200	
W2LFL	200	
JA1DSI	200	
F5JA	180	
OH2LU	177	198
WB4UBD	163	185
G0ATX	161	189
WS7I	151	
W3FV	150	
W8JUN	150	
W1GKJ	150	
ON4CK	150	
WA3IKK	150	
W3DJZ	150	
G0AZT/W6	142	192
JR2PAU	137	
AB0Y/4	135	145
W5QCH	130	
JR6AG	130	
JA3BN	128	
WA3ZKZ	126	142
K0BJ	120	
DK1BX	120	
DU1AUJ	118	
ZL2AKI	117	
JA2NNF	113	
W4CQI	110	
I2WEG	109	
JA6TMU	109	
G4SKA	108	
JA1BWA	108	
ON4WG	105	
VK2BQS	102	

S A R T G RESULTS

Scandinavian Amateur Radio Teleprinter Group

19th SARTG WORLD WIDE RTTY CONTEST 1989

Class A Single Operator - **All Bands**

Nr	Call	QSO	Pts	3.5	7.0	14	21	28	Total
001	HD8S(KB2VO)	438	6,450		10	62	42	28	864,300
002	HC2G(HC2LZ)	411	5,935	2	14	56	42	24	819,030
003	HC5K	411	5,960		08	54	42	20	739,040
004	I2HEO	370	4,620	11	16	48	37	11	568,260
005	RL8PYL/UL7PCZ	322	4,705	09	15	41	26	17	508,140
006	HA6PX	312	3,865	13	12	53	33	02	436,745
007	WB5HBR	325	3,895		09	54	37	05	408,975
008	OZ7GI	260	3.075	11	15	47	47	11	402,825
009	G0ATX	282	3,430	10	11	43	44	05	387,590
010	OH2BP	257	3,015	08	13	43	45	04	340,695
011	FD1LVW	260	3,295			50	33	17	329,500
012	HA1WD	249	3.075	05	07	39	41	12	319,800
013	SP3SUN	212	2,460	14	14	44	34	08	280,440
014	HB9CAL	201	2,450	09	11	45	35	09	267,050
015	N6GG	231	2,645	05	13	46	23	05	243,340
016	PA3DBS	189	2,275	13	12	34	30	07	218,400
017	OH2LU	184	2,160			35	49	05	192,240
018	Y48YN	162	1,800	14	13	37	27	05	172,800
019	EA5FEL	183	2,175		03	37	36		165,300
020	LX2EL	160	1,850	13	14	33	29		164,650
021	K6KW	164	1,965	05	04	40	24		163,095
022	SM5FUG	149	1,755	12	12	32	29	04	156,195
023	IV3ZDO	180	2,240			19	34	14	150,080
024	UA3TT/RF1F	143	2,075			40	19	10	143,175
025	EA8RA	126	1,890			36	26	13	141,750
026	N2FF	118	1,685		13	38	27		131,430
027	OZ1FGS	139	1,595	07	02	30	34	08	129,195
028	LX1OM	157	1,890			49	19		128,520
029	WA6WGL	122	1,505	04	12	33	27	04	120,400
030	IK4BWC	151	1,820		14	22	26	03	118,300
031	W2JGR	126	1,660			31	38	02	117,860
032	W6/G0AZT	157	1,715		02	36	21	06	111,475
033	KI4MI	116	1,430	03	09	34	26	03	107,250
034	SP9BCH	127	1,400	09	07	33	26		105,000
035	Y24MB	124	1,300	11	11	27	18	02	89,700
036	UA3TN	117	1,300		03	33	22	01	76,700
037	CT4KO	118	1,350			22	32		72,900
038	Y24UD	105	1,155	12	09	19	15	05	69,300
039	Y22HF	97	1,070	10		25	23		62,060
040	WB6ZHN	87	1,030	04	09	25	19		58,710
041	LA7AJ	85	1,030			18	29	05	53,560
042	I4IBR	80	900	04	07	24	17	05	51,300
043I	V3UT	80	910		01	24	25	04	49,140
044	W2KHQ	74	995		02	22	24	01	48,755
045	Y24MN/A	83	910	06		26	20		47,320
046	Y51RF	87	895	15	08	22	03		42,960
047	SM3MID	79	870	08		18	20	01	40,890
048	ZL2AKI	66	970			34	02	05	39,770
049	WB9B	69	825		12	23	12		38,775
050	SM4GVR	80	865			20	19		33,735
051	WA8FLF	67	820			21	20		33,620
052	W8LNK	61	775		05	19	17		31,775
053	W8PBX	57	790		02	22	13		29,230
054	W1AX	51	710			24	16	01	29,110
055	SM4AAY	95	975			23	05		27,300
056	SM6APB	55	635			16	25		26,035
057	SM7BGE	61	665			20	14	03	24,605
058	I0KHP	54	585		04	21	08	07	23,400
059	NOFMR	64	665			22	13		23,275
060	Y32WF	56	570	07	03	18	11	01	22,800
061	VK2EG	37	525			20	16		18,900
062	Y58VA	54	545	10	01	15	04		16,350
063	VE6CNV	54	595			19	08		16,065
064	KI1LMR	34	445			16	07		10,235
065	AA5CV	38	410			18	05		9,430
066	NA2Q	27	345			11	12		7,935
067	Y51XO	30	340			15	06		7,140

Class A Single Operator - Cont.

Nr	Call	QSO	Pts	3.5	7.0	14	21	28	Total
068	SM6HVR	32	325	09		06	06		6,825
069	SM4CMG	25	275	08	02	03	04	05	6,050
070	Y22LE	26	300			12	08		6,000
071	SP9MAX	26	285			14	04	02	5,700
072	CT1CDZ	24	245			05	12		4,165
073	LA5TFA	21	215			12	07		4,085
074	DL5XAS	25	260			12	03		3,900
075	HP1AC	22	275		01	10	02	01	3,850
076	Y23ZL	24	245			12	03		3,675
077	DF6ZY	18	215			14	01		3,225
078	EA6ZS	19	205			09	06		3,075
079	JA3BCT	14	190			03	12		2,850
080	UA9FAR	14	205			12	01		2,665
081	IK2IKW	15	170			06	04	01	1,870
082	Y32ZF	13	160			09	02		1,760
083	SP3RBT	15	135			08	01	01	1,350
084	HB9NL	11	105	01	01	03	04	01	1,155
085	SM3EIT	06	65			03	03		390
086	SM0AJU	05	75			03	02		375
087	Y23WO	05	60			01	03		240

Class B Single Operator - All Bands **14MHz**

001	G4SKA	264	3,130		63	197,190
002	WF5E	24	12,710		57	154,470
003	DJ7BU1	45	1,725		59	101,775
004	WA7EGA	192	1,975		35	69,125
005	OH1RY	151	1,425		38	54,150
006	4M5RY	80	1,190		38	45,220
007	DF1SD	82	940		45	42,300
008	LU8FDZ	81	1,210		33	39,930
009	VK2BQS	66	995		41	39,155
010	YO6JN	90	980		38	37,240
011	JA2NNF	44	625		33	20,625
012	K6CV	53	690		29	20,010
013	VK3EBP	47	665		30	19,950
014	ND0F	60	670		24	16,080
015	I2KFW	49	555		28	15,540
016	UZ3WWW	59	615		25	15,375
017	I5OVS	57	590		25	14,750
018	SP3XR	48	530		27	14,310
019	K9VQK	27	375		23	8,625
020	DF5EX	36	380		21	7,980
021	SM5TR	26	305		25	7,625
022	OH1TD	23	250		15	3,750
023	WB5YLT	16	170		12	2,040
024	YO7FT	12	120		09	1,080
025	W6IWO	10	100		7	700
026	SM0BZH	01	15		01	15

21 MHz

001	5Z4BH	201	3,055		55	168,025
002	SM4SSY	108	1,280		52	66,560
003	I1RJP	84	1,095		37	40,515
004	W2FCR	60	850		33	28,050
005	I2KYM	71	915		30	27,450
006	SP2UUU	47	605		34	20,570
007	VE6ZX	76	910		20	18,200
008	LA2IZ	32	370		23	8,510
009	SM7CRW	23	280		19	5,320
010	SM4LLP	15	155		11	1,705
011	JE2ARR	10	140		10	1,400
012	Y23VB	10	125		08	1,000

28 MHz

001	YV6PM	30	440		28	7,480

Nr	Call	QSO	Pts	3.5	7.0	14	21	28	Total
Class C Multi Operator									
001	LZ2KIM	427	4,900	13	20	56	51	16	764,400
002	RW9C3	60	5,175	10	17	52	46	1	652,050
003	SK4RY	270	3,285	14	19	47	50	12	466,470
004	FM5FA	297	3,815	1		48	32	12	354,795
005	SK6LK	213	2,185	13	13	44	26	5	220,685
006	SP1PBW	131	1,600	9	8	34	28	4	132,800
007	Y38GG	98	1,100	11		33	13		62,700
008	LA3T	93	1,030			26	25	1	53,560
009	KA3DSX	79	940		8	20	17	3	45,120
010	SP2ZCD	6	65			2	4		390
Class D SWL Operator									
001	ONL 383	239	2,880	11	8	54	41	11	360,000
002	IN3-489/TN	214	2,335	14	15	53	19	11	261,520
003	G1DPL	181	1,935	12	11	39	23	2	168,345
004	F11ADB	87	1,010			27	27	2	56,560
005	OK1-33209	82	980	2		24	25	2	51,940
006	Y32-08-F	90	1,030			39	5		45,320
007	I1-21171	84	870			11	16	18	39,150
008	I1-1169-GE	67	675	4	5	30			26,325
009	Y64-11-I	84	875			30			26,250
010	Y48-41-N	42	395	12		8			7,900
011	Y32-01-F	25	275			15			4,125
012	LA9VDA	21	230			6	8		3,220
013	SP0213GD/Z	11	195			3	13		3,120

