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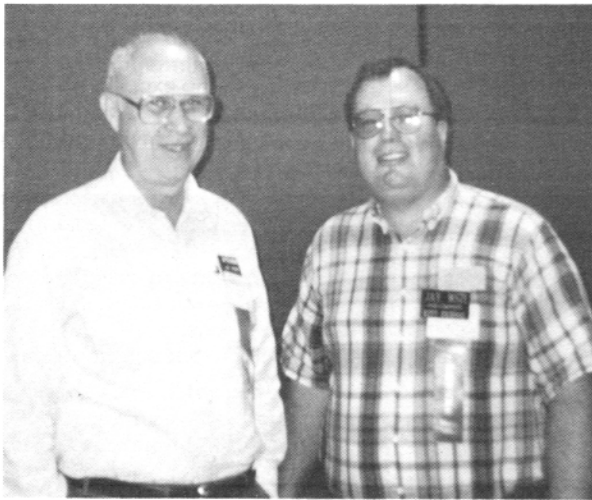
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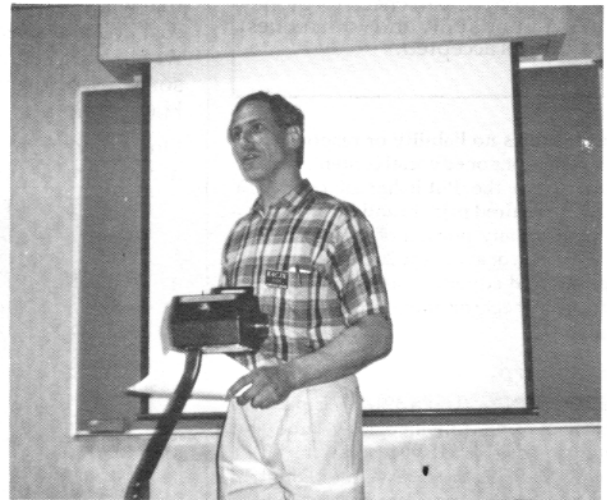
Dayton Hamvention 1992



RTTY Journal staff members pause for a picture. L. to R. Dale, W6IWO, Eddie, G0AZT, Dick, K0VKH, Jim, KE5HE, John, TG9VT, Jay, WS7I, Betsy, WV7Y. Dayton '92



Vic Poor, W5SMM, and Jay Townsend, WS7I pose for photo after Digital Digest forum where both gave presentations. Dayton '92



Sieve Waterman, K4CJX, moderator of APlink meeting. Dayton '92

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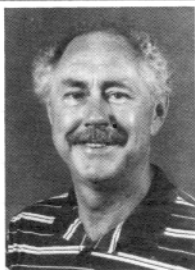
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HITS & MISSES

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Looking back to Dayton 1992

It all starts for me on Thursday evening when I arrive at the Radisson Hotel. The Radisson is where all us Digital types stay or try to stay each year. More on that later.

After check-in, and unpacking, it is time for the annual visit to the hotel cocktail lounge. There you will find all those who have arrived before me, telling tales of the past year and enjoying each other's company. This year was no exception, in fact, I encountered the largest group ever to meet in the lounge. There must have been over fifty of us in there at one time. As the cocktails limbered up our tongues, the conversations ran from DX to technical topics such as Clover and APlink.

This gathering usually lasts for a couple of hours after which, folks drift off in different directions for a leisurely dinner and more conversation. For me the evening ended somewhere around midnight Dayton time. Now for me, coming from the west coast, that was not too bad, but for those from the east coast, it was getting late. Eventually, we all part company, so that we can get some rest before we start another day of the Hamvention.

On Friday morning, those who went to bed at a reasonable hour, can be found roaming

the Flea Market at the Hamvention site. If you have never been to Dayton and experienced this phenomenon, let me tell you that you will need all the stamina you can muster. There are literally miles of flea market booths where you can find everything from nuts and bolts to KW amplifiers. There is homebrew gear for sale as well as new and used manufactured gear. It is guaranteed your feet will give out before you can finish one round of this giant Flea Market. A real shopper's paradise. I might also add that chances are, if you make the rounds of the Flea market, you will buy something to drag home with you, whether you need it or not.