Thanks to the following stations who submitted check logs: DF1XI, HA8LKM, PA3AFD, SM4SSY, SM5BFJ, SM6ARH, SM6CYX, SM6DHD, SM6EZI, SM6LKM, SM6SRW, SP2UUU, SP3BGD, and W6JOX

Operators of Multi-Op Stations:

FM5FA	FM5FA, FM5FP
KA3DSX	KA3DSX, KA3HNM
LA3T	LA2KGA, LA2ZAA, LA7SP, LA7QM
LZ2KIM	LZ2MP, Krassimir K.
SK4RY	SM4AWC, SM4CMG, SM5CZD
SK6LK	SM6LKM, SM6SRW
SP1PBW	SP1BZZ, SP1AMU
SP2ZCD	SP2SCB, SP0313GS
RWPC	UA9CGA, UV9CAF, UA9CR
Y38GG	Y38OG, Y38QG, Y38SG

To late to include:

Single Op: RM8MA/RM5Q-----15,875 and OZ6GQ-----2,550

Multi-op:

LZ1KAA-----676,500

Contest Manager: **Bo Ohlsson, SM4CMG**

EXCHANGE POINTS TABLE

YOUR zone \ CORRESPONDENT zone	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	2	14	10	13	16	18	22	20	25	30	36	37	39	21	22	19	20	17	11	25	29	29	22	22	16	28	25	31	39	35	14	36	25	29	34	39	40	47	44	15
2	14	2	15	8	7	16	16	12	16	23	24	30	30	12	14	16	19	20	19	19	25	31	26	30	28	35	35	40	50	50	25	47	14	21	21	28	33	36	37	6
3	10	15	2	8	11	9	13	14	18	21	28	28	30	26	28	27	29	27	21	32	37	39	32	31	24	37	33	40	43	35	11	32	29	35	35	42	48	50	52	20
4	13	8	8	2	3	8	10	8	12	18	22	25	27	19	21	23	26	26	22	26	33	37	32	34	30	40	38	44	52	44	20	40	21	28	26	33	40	41	44	14
5	16	7	11	3	2	9	9	6	10	17	20	24	25	18	20	22	26	26	24	35	32	38	33	35	31	41	40	45	54	46	22	41	19	27	24	31	38	39	42	13
6	18	16	9	8	9	2	4	7	10	12	19	19	21	27	29	31	34	33	29	34	40	46	40	40	33	46	42	49	47	38	17	32	28	36	30	37	44	43	48	22
7	22	16	13	10	9	4	2	4	6	8	15	15	17	26	29	31	35	36	33	33	40	47	42	44	38	50	46	53	49	40	22	34	26	34	26	33	40	38	44	22
8	20	12	14	8	6	7	4	2	5	11	15	18	19	22	24	27	31	32	30	29	35	42	38	42	37	47	46	51	54	44	24	38	21	30	23	30	38	36	41	18
9	25	16	18	12	10	10	6	5	2	8	10	14	15	23	25	29	33	35	34	29	35	43	41	45	41	50	50	55	52	45	28	38	21	30	20	27	35	32	38	21
10	30	23	21	18	17	12	8	11	8	2	9	7	9	31	33	37	41	43	41	36	42	51	49	52	45	58	52	54	44	37	28	31	28	36	24	29	38	31	38	29
11	36	24	28	22	20	19	15	15	10	9	2	9	7	26	28	33	36	41	43	30	34	42	45	51	52	49	55	49	42	41	37	35	22	29	16	20	28	23	29	27
12	37	30	28	25	24	19	15	18	14	7	9	2	3	35	37	41	45	49	48	39	42	49	53	58	50	52	52	48	37	33	32	27	31	37	34	27	33	27	33	34
13	39	30	30	27	25	21	17	19	15	9	7	3	2	33	35	40	43	48	49	37	39	46	50	56	53	50	52	46	34	34	35	29	29	34	21	24	30	24	30	34
14	21	12	26	19	18	27	26	22	23	31	26	35	33	2	3	6	10	14	18	7	14	21	19	25	27	27	30	32	42	49	34	55	5	10	15	19	21	26	26	6
15	22	14	28	21	20	29	29	24	25	33	28	37	35	3	2	5	9	13	18	6	11	18	17	23	27	25	29	30	39	47	36	54	6	7	15	18	19	25	24	8
16	19	16	17	23	22	31	31	27	29	37	33	41	40	6	5	2	4	8	13	6	10	15	12	18	22	21	24	26	36	42	33	49	10	9	20	21	21	27	25	9
17	20	19	29	26	26	34	35	31	33	41	36	45	43	10	9	4	2	5	12	7	8	12	8	14	19	17	20	22	32	38	32	45	14	10	22	22	20	27	23	12
18	17	20	27	26	26	33	36	32	35	43	41	49	48	14	13	8	5	2	7	12	12	12	6	11	14	15	16	20	30	35	29	40	18	15	27	28	24	31	27	14
19	11	19	21	22	24	29	33	30	34	41	43	48	49	18	18	13	2	7	2	18	19	16	10	10	9	16	15	20	30	32	21	36	23	21	33	34	30	38	33	16
20	25	19	32	26	35	34	33	29	29	26	30	39	37	7	6	7	12	18	2	6	14	14	20	26	21	26	25	34	43	39	49	8	3	15	16	15	22	20	12
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22	29	31	39	37	38	47	46	42	43	51	42	49	46	21	18	15	12	12	16	14	9	2	6	10	18	17	13	11	21	29	36	35	22	14	26	22	15	22	16	24
23	22	26	32	32	33	40	42	38	41	49	45	53	50	19	17	12	8	6	10	14	11	6	2	6	13	8	12	14	24	30	31	37	22	16	29	26	21	28	22	20
24	22	30	31	34	35	40	44	42	45	52	51	58	56	25	23	18	14	11	10	20	17	10	6	2	8	6	6	10	20	24	26	30	28	22	35	33	25	32	25	25
25	16	28	24	30	31	33	38	37	41	45	52	50	53	27	27	22	19	14	9	26	24	18	13	8	2	13	9	15	23	30	18	27	32	28	41	40	33	40	33	25
26	28	35	37	40	41	46	50	47	50	50	49	52	50	27	25	21	17	15	16	21	16	7	8	6	13	2	6	5	16	22	31	29	29	21	33	29	21	27	20	29
27	25	35	33	38	40	42	46	46	50	52	55	52	52	30	29	24	20	16	15	26	21	13	12	6	9	6	2	7	15	18	25	25	34	27	40	35	27	32	26	30
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29	39	50	43	52	54	47	49	54	52	44	42	37	37	42	39	36	32	30	30	34	28	21	24	20	23	16	15	10	2	9	15	32	42	33	39	31	24	24	20	44
30	35	50	35	44	46	38	40	44	45	37	41	33	34	49	47	42	38	45	32	43	37	29	30	24	30	22	18	17	9	2	24	7	51	42	47	40	33	32	29	48
31	14	25	11	20	22	17	22	24	28	28	37	32	35	34	36	33	32	29	21	39	40	36	31	26	18	31	25	31	15	24	2	22	39	42	46	53	52	56	51	28
32	36	47	32	40	41	32	34	38	38	31	35	27	29	55	54	49	45	40	36	49	43	35	37	30	27	29	25	24	32	7	22	2	57	48	47	42	38	34	33	50
33	25	14	29	21	19	28	26	21	21	28	22	31	29	5	6	10	14	18	23	8	14	22	22	28	32	29	34	34	42	51	39	57	2	9	10	14	18	22	23	10
34	29	21	35	28	27	36	34	30	30	36	29	37	34	10	7	9	10	15	21	3	6	14	16	22	28	21	27	25	33	42	42	48	9	2	13	12	12	18	16	16
35	34	21	35	26	24	30	26	23	20	24	16	34	21	15	15	20	22	27	33	15	18	26	29	35	41	33	40	36	39	47	46	47	10	13	2	7	15	15	19	20
36	39	28	42	33	31	37	33	30	27	29	20	27	24	19	18	21	22	28	34	16	16	22	26	33	40	29	35	30	31	40	53	42	14	12	7	2	8	8	11	24
37	40	33	48	40	38	44	40	38	35	38	28	33	30	21	19	21	20	24	30	15	11	15	21	25	33	21	27	22	24	33	52	38	18	12	15	8	2	7	5	28
38	47	36	50	41	39	43	38	36	32	31	23	27	24	26	25	27	27	31	38	22	19	22	28	32	40	27	32	26	24	32	56	34	22	18	15	8	7	2	6	32
39	44	37	52	44	42	48	44	41	38	38	29	33	30	26	24	25	23	27	33	20	15	16	22	25	33	20	26	19	20	29	51	33	23	16	19	11	5	6	2	32
40	15	6	20	14	13	22	22	18	21	29	27	34	34	6	8	9	12	14	16	12	19	24	20	25	25	29	30	34	44	48	28	50	10	16	20	24	28	32	32	2

PACKET

Richard Polivka, N6NKO
7052 S. Friends Ave, Apt J, Whittier, CA 90602

TO START

I thought that I would tell you about the Owl's Nest here. I sincerely believe, and my wife agrees, that this place would win the World's Messiest Shack award. Even I do not know where everything is here. I guess that is why I like it so. Within reach, I have a Chow Mein Noodles can that tipped over tonight holding some pens and pencils, a floppy disk drive that is flaky at best, two mother boards, a scanner, 150 floppies, two printers, a HF rig, PK-232, K9NG modem, and enough papers stacked up to net me about $110.00 if I recycled all of them. I am an information sink that needs to have its fix daily.

Also, I worked, bless her heart, Hilda, DL5UF/H44 in the Solomon Islands this evening. I do not think that my wife minded the mad dash after a phone call saying that she was there on the air considering that my wife received a wonderful geography lesson last night from Lloyd, ZL1BYB. I still can't convince my wife to get her ticket, even with that kind of experience. Oh well. But my perseverance will continue.

THE NOODLES ARE STICKING AGAIN...

I need to stir the pot again, the noodles are sticking. I am quite sure you have read the second part of the letter from Paul Newland, AD7I, concerning the present debacle in the making wherein the ARRL proposes to allow HF unattended forwarding in certain parts of established subbands. Paul has brought forth a proposal for a 10 KHz segment of HF spectrum to allow for AMTOR, BAUDOT, CW, and PACKET. In order for this to occur according to his plan, EVERYONE would have to clean up their act, even though they should be clean to start. What he is proposing is a 500 Hz window for CW, three 500 Hz windows for AMTOR, three 500 HZ windows for BAUDOT, a 2.25 KHz window for bulletin stations, two 2 KHz wide packet, and a 1 KHz CW segment. Amazing how for the longest time BAUDOT and AMTOR, CW, and VOICE have worked without channelization. Now comes along something that has to be channelized (PACKET), by choice, and everything has to be channelized. I am not trying to knock down the idea of yours Paul, it just seems weird to me that we as amateurs got along quite well until this stupid thing started up. Now to the meat of things.

500 Hz channels. Ok, fine. The only way that a RTTY or AMTOR signal will fit into the segment is to be pure FSK, not AFSK. Reason being is the fact that sidebands are created when AFSK is used. Also, amplifiers are not clean and then there are the BIG GUNS that run 2 kw to get across town splattering their merry way across the whole band. The operation of all of the radios involved with this will have to be CLEAN and on FSK. AFSK is out. Now, lets see. I wonder how many FT-101E's are out there that do not do FSK along with all of the other radio's that do not produce FSK? So, we now have a another problem. It is called TIGHT filtering. You can have a 500 Hz mechanical filter that has a shape factor of 1.05 to 1 and you can still have problems that could be caused by splatter and group phase delay at the edges of the filter bandpass. This will take some good equipment and good operators to pull off.

Well, here is another role for Big Brother. Now we will need a frequency sharing and registration organization (more politics). This person would not be a frequency coordinator, but someone who could suggest frequencies to use and to tell who is on what frequency. There would be a "registrar" for each radio region and he would provide the service at cost (a paid (?) position). Now how is the selection going to take place for this "registrar" position (more politics)? I thought that Ham Radio was a hobby and was not supposed to be operated as a money making venture. I guess I am getting OLD.

There is more to this but I am not going to get into it now. I have other things to cover this month. We will see if it is going to work. If I can use the southern California area as an example of cooperation, I do not think that it will work too easily. That is just my own opinion.

9600 BAUD STUFF

Well, 9600 baud is alive and being tested in the Los Angeles area on 2 meters. I have been in contact with the two people who are testing it and they said that it seems to be going fine for them. That is great. Now for me to get on it with them but the topography does not allow for direct shots.

I have a few more notes on the K9NG board. I suggest that all cables, that run in and out of your TNC to the board, be RG-174 coax. You do not want the hash to get out and tweak your HF reception. This would be another good place to use ferrite beads for RFI protection. The board that I have is prone to false triggering of the DCD line. I think it is because it is hearing a pulse from something involved with the clocking of signals. This is occurring because the slicer being used is running in open loop (no "dead band") and triggers on the slightest digital noise that it hears. This is where a dead band adjustment would be handy. Also, the above-mentioned coax cable stuff will help out.

MAIL

Time to answer the letters that have been piling up here on the desk (horizontal storage device).

I have in possession a letter from Carl, K6WZ. It is a copy of letters that he has sent to Messrs. Newland, Rinaldo, and Sumner. I agree with the views that he has presented therein and they parallel my thoughts on the subject. Someone told me that I should write to them concerning the thoughts that I have on the subject.

Well, I prefer this medium over writing a letter to them that might end up in the round file because my views do not match theirs (with statistics one can prove anything with nothing).

John, W0OMV, has a few questions that need to be answered and will provide some more knowledge out there to the readers. He had a question concerning sending computer programs over HF. My advice is send a floppy thru the mail. HF is no place for machine code because of all of the inherent problems that HF has going for it. VHF is fine on direct links and the higher speeds that are found on VHF. He also mentioned about possibly sending computer programs via AMTOR or APLINK. That is not possible because of the initial design of AMTOR. AMTOR does not allow for sending the full 256 character codes that ASCII supports because it grew out of RTTY. Packet would be the only way to go to get it right, but, not on HF.

John also has some questions on TCP/IP. He asked about how the ARP and NETROM ROUTE tables work in the autoexec.net file. I will have to devote next month to that. Not enough space here. NOS is an acronym for Network Operating System. It was a name that, I guess, Phil Karn pegged to a release after a few changes to the code to support more functions and the name has stuck. I believe the releases that came after September 1989 have been referred to as NOS and the ones before that date have been called NET.

He also mentioned a neat trick that a SYSOP in his area does which I agree with. Any message that comes in to his box that is routed to ALLUS gets changed to TEXAS. That is a great way to go and will get around the network pollution caused by the ALLUS tag.

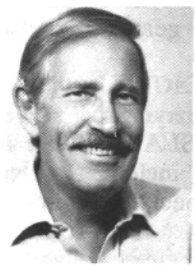
John is also looking for an APLINK program that can be run on a Mac. If anyone knows, drop him a note via packet to W0OMV @ WB5FRO.TX.USA.NA. He would appreciate it.

Also, I need to print a retraction. Skip, WB6YMH, has his box on the air again here in Los Angeles. So, you can send me comments and messages there at: n6nko@wb6ymh-2
or
n6nko@wb6ymh.ca.usa.na or, for the more adventurous types,use this one, n6nko@n6nko.ampr.org [44.16.0.114].

This one deserves an AW ****. I just found out today, 4 MAR 1990, from W6IWO that the FCC has pegged a RM number involving the unattended operation stuff. It is RM-7248 and comments have to be in by March 8, 1990. Too late for me to go and whip off 11 copies of my comments on the subject and get them to the FCC in time. I hope that it does NOT go to NPRM and gets dropped like a rock, but if it does, then my printer will be getting overtime work printing out the copies needed in the proper legal format (line numbers and parenthesis).
Till next time, Peace

de Richard, N6NKO

DX NEWS



John Troost. TG9VT
444 Brickell Ave, Suite 51-265, Miami, FL 33131-2492

During the week of the ARRL CW Contest, I had the pleasure of the visit of Martti Laine, OH2BH, who used my gear as TG0AA, and made almost 6,300 QSOs in the Test. Now Martti does an awful lot of DXpeditions and when I heard of his travel plans this year, I just had to convince him that RTTY was an attractive and viable Mode. And with that I had success; Martti was really impressed by the capabilities of RTTY and AMTOR and decided that it was a Mode, worthy to be used on his Expeditions.

Then we discussed the type of gear he would need, reliable and easily transportable, in his suitcase and Martti decided on a Lap-Top Computer and a ST-6000 (HAL), if available. The reason Martti decided on an ST-6000, and not a PK-232 or a KAM, is that the unit is to be used only for RTTY and not for packet or AMTOR, thus it is necessary that the filters be for 170 shift and steep, and that it has a "Autostart" circuit and a tuning scope, all of which are perfect on the ST-6000 demodulator, though a little bigger than a PK-232. Also the ST-6000 is pretty well immune to TX RF.

So, now to find an ST-6000, plus the software to make it do RTTY. Clark, W9CD, was so kind as to write the software and make the cabling, ICOM donated a transceiver. But an ST-6000 could not be found so easily.

I happened to mention this problem to George, KB2VO, who immediately volunteered the loan of the spare ST-6000 he had, bless him.

So, now Martti was all set: Clark, W9CD made the software and cabling and sent it to KB2VO for testing with the ST-6000.

Then on Friday 2 March about 1400Z, dear George, KB2VO suffered a Heart attack but his XYL, Maj-Britt, was able to get him to Intensive Care in time, where he was promptly put in the oxygen tent and they were able to prevent things from getting worse. But George, being the fine guy and avid RTTYer that he is, was able to tell Maj-Britt to ship his ST-6000 to Martti, together with a software/cabling package that would be arriving that same Friday.

So, when I called Maj-Britt Friday afternoon, to inquire about George's conditions, the first thing she told me was that all had been shipped to Martti, overnight delivery. Sounds like a fairy-tale, but every word is true.

As of this writing, George was out of oxygen care, clear and lucid, but still on intravenous feeding, and hungry.

Please your prayers for George and get-well wishes to his CB address.

FEBRUARY REVIEW

The bands were up and down this month, with propagation on many days just plain

lousy. Yet we saw much desirable DX float around. XW8KPL was up for a few (too few) days around 13th (for luck), but left the RTTY gear in LAOS, to be used by other visiting groups or by the Laotians, as they were given some instruction in RTTY operation.

A Japanese group with JA3AUQ, operating 8Q7DN from the Maldives, made a fantastic effort the last week of the month, and has surely taken 8Q off the "Most Wanted List".

JX9CAA showed up from Jan Mayen Island at unpredictable hours, mainly just below 14,084 Mark. He will be there till October, so don't get nervous.

ZS8MI, good to his word, is active every Saturday on RTTY around 1500Z on 20M, he will be there till end of May. Besides, this month gave us lots of USSR stations, as now a special license for RTTY is no longer required for "First Class Stations" and computers seem to be more available.