Friday noon the Hamvention officially opens. The mad dash to get inside the arena is unbelievable. If it is raining, you will find yourself moving down the aisles at a snail's pace. The humidity level goes sky high and body odor permeates the air. You feel like you are in the locker room of a basketball team after a rigorous game. Fun? You bet it is! Where else in this world can you find all your friends and hundreds of DX folks congregated in one place to tell stories and share experiences. This is a *real* Ham radio celebration!

This year was no exception when it came to exhibitors present. No matter what you are looking for, you will find it here. Coax cable by the foot or by the mile, software



APlink operators and projectives gather for APlink meeting conducted by Steve, K4CJX.

available by the hundreds, hats, badges, food, books, are but a few of the thousands items for sale. All the manufacturers are here with all the latest gear. Some of the booths are so busy, you must wait to get in to see all the nice goodies they have to offer.

If you plan on going to Dayton this coming year, plan now and make a list of all the things you wish to buy. Chances are pretty good you will find each item there, just waiting for you.

On Friday afternoon, Steve Waterman, K4CJX, held an APlink meeting in the RTTY hospitality room of the Radisson hotel. There were about 35 APlink operators and prospective operators present. What a fine turnout for a first time attempt. Frank Moore, WA1URA/7, video taped the entire session. For those who would like to have a copy of this tape, I have asked Frank to make it available at a nominal cost. He has agreed to offer it to all interested parties for a cost of \$15.00. This cost will cover the cost of reproduction and mailing a copy to you. Making a commercial copy cost about \$10.00, so this \$15.00 fee is not making Frank any money. Thanks Frank for taking over this project. Let me tell you, I have a copy of the tape and it is well worth the fifteen bucks. Just being able to see all the folks on tape and listen to them is worth the price.

The tape includes a presentation by Bud Thompson, N01A, which covered some statistics of where we are now with APlink and some projections of where we are going in the future. The second presentation was given by Vic Poor, W5SMM, the author of APlink. Vic introduced his newest creation, a Windows server which can be used to operate different modes from windows plus handle user lists, and much more. I'm sure Jim Jennings, KE5HE, will cover more of this new program in his column. The last part of the program was given by Peter, TY1PS. Peter shows us his scanning program that works from software, no hardware needed. It currently works with Kenwood and Yaesu radios but not ICOM. Peter also had his beam heading program but time ran out, so he was unable to show that part of his presentation. I think we may get a write-up from Peter on that one in an upcoming issue of the RJ.

I have included some of the pictures I took of the APlink meeting group. You will find them scattered throughout this issue.

Friday evening is special for all of us. From about 7:30 P.M. until very late, we all congregate again in the hospitality room for more fellowship and a libation or two. The room this year was co-sponsored by AEA, HAL, and the RJ. This first night saw over 75 Digital types in attendance. Lots of pictures are included in this issue. I hear tell that even a DXpedition was planned that evening by an adventurous group. We had some "show and tell" items also. This year we had a new PACTOR unit on display loaned to us by the good folks of Pac-

Comm. Also Ray, WF1B, was showing his contesting software. Steve Schneider, KI4JQ, from BMK-Multy was there. Plus lots of handouts were on the tables for those looking for the latest in software. It was fun for all.

Saturday is my big day. This day, the Digital Digest forum is held and this year I was fortunate to have two great speakers. First was Vic Poor, W5SMM, who spoke on the different digital modes and how their throughputs are affected by propagation and other factors that cause signal corruption. Second, Jay Townsend, W57I, gave his presentation which covered some of the different software out there. He had a computer and TNC hooked to a device that sat on a view graph machine. This made it possible for him to project the actual programs up on the big screen for all to see. A very enlightening presentation. Wish we had taped these two outstanding presentations. Maybe next year.

The forum was well attended again this year. Seems like each year we are attracting more folks to the Digital Digest Forum. I don't know who will be on the program for next year yet, but I'm working on it.

Saturday night, things really come to a head for us digital types with the RTTY dinner at the Radisson. We had a fantastic turnout this year with over 100 in attendance. The food was great, the conversation lively, the program was interesting and entertaining and a lucky lady walked away with the large wall clock door prize.