Good DX included: PZ1BS, Surinam; VP8BFH, Falklands, around 0100Z on 14,093; H44SH; TJ1MW; V85DA; YN4NR around 2300Z on 20 M; D44BC; 3B8FP; LY2BOK and LY2WW from Lithuania; 6W6JX and C56/6W6JX; ZS8MI; ZS9A Walvis Bay; TZ6VV; 9M2AX; FR5ZD; TA3B; and TA3D; PJ2MI; 3A2AB; HS1BV; 4K2OT and 4K2OIL from Franz Joseph Land; BY1QH; BY1SK; BZ4SAA; BZ4RCC; and BZ1FB; GJ4YMX; JW7SP from Swalbard, now gone home; J28TY; ZS3NH, Namibia; JY9IY; JY9SR and JY9IU, Jordon; TU2BB and TU4AK, Ivory Coast; 9J2AL Sundays around 1600Z on 10 M; 5V7DP, Togo; HK0/N3JT, from San Andres, now gone home; 5U7/C53FC (WFWL); Z21EZ, Zambabwe; BV2B and BV4VB; ES7FU; AH9AC, Wake Island; ZF2NR; A41JR, Oman; CU3CB, Azores; SV5ADM, Rhodes; ZS4RF; EA9JV, Melilla, and many others to keep you busy, propagation or not.

There has been a good return on the "Most Needed Country Questionnaire" but I could use about 50 more to get a more accurate result: see the January issue of the Journal and do not forget: the countries shown there are just samples: just add all others you need; in fact show all the countries you have worked. Results are to be tabulated in the May issue.

Also, with the returns of the questionnaires, I had a lot of mail, thank you fellows. Some of the mail complained that the Journal arrived so late, that the DX news is stale by the time the Journal reaches you. Sorry, but that is the best our dear Publisher can do. The Journal is assembled and submitted to the printer on about the 10th of the month. That normally makes it ready for mailing on the 20th: but sometimes there are holidays in between, and that delays mailing. But please realize, there is no other Radio Magazine that gets the news as quickly to you as the RTTY Journal. If you wish quicker information, please lift my APlink mailbox on 14,074 Mark, access TG9VT, and you will find the latest RTTY DX news, updated each Friday morning Z.

And I had a plea from Japan, that the operators in the Caribbean please turn their beams to JA land around 2300Z on 10 or 15 Meters, or at 1200Z on 20 Meters, and make a directional call to Japan. Seems that all of the Carib Islands are very rare in Japan.

DX COMINGS

ZS9A, Ian, WALVIS BAY, now approved by the ARRL as a "New Country," is active on RTTY every Saturday from 1700Z on about 14,064 Mark. He is also active on SSB each Monday, Thursday and Saturday at 1600Z on 28,610 and will make a RTTY sched if requested. Glad Ian recovered a lot quicker then anticipated from his hospital visit. Also active is ZS9S.

As of this time RL8PYL, together with two JA and several Vietnamese operators, is scheduled to go to SPRATLEY, 1X0SV the second half of March, for a Multi station, All Mode operation. Cost of the trip is some $40,000, as helicopters have to be chartered, plus a contingent of army forces needs to be taken for protection. Contributions are required and will be refunded if there is a hitch in the plans. Send yours, as of this writing, to "Joint-Venture KIULONG", Acct No. 37.0.070.0.579 with the Bank of Foreign Trade, Ho Chi Min City, Vietnam. Further investigation has revealed the following: Quote - *The Foreign Assests Control Office in Washington advises that the U.S. Treasury needs to issue a special. permit to transfer U.S. funds to Vietnam, which is not likely to be granted for Amateur Radio Support.* - Unquote

There are conflicting rumors as to the SOUTHERN SUDAN operation by F2CW, and I have not been able to get a reply to my mail to him: if it comes off it will be Mid March, possibly before you get this issue, though rumors say that the trip has been delayed till September.

Seems that BHUTAN, A51, will be a reality this year, as apparently both the efforts by VU2JX and VK9NS are bearing fruit and the operation might come off sooner than expected. Plus, VK9NS, Jim is very confident that he will also get a valid license for BANGLADESH, S2. Toes crossed!

A61AD, UNITED ARAB EMIRATES, will be operated by WB2DND on March 26 and 27, RTTY, only. Don't miss that one!

The IRDXA is assembling RTTY gear for ZD7BV, TRISTAN DA CUNHA, which hopefully will be shipped in March. But the CE0Z, JUAN FERNANDEZ, has been delayed to possibly April or May, as CE0OGZ unexpectedly had to leave the island.

YN4JR is frequently active from NICARAGUA. He is new at RTTY and his QSLs are awaiting action from the printer. Look at about 2300Z on about 14090 Mark.

The operation to the SOUTH SHETLAND and SOUTH GEORGIA ISLANDS by WA4JQS and group will take place in October/November of this year. Both islands will be on the air simultaneously with RTTY gear supplied by IRDXA.

TI2JJP and TI2CI are trying to arrange a trip to TI9, COCOS ISLAND. There are many unknowns yet, including timing,. but they will pay special attention to RTTY. However, they hope to go by Costa Rican Government vessel and the whole operation may only last 18 hours, the "turn around time" of the ship. And if anyone still needs QSLs from the TI9TTY operation in February 1985, please send your request to WB4UBD.

OH2BH, Martti Laine, is planning to join a group of Venezuelan operators on a trip to YV0, AVES ISLAND, late March. Here also are some unknowns, as

they were going with a YV Naval Vessel, and the ship is trying to recover from a fire aboard. That will test out Martti's new Portable RTTY gear.

The same OH2BH and 7 operators from U.S. and Japan will activate JARVIS ISLAND, AH3C/KH1J for 9 days from 13 April, all modes, all bands. They believe to have sufficient reason to request that the ARRL grants separate country status to Jarvis, due to distance and intervening countries from Palmyra, with which it is lumped now.

Mid May, for 8 days, OH2BH and another 7 multinational operators will activate CONWAY REEF on all bands and modes.

T32LB, EAST KIRIBATI, by JH1LBR should be active from 22 to 27 March with special emphasis on RTTY.

There are rumors that VK9LE, LORD HOWE ISLAND, by VK3OT, will be on the air from about 28 March: again toes crossed as a decision to operate RTTY is still pending.

The WESTERN SAHARA operation by the LYNX Group of Spain, is now scheduled to start 18 March for one week, with the call of S01LYNX.

LY2WW, LITHUANIA has his gear fixed and is back on the air, doing a professional job. Look for him around 0600 on 20 Meters, if you can stay up that late.

At this QTH, nothing has been heard as yet, from the crowd in CROIZET and KERGUELEN.I hope that they will come on RTTY, but nothing is sure in this business.

RW3DX, UA3DK and UA3DZ will go to VIETNAM and operate as 3W3DX, 3W3DK and 3W3DZ from about 13 March.

Further rumors state that D2ALA, ANGOLA, is now QRV on RTTY, but you cannot prove it by me.

RAMBLINGS

It looks like we are past the peak of the Sunspot Cycle, but for the next year or two there will still be plenty of good DX on the high bands. But maybe it is time to start a little more activity on 40 and 80 Meters. Those bands seem to be opening well, but there is just not a lot of DX around. But we have to get used again to the fact that 10 and 15 Meters will gradually become harder for DX; so why don't we see some more on 40 at least?

Will not write about RM-7248, the FCC Number for the ARRL Petition for giving away fifty percent of our RTTY band. I did all my writing to the FCC and sent by Air Courier: plus I am sure that my colleagues will have plenty to say about it.

Had a lot of mail this month, including one from W4UW. Dick complains about the difficulty in getting RTTY QSL cards and attributes this to his QTH in 4 Land. Dick, it ain't so; I too have sent about 4 QSLs to FY5AU, with SAE and postage. I guess he may not know how to write, as I have yet to find anyone who has received a card from him.

If you had bad results with KP4, please try KP4BJD, he is very active and a true gentleman, and you will have a QSL back in no time. But yes, in some of the S.A. countries it is difficult: not necessarily due to the operator, but the mailing system leaves a lot to be desired, specially if you put green stamps in. To the mailman, in some of these countries, and not only in Latin America, a green stamp represents half a day's wages, and that is a lot of temptation.

Basically, what I do to assure a good QSL return rate, is to send a QSL Card with all info on only one side, prefer to send it to a QSL manager, it there is one, always put in return postage and a SAE. When I use a green stamp, I put it in a bit of folded carbon paper, so it cannot be seen from the outside. Dick, your problems are no different from mine or W2JGR, whom you mentioned and we have been waiting for a QSL reply for years sometimes and sometimes they come and sometimes they don't and you try and work the country again. How about last year's two Mongolian operations?

But I can assure you that the QSL return rate on RTTY is better than on other modes: whoever goes thru the trouble of installing a high technology station and maintain and use it, is more apt to pay attention to requests for QSLs then most Hams.

GO GET THEM, GUYS AND GALS

I am quite upset over KB2VO's plight, yet the mail has to go thru. So hope I did not bore you to death, but I guess there is quite a bit of good DX coming up and I hope that this helps you to get some of it (or all of it).

Thanks so much to all of you who cared to read the Column and supply me with data that makes it possible to write one, including but not limited to: I5FLN, OD5NG, W2JGR, JA1ACB, W6PQS, W6WZ, KB2VO, OH2BH, JA3DLE/1, JH1BIH, W4UW, UZ4FWD, UT5RP, RL8PYL, WB4UWD, W7KS, W6/G0AZT, VK2AGE and VK2SG (and not necessarily in that sequence).

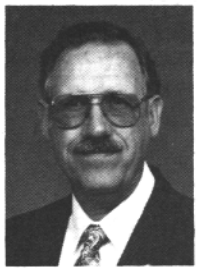
So stay away from the Beacon Mailboxes, use the upper band- segments to keep the 'STA' boys where they belong, fight for your RTTY/AMTOR segments, don't jam the calling DX station (should take my own advise sometimes) and in general behave like gentlemen (women) in a gentlemen's mode.

May the Lord Bless you all and may DX be your joy. 73 **de John, TG9VT**
on the Mountains of Guatemala, Land of Eternal Spring.

GOING TO DAYTON? READ ON!