David Larsen, KK4WW, and John Douglas, N0ISL, together presented a slide program of their work in taking computers and Ham gear into Russia and the Ukraine. The RJ has run a couple of articles on these two dedicated Hams in past issues and it was a pleasure to have them with us on this evening.

Steve Waterman, K4CJX, presented a plaque to Vic Poor, W5SMM, for his outstanding contribution to Ham radio with his APlink software. Vic's unselfish efforts were rewarded by those in attendance with a standing ovation. APlink is practically the world standard for AMTOR operators who handle traffic or operate an MBO. This was a most deserving award to a very deserving person. Congratulations Vic. Vic you are truly our "Digital Man of the Year."

It was then my pleasure to announce the "DXpedition of the Year" award which went to Luciano, I5FLN, for his effort with Albania, ZA1A, operation. I also announced the winners of last year's CQ/RTTY WW RTTY Contest. Those winners who were present, were acknowledged. I then announced that I would have a large block of rooms for next year in the hopes we will all have rooms at the Radisson and not have to be split

up among other hotels. A couple of other announcements were made and we departed the great halls of this year's dinner party, a little less hungry and certainly fulfilled by the memories of this gala affair.

After such a great dinner, where else to go but back to the hospitality suite for more great conversation. Again Saturday night more than 70 folks came in to enjoy the camaraderie.

For me, this year was a really great year and the digital turnout was the largest in years. Part of this was made possible by the Radisson Hotel giving us a block of rooms. A lot had to do with the fine work Steve, K4CJX, put into the APlink program and the dinner that he co-hosted with me. My sincere thanks to Steve for all the hard work he expended putting this year's event together.

As for the room problem, it turns out, we came up a little short, but I have been assured by the hotel brass that this will not happen next year. In fact, I have been guaranteed a larger block of rooms than I had for this year. So if you plan to go next year, start making your plans now. I will announce later this year when to start signing up for rooms. This program will be administered by me, so you must let me know of your desires when the time comes. Do not contact the Radisson, because they will only refer you to me. Stand by for my announcement.

So went Dayton this year. I had a ball and I'm already planning for next year. How about you?

Have a great Summer. Our next issue does not get mailed until late August.

de Dale, W6IWO ■



Margaret Kelly, a guest of Red, WB0ESF, wins door prize.



Jim Mortensen, N2HOS
65 Holly Place
Briarcliff Manor, NY 10510

DAYTON 1992

I missed it. I opted to pursue my new career as managing director of a one bed hospital and three-star restaurant here in Briarcliff. Since this new position entails such heady responsibilities as shopping, menu planning, cooking, dishwashing, hand-holding and handling an occasional bed pan, I couldn't walk away from it. The doctors flounder without me. And the patient thrives when I am near. Besides, who wants to go to Ohio to talk about mundane subjects such as RTTY or AMTOR when I can discuss the latest in hi-tech medication here everyday?

What trinket of interest is there in the flea market, or new gear to buy in the exhibition halls-of-plenty that rivals spending all my money (and then some) right here in this new hospital? What is there about a crusty group of APLink sysops that would attract a crowd? The RTTY Journal hospitality suite? I can't imagine hanging around there late at night wasting time in idle conversation with a bunch of keyboard fanatics. I didn't miss a thing.

Every bit of that is a lie. My pain was eased a bit by the pre-Dayton visit of Steve, K4CJX, and the early May visit of Peter TY1PS (of which, more later). Many phone calls from the front lines kept me posted on all of the scuttlebutt. Thanks to all for their most thoughtful help. By the way, I have the Radisson's very first confirmation from Dayton-1993!

Always the planner, I did prepare a Dayton agenda. The basic mission included picking up new or updated products and gathering users' points-of-view. The products will get here by mail. User comments must come via the same route. Please, please send me your personal thoughts about and evaluation of any of the programs mentioned here, good or bad. Your participation is important and it makes up for my slothful absence from Dayton. Write that letter now!