If you are planning to be in Dayton for the HAMVENTION you won't want to miss all the digital action. In just the RTTY arena alone, there is lots of activity planned. To start with, if you are arriving on Thursday evening, join the informal get-together staring about 5:00 P.M. in the Cocktail lounge of the Radisson Hotel. Lots of RTTY talk and a good time to meet with some of the RTTY gang. On Saturday, the "Digital Digest" forum will be held at 12:00 noon in Rm# 4 at Hara arena. Don't miss this lively forum which will have representatives from the Ham community and the Ham industry on a panel. A discussion the latest ARRL Petition regarding "Unattended Automatic Operation " is also slated for this forum. On Saturday evening, the annual RTTY Dinner will held at the Radisson Hotel. (See pg. 9) Then there is the famous RTTY hospitality suite on both Friday and Saturday nights in the Premier Room of the Radisson. Friday night the room opens at 8:00 P.M. until ? and Saturday night it opens after the RTTY dinner. Stop by and enjoy all the RTTY talk either or both nights.

Ed: Dale, W6IWO



MSO'S

Dick Uhrmacher, K0VKH
212 48th St, Rapid City, SD 57702

Hi Gang! Can Spring be far off now? And of course that means the annual trek to the Dayton HAMVENTION can't be far off. The annual RTTY Dinner is again being held this year, and Bob Foster, WA7QWG, is the host. I'm certainly anxious to see all of the guys and gals again this year. We sure had a super time last year!Information on attending the RTTY Dinner can be found in several of the MSO's on the National Autostart Frequency, (14 085 625 Hz Mark), and a list of those currently scheduled to attend can be found in the K0VKH MSO. Register early with Bob Foster, and remember no tickets will be sold at the door!

PROPOSED 20 METER UNATTENDED OPERATION BAND PLAN:

With all due respect to Paul Newland, and his proposed "Band Plan," for the 14090 to 14100 KHz area, it's very obvious to me that either he doesn't operate the digital modes very often on 20 Meters, or that he doesn't understand the limitations of amateur radio grade equipment on the market today. His proposed "channelization" of this ten kilohertz area is not only unrealistic in approach, it is in reality unworkable, discriminatory in design, and demonstrates a lack of on-the-air experience with automated systems. His band plan appears to this author as one that has been developed to conform to the direction or guidelines set forth by the American Radio Relay League, (ARRL). I've been more than fortunate in being able to utilize most of the more expensive, and thus more sophisticated, amateur radio grade equipment, on the digital modes. I am more than confident that a majority of digital operators have modest equipment, completely satisfactory in most cases for their pursuit of digital operations, but in the majority of cases, completely inadequate to operate in a tightly restrictive, channelized, 500 Hertz band plan that Newland proposes.

If my twelve years of daily operation of a RTTY MSO has provided any insight, I doubt very seriously that one-kilohertz spacing would be adequate to insure QRM free automated operations, and most likely 1.5 kilohertz spacing is much more realistic. Even while using a Kenwood TS-940S, with a 500 Hertz filter installed, and the "CW Bandpass" knob screwed down tight, I can assure you that digital operations within 500 hertz of the mark frequency of this sophisticated transceiver will cause enough QRM to make things quite unbearable. And, should one find automated systems on both sides of his mark frequency within 500 Hertz, then I doubt that any regular service could be counted upon. In "unattended" operations of course, there's no one on the other end to determine if one station is QRM'ing another, and if we are to approach unattended digital operations with any sense of reality, then 500 Hertz channelized spacing is obviously a poorly thought out proposal. "Carrier detect," and other "channel busy" devices usually end up in a "dog eat dog" fire fight!

If I don't think my signal is getting a fair share of the channel, I up the ante by increasing power, antennas, etc. The corresponding escalation causes nothing but problems for everyone. Does Newland's proposed band plan seriously consider stuffing the National Autostart Frequency, (about a dozen active MSO's on one frequency), the KD3O C-64 Mailbox, and about five automated AMTOR systems in less than three (3) kilohertz space, and expect any of these systems to function reliably? Or, is there some hint to his proposal that QRM in the channelized area would be so intolerable that longtime automated system operators would either stay where they are now, or move back after a frustrating experience, thus leaving even more area for packet radio operations?

I visualize his proposal, (if it were to be adopted), causing the following scenario: RTTY and AMTOR automated operations would cause so much interference to each other in the proposed three kilohertz area, that lack of service, infighting and hard feelings would without doubt occur. Automated RTTY and AMTOR system operators would either abandon the channelized area and move back to their old operating frequencies below 14090 KHz, or foreseeing such events occurring, not move into the area in the first place (thus not being able to avail themselves of true "unattended" operations). Packet radio, which is already authorized more than any other mode within the channelized area under Newland's proposal, would thus be free to expand its horizons.

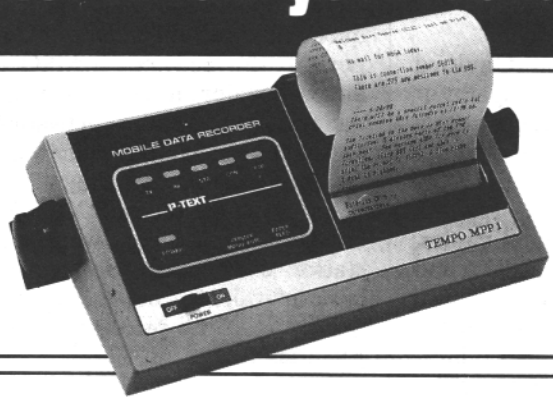
With the accepted knowledge that HF Packet radio doesn't work as reliably as predicted, why does Newland's proposal allot more to this mode than for RTTY and AMTOR? So, who really loses under Newland's proposal? The RTTY and AMTOR guys are going to move out of the channelized area, back to safe havens where they have provided decades of service to Amateur Radio. The packet guys, who are already finding that the 15 kilohertz area from 14100 to 14115 KHz isn't enough room for their operations, are going to ooze out of their channelized area, and consume the entire 10 kilo-

WHO GAINS HERE?

hertz. But you say, where has all the DX gone? Where can I have a leisurely RTTY ragchew QSO at 45 baud, that lasts for 45 minutes to an hour? Where can I send my RTTY pictures now? And finally, who is going to enforce such a restrictive frequency allocation? The FCC? They have neither the money, staff, equipment or desire to become involved in such matters. The word "anarchy" has been mentioned recently on the air in regard to packet radio, and Newland's proposal for unattended, channelized operations between 14090 and 14100 KHz, would provide the seeds for just that type activity.

We need cohesive, well thought out and coordinated activities with respect to Amateur Radio, and particularly toward the burgeoning digital modes. I have for

HENRY RADIO IS THE PLACE
. . .THE BEST PLACE
to fill all your data communications needs

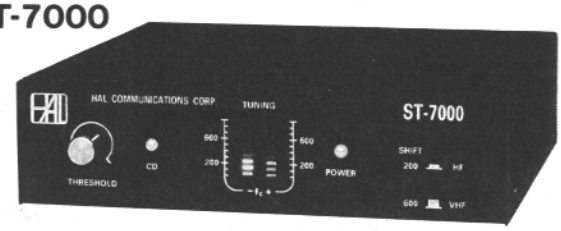


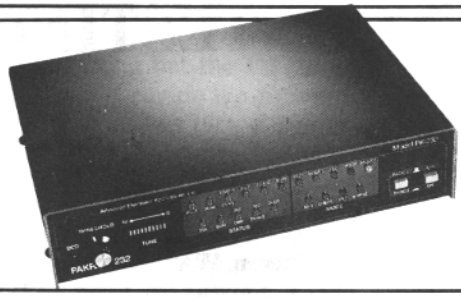
The TEMPO MPP1

. . .a unique new mobile data printer, includes a packet controller and a 13.6 VDC printer that interfaces with any mobile radio. in a recent user test it proved to have about twice as much audio level range tolerance as other TNCs. It is also an ideal unit for emergency work and a commercial version is perfect for dispatching service, emergency and police vehicles.

HAL Communications' ST-7000

HF-Packet Modem. . .a high performance modem designed specifically for 300 baud HF-Packet. It offers no-compromise performance to assure optimum operation under the most demanding signal conditions. Techniques developed for government and military use are used in the ST-7000. AGC-controlled AM signal processing provides a wide dynamic range. All filters and detectors are optimized for 300 baud HF-Packet. It offers the 200 Hz shift mode and a wider 600 Hz shift mode, each supported by separate 6-pole input filters and a 40 db AGC system.





The PK-232 by AEA

. . .the only controller offering Morse Code, Baudot, ASCII, AMTOR, Packet, and facsimile Transmission & Reception plus the ability to monitor the new Navtex marine weather and navigational system. . .7 modes in one controller. The PK-232 makes any RS-232 compatible computer or terminal the complete amateur digital operating position. All decoding, signal processing and protocol software is on ROM. Only a simple terminal program (like those used with telephone modems) is required to interface the PK-232 with your computer. **Watch for the new and exciting AEA FSTV-430. Have fun on amateur TV!**

Obviously, we can fill in a system that you have already started. Or we can furnish a complete system to fit your needs and budget. For example, here's some suggestions for the amateur just entering the exciting field of data communications, or: for the amateur who wants the best available.

NO. 1 For the fun (and very affordable) mode, VHF Packet, AEA PK-88 with personal mailbox, 8K programmable memory and TCP-1P compatability.
For serious 20 M world-wide DXing on Packet, 200 or 600 Hz shift. . .add the superb HAL ST-7000.

NO. 2. . .top of the line! The HAL ST-8000 or HAL ST-6000 and AEA's PK-232 . . .the winning combination. You can't do better for all-mode, all-band enjoyment of hi-speed data communications.

If you have any questions concerning these units, or would like to discuss your requirements with a knowledgeable specialist, please call or ask for Fred Daukantas, N6SFD. We also carry a large selection of excellent commercial products for data communications and emergency systems as well as a complete inventory of amateur equipment and linear power amplifiers.

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several years now thought that there is a behind-the-scenes, well thought out, and back door approach, to expanding the Phone portion of 20 Meters, down to 14100 KHz. We hear bits and pieces of information; tidbits doled out piecemeal so as not to provide the overall picture. We hear that it's "necessary" for the United States to conform to frequency allocations on a world-wide basis. Why? Or is this just a smoke screen generated to cover up a frequency grab scheme by those with phone interests? I personally feel that the ARRL is not honest in their approach to digital operations, that digital operators and operations in general have been treated like step-children, and that the ARRL's approach to unattended digital operations was contrived from the start to be divisive. Strong words? Yes, but from where I stand, the ARRL's actions certainly portray an organization that is highly prejudicial in its way of doing business, and unless someone calls their hand, they will continue to run rough shod over anyone who doesn't fit their mold.

It's easy to criticize, but not quite so easy to provide a plan or method of accomplishing some goal. To Paul Newland's credit, he at least went out on a limb, no matter how shaky, and suggested a band plan. Unfortunately it would appear to this author that his band plan is not viable in several areas. To put it plainly, we lack the facts necessary to make such judgements about not only 20 Meters, but all the digital areas allocated to Amateur Radio. We need a concentrated, well defined, well managed, and wide scope digital frequency allocation study, held under the auspices of some agency other than the ARRL. The ARRL should certainly have an input, although its current actions with respect to digital activities certainly would preclude it from having a leadership role. Let's gather the facts, analyze them without prejudice, and then go to the FCC with a rational approach to digital modes and spectrum allocations. Anything less and we continue the inadequate and prejudicial system now in place.

I would like to take this opportunity to thank all of the folks who have written letters to me, left notes in the various MSO's, etc., supporting my position as I outlined it in the January 1990 "MSO Column" in The *RTTY Journal*. If we pull together and properly suggest changes to the digital areas, I'm sure that all interests will be satisfied. Finally, the ARRL needs to understand how frustrated digital operators are with their actions. Unless YOU take pen in hand and write to the various League officials, they will continue their course. Write now, and lay it on the line! The ARRL's charter is to represent all of amateur radio, and it's certainly doing an inadequate job in the digital area.

SAD NEWS DEPARTMENT:

Even though I know that Gaylord Crawley, WB8ICL, wants no sympathy or special treatment, he is suffering from a very life threatening disease, and he deserves our heartfelt prayers for his recovery. Gaylord has been a staunch supporter of the various digital modes, operating and maintaining MSO's and AMTOR BBS's on 20 Meters, and Packet BBS's on VHF frequencies in the Dayton, Ohio area. He has helped literally hundreds of digital enthusiasts become more proficient in the digital modes, and has friends on a world- wide basis. He has been my friend for over 12 years, and I pray that his doctors efforts to return him to good health are successful. Let's all keep Gaylord in our prayers!

IS THIS FREQUENCY IN USE PLEASE?

I was taken to task recently for my caustic comments concerning the ARRL's lack of good operating practice, by not asking if the frequency was in use prior to sending their Bulletins. It was suggested that MSO's do not "ask" if the frequency is in use prior to being activated. And, of course, technically, that is correct. Two-meter repeaters do not ask if the frequency is in use either. But, obviously the person who activates a MSO or two-meter repeater must determine if the frequency is in use, prior to activating one of these systems. Same goes for the ARRL! It's really ironic that the ARRL complains about the recent DX QRM, out of band operations, etc., when their own station consistently violates the most basic of rules by not asking if the frequency is in use prior to sending their Bulletins. Shape up ARRL!

That's it for this month! Start packing, Dayton is just around the corner! --73-

de Dick, K0VKH

CONTESTING

Hal Blegen, WA7EGA
2021 E. Smythe Rd, Spangle, WA 99031

NEWFERS

I got a letter the other day from a newly-ordained extra class that made me feel so good that I am going to share some of it with you:

"I just made general (class) a month before that and I just couldn't wait to get on RTTY. But, of course, like anything else tried for the first time, I was a little bit scared of making a big fool of myself on a new mode. You were my first contact and you made me feel right at home... welcome to RTTY and I have loved it ever since."

He went to say that since that first time, he has more than 3,000 QSOs on RTTY, worked the ROUNDUP contest, has an RTTY WAS on the wall and is up to 94 confirmed toward his DXCC.

Stations that are new to the mode show up on the bands all the time and they're not too difficult to spot. They are the ones that are upside-down, calling CQ on 30 Hz shift, are listening 250 Hz off frequency and preface every transmission with about 300 RY's. Some of us who may be looking for DX, or tuning the band for a familiar call to ragchew, may avoid this guy like dental surgery. It's true. Getting a NEWFER into the ballpark on RTTY

can be frustrating and very time consuming but, if nobody makes the investment, it may be the first and last time that the fellow tries RTTY.Remember, the RTTY sub-band is currently under scrutiny by a pack of hungry packet developers who view it as "under utilized."

CONTEST DATE FOR REAL!

Trust me. The date is real. It has been certified by none less than Francesco himself, hand delivered by registered letter to my new home in Spangle, WA (which is so far removed from civilization that the letter carrier wanted the stamps). Unfortunately, getting the date right is only the beginning of a tough battle on this contest.

Don't be lulled into a false sense of fairness by the zone chart scoring system. This is a rate contest. EFFICIENCY and BAND AGILITY are the equalizers. There are a lot more RTTY stations in the USA for Europe to work, than visa-versa, so you have to work the same stations on more bands. By multiplying the QSO points by the total number of contacts, you can find yourself losing a little on each QSO and then trying to make up for it in volume.

Ten meters will be essential to any serious effort. If the band has only a spurious European opening but the US stations can work each other on ten meters for double scoring, it may turn out to be a close race. You will also need 80 meters. COZY DEAL anyone you can to a double point frequency at any time. EVEN A 2 POINT CONTACT ON 80 METERS IS A MULTIPLIER FOR YOUR ENTIRE SCORE!!!!

See you in the VOLTA.

de Hal, WA7EGA

ED: *1989 VOLTA RTTY contest results begin on page 20. The EXCHANGE POINTS Table can be found on page 9 of this issue. It is also sometimes referred to as "ZONE CHART." Either way it is the method of determining your score for the VOLTA RTTY contest and is also used by the ANARTS group. Save this issue or photo copy the chart because it is only published once each year.*

24th VOLTA RTTY DX CONTEST

TEST PERIOD: 12:00 GMT Saturday 12 May until 12:00 GMT Sunday, May 13th, 1990.

BANDS: 3.5 - 7 - 14 - 21 - 28 MHz Amateur bands.

CLASSES:

A1 -- Single operator, all bands
A2 -- Single operator, single band

B -- Multi operator, single transmitter
(List names and call signs of all operators).
C -- Shortwave listeners

SCORING: All two-way RTTY contacts will score in accordance with the EXCHANGE POINTS TABLE (printed in this issue). Contacts between stations within the same country will not be valid, e.g., a W2 station cannot work another W2 station but can work W1,W3,W4 etc. Contacts made outside one's own continent 3.5 or 28Mhz are worth DOUBLE points (Wow! lookout ten meters!!!)

CONTACTS: Stations may not be worked more than once on any band. Additional contacts may be made with the same station if a different band is used.

MULTIPLIERS: A multiplier of 1 is given for each country contacted. The same country may be claimed again if a different band is used. An additional multiplier is given for each INTER-CONTINENTAL COUNTRY worked on at least 4 bands. A contact with a station which would count as a multiplier will only be valid if that station appears in at least 4 other logs, or a contest log is received from that station.

SCORING: Total exchange points times the total number of multipliers time the total number of QSO's.

COUNTRIES: ARRL Country List plus each call area in Australia, Canada, and the USA will be counted as a separate country.

EXCHANGE: RST, QSO number and CQ ZONE number.

SWL's The same scoring rules will apply but must be based on stations and messages copied.

AWARDS: A trophy will be awarded to the top stations in each class. In addition, a certificate to ALL ENTRANTS.

LOGS AND SCORE SHEETS: Use one log per band. Logs must contain: BAND, DATE, TIME GMT, CALL SIGN OF THE STATION WORKED, MESSAGE SENT, MESSAGE RECEIVED, POINTS AND MULTIPLIERS. A summary score sheet is required with a list of multipliers worked. Comments will also be very much appreciated.

ALL LOGS MUST BE RECEIVED BY JULY 30th,1990!!!

SEND TO: Francesco Di Michele I2DMI
P.O. BOX 55 22063 Cantu'
ITALY

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Steamship Round of Beef
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Salad Bar
French Pastries

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Dinner 7:30
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UQ1GZW

This story submitted by Alex, UA9FBV outlines the effort some of the members of the UZ9FWA club station put together for the 1989 CQ RTTY Journal RTTY contest from Latvia.

by: **Alex, UA9FBV**

After our unsuccessful participation in the second WW RTTY contest last year (under the call UL0P/UZ9FWA), we concluded a new and different location was in order. One not too far from Europe with good propagation to the U.S. Our thoughts leaned toward the Baltic republics.

We also noticed, that in order to make a good effort, better radios would be needed over the present home-brew transceivers. Home-brew radios are good but lack such features as DFC, special service functions and duplexing ability. So the idea is born and now we must put it into practice.

First we found some good friends from the UQ1GZW gang who are well known as some of the best SSB and CW contesting team in Latvia. These men have nice antennas and a TS-440 transceiver. We also asked our friend Gena, UA9MA about his IC-701 transceiver that was a gift from INDEXA. He helped us with pleasure. Now we had two nice transceivers available and organized our team of Latvian and Perm operators.

The Thursday evening before the contest, we arrived by air at the city of Riga, the capital of Latvia. The city is very beautiful from the sky as we approach. Our luggage was not to heavy this trip, as it was on the last trip. We had only the IC-701, two computers with modems with us.

After a hearty welcome from our Latvian friends at the airport, we continued our journey by car in a northeastern direction to the Estonian border. The UQ1GZW station is located in the center of a "clear field" not far from a little town named VALKA on the Latvian side and VALGA on the Estonian side. (The Latvian-Estonian border divided the town into two parts.) There are no sources of industrial QRM at the location, so the noise level is very low.

There are four antenna towers, one at each corner of the square property and a little house used for the radio station in the center. Some vertical elements of a 3.5 MHz antenna system (with lobe switching) loomed in the distance on a hilltop near the edge of a forest. A very nice view and an excellent location.

The house contained two rooms. One room for the operating position and the other housed the fully automatic power amplifier and the kitchen.

Throughout Friday we prepared for the contest by getting the computers ready, soldering connections, and of course training operators on the use of the two transceivers. We used the UQ1GZW callsign during this period of testing and training and we were in no hurry. We heard some OMs say we were slow but they did not understand it was not contest time yet and we were training. HI!

Our hosts helped us with all the preparations and explained some of the local peculiarity of propagation to us. Juris, UQ2GM, (station chief), Oleg, UQ2GID, and Girt, UQ2GKL were of great help as well as excellent hosts.

We had two operating positions. One was based at the TS-440 and the second at the IC-701. The second station was used mainly for spotting, i.e., for receiving, and receiving new country stations as multipliers. Each transceiver was keyed through a simple blocking relay circuit which allowed only one transceiver on the air at a time. The radios were connected to the computers through the home-brew RTTY Shift Converters (designed by DJ6HP). Our computers were based upon the old INTEL 8080 CPU chips and did not have disk drives. So they were not as serviceable as an IBM type. (That is the one I dream of while sleeping, Hi!) However these units work well as RTTY terminal units. The software was written by me with the help of my friend Vadim, RA9FLW.

For the first time in my life, I was going to be operating without home made transceivers. Operating without touching the tuning dial during a "pile-up" and having all stations on frequency was a new experience. No need to touch the dial. In my view, the Americans are the most disciplined operators in the world allowing for quick QSO's somewhat like CW. It was a lot of fun operating under these conditions. Now I know how easy it is to operate when you can use industry manufactured radios. It would be impossible to built such a radio at home, at this time.

With the use of good equipment and antennas, we were able to produce 1400 contest QSOs with our team. Maybe not as high as HD8EX, but it is great progress for our group, where last year, using the callsign UL0P we had only 700 QSO's.

Unfortunately, we forgot to take along photo equipment, so there are no pictures of our effort in Latvia. Tell everyone the QSL cards for the contest station UQ0GZW are not ready yet. The printing process is not so fast in the USSR but all Hams will receive their cards in some future year. Hi!

By the way, we tried Packet from UQ but without success. Our computers are not yet perfected for this mode.

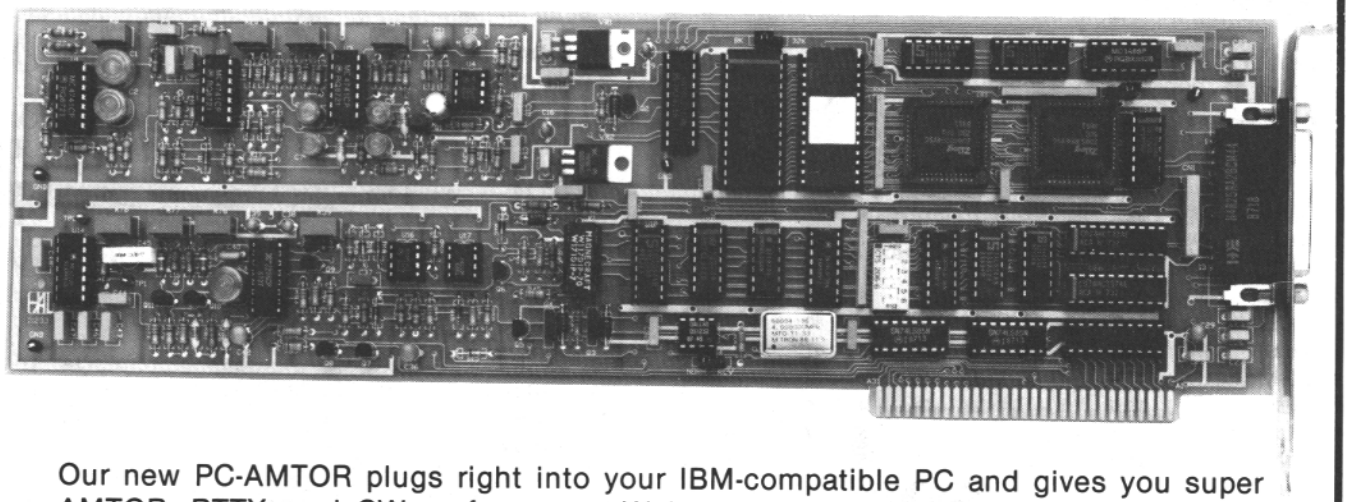
Besides our Latvian friends, the station operators were: Serge, RV9FQ, 31, married with 3 children, Ham since 1975; Vlad, UV9FM, 30, 2 children, Ham since 1976; myself Alex, UA9FBV, 31, 2 children, Ham since 1977. We are all extra class licensed (in USSR it is called the first category station).

Thank you and best regards from the gang at UZ9FWA (club station). (ex UQ0GZW, R9ZF, UL0P, UA0Y)

de **Alex, UA9FBV**

The pictures on page 21 show some of the operators from the UZ9FWA club that were taken during previous RTTY contests efforts.

PC-COMPATIBLE AMTOR, RTTY, & CW . . . THE NEW HAL PC-AMTOR



Our new PC-AMTOR plugs right into your IBM-compatible PC and gives you super AMTOR, RTTY, and CW performance. We've combined the best features of many of our other products to give you an easy to use, low cost, and very high performance PC terminal card.

• **AMTOR:** We have an entirely new algorithm that is really great! No more long waits to synchronize, no more strange link failures. This AMTOR *works*! Want to try CCIR 625 AMTOR? It's now legal and HAL has it!

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*STEP UP TO THE **BEST**, STEP UP TO HAL!*

Results of XXIII Allessandro Volta RTTY DX Contest 1989

Class A1: Single Operator All Bands

No	Callsign	QSO	Pts	Multi						Score
				3.5	7.0	14	21	28	TOT	
1	I2OLW	275	4589	3	7	47	43	10	110	138,817,250
2	I2HEO	198	3231	3	3	47	27	7	87	55,657,206
3	4M5RY	166	3440		7	41	30		78	44,541,120
4	JA6GIJ	148	3900			30	37	4	71	40,981,200
5	OH2LU	210	2365		1	37	33	9	80	39,732,000
6	VU2SJV	134	3517			30	24	13	67	31,575,626
7	K6WZ	168	2764			33	29		62	28,789,824
8	SM5FUG	140	1467			28	24	4	56	11,501,280
9	EA8RA	125	1528			31	1	5	37	7,067,000
10	I2WEG	105	1128	1	3	34	17	55		6,514,200
11	EA8AKQ	105	1181			18	23	5	46	5,704,230
12	KI4MI	78	1365			19	24		43	4,578,210
13	SP9BCH	98	881	2		31	19		52	4,489,576
14	YO6JN	91	1104			25	9		34	3,415,776
15	W1AX	65	1237			18	24		42	3,377,010
16	I0WQP	78	823			21	25	2	48	3,081,312
17	UA3TN	96	669			23	21	2	46	2,954,304
18	IV3ZDO	55	705			15	23	6	44	1,706,100
19	IK8HCM	65	553		1	25	16	3	45	1,617,525
20	Y23IL	71	570	3	2	20	12		37	1,497,390
21	Y24MN/A	64	520			18	16		34	1,131,520
22	YC0IKI	35	1297				21	3	24	1,089,480
23	LZ1KFM	71	501			17	12		29	1,031,559
24	SM4AAY	71	426			20	13		33	998,118
25	IK4BZR	50	378			16	14	3	33	623,700
26	I4IBR	37	428			16	12	4	32	506,752
27	VE6CNV	33	544			7	17		24	430,848
28	IT9DWO	37	302			11	16		27	301,698
29	SM3MID	44	264			10	13		23	267,168
30	N0FMR	30	514			9	8		17	262,140
31	WA8FLF	26	439			4	12		16	182,624
32	IV3IXN	25	160			10	8		18	72,000
33	I2HWI	21	164			6	10	1	17	58,548
34	DK5KJ	25	146			12	4		16	58,400
35	SM7BGE	27	134			7	5		12	43,416
36	I1VTX	13	63			9	2		11	9,009
37	ON4AHG	12	53			4	5		9	5,724
38	LA8BX	9	68			2	4		6	3,672
39	IK3MLH	4	33			3	1		4	528

CLASS A2: Single Operator Single Band 14MHz

No	Callsign	QSO	Pts	Multi						Score
				3.5	7	14	21	28	Tot	
1	OK2FD	183	2829			53			53	27,438,471
2	G4SKA	189	1772			48			48	16,075,584
3	SP3SUN	157	1761			43			43	11,888,511
4	YO6CFB	121	1591			38			38	7,315,418
5	I0ZSG	126	1185			40			40	5,972,400
6	EA1PJ	128	950			38			38	4,620,800
7	LZ1YE	76	850			35			35	2,261,000
8	I2KFW	73	797			35			35	2,036,335
9	LX3CP	71	571			27			27	1,094,607
10	OK2BXW	54	620			26			26	870,480
11	IK1DFH	52	424			33			33	727,584
12	I8VKB	49	334			26			26	425,516
13	I2JIN	39	400			27			27	421,400
14	IV3KCB	44	404			23			23	408,848
15	ZL2AKI	22	982			16			16	345,664
16	VK3EBP	22	839			16			16	295,328
17	UA9FBV	32	300			15			15	144,000
18	HA8AL	56	215			8			8	96,320
19	SP3XR	32	149			16			16	76,288
20	OH1KH	34	100			14			14	47,600
21	I2FUM	18	113			12			12	24,408
22	SM4CJY	15	51			7			7	5,355

CLASS A2: Single Operator Single Band 21 MHz

No	Callsign	QSO	Pts	Multi						Score
				3.5	7	14	21	28	Tot	
1	G0ATX	173	2432				40		40	16,829,440
2	WS7I	83	1729				38		38	5,453,266
3	W0YR/9	90	1651				36		36	5,349,240
4	W6/G0AZT	78	1430				32		32	3,569,280
5	SM4SSY	80	1088				30		30	2,611,200
6	EI3GC	98	855				31		31	2,597,490
7	VE6ZX	75	790				22		22	1,303,500
8	W7MI	43	950				26		26	1,062,100
9	NU1E	50	906				23		23	1,041,900
10	I1RJP	46	756				28		28	973,728
11	SP4KM	34	572				18		18	350,064
12	NW0F	23	300				13		13	89,700
13	IK0AUO	23	216				15		15	74,520
14	SM4GVR	18	185				15		15	49,950
15	SP2UUU	7	136				7		7	6,664

CLASS A2: Single Operator Single Band 28 MHz

No	Callsign	QSO	Pts	Multi						Score
				3.5	7	14	21	28	Tot	
1	SM4CMG	40	547					24	24	525,120

CLASS A2: Single Operator Single Band 3.5 MHz

No	Callsign	QSO	Pts	Multi						Score
				3.5	7	14	21	28	Tot	
1	SP3BGD	3	6	2					2	36

CLASS B: Multi Operator - Multi Band

No	Callsign	QSO	Pts	Multi						Score
				3.5	7	14	21	28	Tot	
1	LZ2KIM	319	5056		6	51	41	9	107	172,508,182
2	OK3RJB	165	1762	4	2	37	29	5	77	22,386,210
3	UZ9CWA	150	1869			20	31	2	53	14,850,550
4	SP3PLD	33	246			6	13		19	154,242

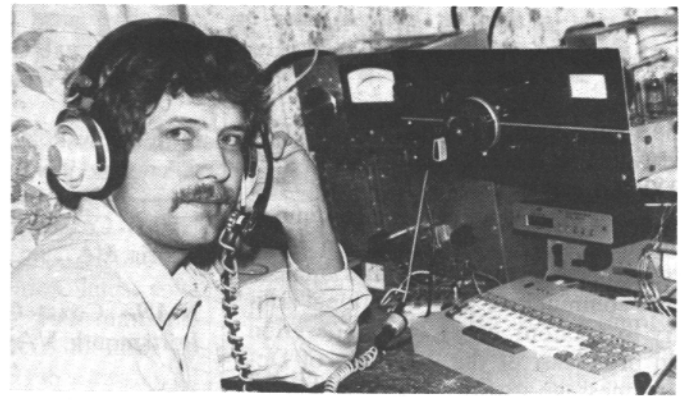
CLASS C: SWL

No	Callsign	QSO	Pts	Multi						Score
				3.5	7	14	21	28	Tot	
1	ONL 383	172	1796		3	32	27	2	64	19,770,368
2	I2-3089	73	878			20	20	2	42	2,691,948
3	I1-21171	68	773			27	18	3	48	2,523,072
4	G6LAU	79	653			22	18		40	2,063,480
5	ONL 6945	86	517			22	20	2	44	1,956,328
6	BRS 27239	71	320			17	12		29	658,880

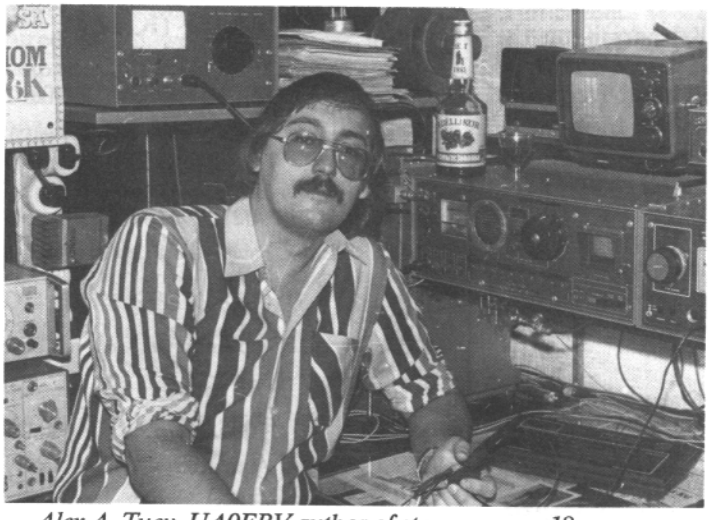
No	Callsign	QSO	Pts	Multi					Score
				3.5	7	14	21	28	Tot	
7	ONL 4003	38	201			19	7		26	198,588
8	ONL3993	28	203			12	9		21	119,364
9	ONL 4335	35	148			13		10	23	119,140
10	13-450/VE	22	237			12	7	1	20	104,280
11	IN3-085	18	134			8	4		12	28,944
12	SP 0181-GD	19	57			7	3		10	10,830

CONTROL LOGS: Y48YN, IK1FEK, EI0NDR, NW0F, SM4GVR, SM4CMG, SP4KM, NU1E, I2DJX, I2DMI.

See UQ1GZW story page 18 for more information on these operators from the USSR.



Serge, RV9FQ at home station. Serge is a very active DXer.



Alex A. Tuev, UA9FBV author of story on page 18.

L. to R. Serge, RV9FQ, Vlad, UV9FM, Alex, UA9FBV and Vadim, RA9FLW. Pix from UL0P RTTY contest effort in 1988.

Picture from UA0Y RTTY effort in 1987.

L. to R. Serge, RV9FQ, UA0YM (no name supplied), Alex, UA9FBV, Vlad, UV9FM, Vald, RV0YF, Mike, UA0YAG, Vadim, RA9FLW.

ARMED FORCES DAY 1990

The annual Armed Forces Day Communication Test is set for Saturday, 19 May 1990 and marks the 41st 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, RTTY and Packet radio.

These tests give both amateur radio operators and short wave listeners (SWL) the opportunity to demonstrate their individual technical skills. Special commemorative acknowledgment (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 SWL's 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.

CROSS BAND CONTACTS - The military to amateur cross band operations will be conducted from 19/1300 UTC (Universal Time) to 20/0245 UTC May 1990.

MILITARY STATIONS PARTICIPATING IN CROSS BAND OPERATIONS

AAE-- Army MARS Radio Station Fort Sam Houston, TX

AAH-- Army MARS Radio Station Fort Lewis, WA

AIR-- 2045th Comm. Group Andrews Air Force Base Washington, DC

NAM-- Naval Comm. Area Master Station LANT Norfolk, VA

NAV-- HQ Navy/Marine Corps MARS Radio Station Cheltenham, MD

NPG-- Naval Comm. Station NTTC Mare Island Vallejo, CA

NPL-- Naval Comm. Station San Diego, CA

NHM-- Coast Guard Radio Station Alexandria, VA

NMN-- Coast Guard Comm. Station Portsmouth, VA

NZL-- Marina Corps Air Station El Toro, CA

WAR-- HQ, Army MARS Radio Station Fort Detrick, MD

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

FREQ(KHZ)	EMISSION	STATION
4005.5	USB	NAM
4015.0	CW	NMH
4018.5	LSB	WAR
4025.0	LSB	AIR
4030.5	LSB	AAE
4033.5	LSB	AAH
6970.0	CW	NPG
6988.0	RTTY/CW	AAH
6995.5	CW	AIR
6998.5	CW	WAR
7301.5	LSB	NPG
7315.0	LSB	AIR
7346.5	LSB	NMH
7358.5	LSB	AAE
7365.0	CW	NPG
7372.5	RTTY	NAV
7375.0	RTTY	NZL
7382.5	RTTY	NPL
7393.0	LSB/RTTY/CW	NMN
10180.0	RTTY/CW	WAR
10259.5	CW	NPG
13927.5	RTTY	NPG
13975.5	CW	NPG
13986.5	RTTY	AIR
13994.5	USB	AAE
13997.5	CW	AIR
14375.0	USB	NPG
14385.0	USB	NPL
14389.5	USB	NAV
14400.0	USB/RTTY/CW	NAM
14403.5	USB	WAR
14408.0	USB	AIR
14440.0	RTTY	NMH
14480.0	USB	NZL
14488.5	USB	AAH
14511.5	RTTY/CW	AAE
20937.5	USB	NMH
20975.0	USB	AAH
20994.5	USB	WAR
20625.0	USB	NPG
24805.0	CW	NPG
27820.0	USB	AAH
27950.0	USB	NPG
27992.5	USB	AAE

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 20/0300 UTC May 1990. The RTTY Broadcast will begin at 20/0345 UTC May 1990 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 FREQUENCY (KHZ)

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

AAH 4021.5 7309.5 13994.5
HF/MARS Radio Facility Fort Lewis, WA

AIR 6995.5 13997.5
2045th Comm. Group Andrews Air Force Base Washington, DC

NAM 4005.0 7393.0 14400.0
NAVAL Comm. Area Master Station LANT Norfolk, VA

NAV 7372.5 14389.5
HQ Navy/Marine MARS Radio Station Cheltenham, MD

NPG 7365.0 13975.5 24805.0
NAVAL Comm. Station Stockton,CA

WAR 4030.5 6998.5 14403.5
HQ ARMY MARS Radio Station Fort Detrick, MD

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 27 May 1990 and submitted to the respective military commands as follows:(*Cont.23*)

CLASSIFIED AD DEPARTMENT

First 30 words $5.00, additional words 5 cents each. Cash with ad. Deadline for ads is 1st of month of publication. (Example - Ad arrives by 1st of September will be run in the September issue)

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NEWS - NEWS - NEWS -- NEWS
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(MARS Continued from page 22)

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AAE, AAH, WAR

Armed Forces Day Test Commander, USAISC Attn: ASOP-HF Fort Huachuca, AZ 85613-5000

NAM, NAV, NPG

Armed Forces Day Test Naval Comm. Unit Washington, DC 20397-5161

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