Notes of Interest

Clark-W9CD's PTERM is now in version 1.32 and includes a shareware text editor, EDITEXT. It is still available for a disk and SASE. Get it if you have a HAL PCI-3000! It is the best bargain around. Bo-W8ISG has

volunteered to send a free template (disk and SASE, of course) for an excellent DXCC management program that runs under Info-Select. It is fast and versatile. If you are using IS, get in touch with him. Love or hate Windows 3.1? Beg, borrow or steal the April 25th issue of PC Magazine. There is no better summary available. Bill-AA4M/6 writes to tell of a lower price on QQSL, now just \$19.95. He reminds me that it is a commercial product (the shareware version has a 3-label limit). Now in version 5.2, QQSL rates a ten.

Lan-Link. There is a file full of thoughtful letters here from users of this product. Two run to eight single-spaced pages! Thanks. Rest assured that they will be used in an upcoming column. Joe promised me a copy of the latest version released at Dayton. (Peter brought me a copy). The users, some of whom have beta-tested this new version convinced me that the program is worth an extensive evaluation. Coming soon.

Acu-Term. Ditto. The files tell me that Bill, the author, was thinking of converting this product from shareware to "commercial." He like many others before him has a growing frustration. The lack of response from those who are willing users of shareware (but are unwilling payers of the modest fee) is legendary. Our stingy habits will cost us eventually. Anyway, there was to be a new product introduced at Dayton and I do hope that Joe will send it to me. All of the other news about this well established, comprehensive product will also be welcome.

Windows 3.1. Microsoft released this new version just before Dayton. Among elite computer users (and there were many at the Radisson) this might be topic number one even at any hamfest! I wanted to listen in even though I already have it and Norton Desk Top v2.0 installed. My notebook 386 now has a desk top equal to the Macintosh, and it took only two years and twice the hardware to accomplish it. Well, maybe three times. Hurr! I like it so much that I may never add another upgrade... for fear of losing parts of it. Stay tuned.

PktGOLD. This manual, with characteristic modesty, describes the Multimode and Enhanced Edition as follows; "Multimode, multiple connect terminal programs, with multiple screens, point-and-shoot connects, binary file trans-

fers and more." That's true. InterFlex designed a veritable arsenal of weapons into this relatively expensive program (\$79.95 + \$5 S&H). Even the manual is impressive. An occasional packet user like me is a bit overwhelmed with the Desert Storm approach to that mode. I did everything I ever wished to do with packet and used a meager ten percent or so of the power of the program. So I need real help here. If you are a user get to the word processor (for all I know, there may be one included in PG!) and tell me about it. This big product needs a thorough review.

Harold, W0NAZ, started the ball rolling by writing about his troubles with PktGOLD and RTTY. He is unable to RX or TX RTTY overlay pictures. And also points out that there are printing problems because of the automatic placement of a C/R at the end of the 80 character line. This kills the use of wide carriage printers or the use of condensed type, something Harold has been doing for years on the old Commodore. The promised "fixes" are apparently not going to be delivered.

He agrees with me about the logging program and states that it is, "very clumsy to use and print out." Harold now is back to CompRtty II for RTTY/AMTOR and is using PG for packet. "As for packet, PG is a good program, but not for RTTY."

I did want to visit with Jeff, if he thought to go to Dayton. First I wished to reassure him about the RTTY Journal and then to follow up our endless telephone conversation of some weeks ago. This publication may not be what the PktGOLD honcho referred to when talking about the "real technical magazines." According to Jeff, those magazines allow product reviews written by the manufacturer. I have heard of such publications though not always in very flattering terms. RJ is like most periodicals. It does allow any legitimate commercial firm to discuss their product with the readers, at any length. RJ encourages such activity. We call the technique **advertising**. It is used by the best software companies to tell their full product story. He can find out all about it by calling Dale Sinner, the publisher of this fine journal. The number is right there on the masthead. Dale will provide all of the information about rates and availability.

ComprttyII. I wanted very much to talk to David, KC2HO, about his product, the ver-

sion that works with the HAL PCI-3000. I had also hoped to find some users since none have been in touch with me to date. A pioneer buyer, I have yet to accept it as the RTTY/AMTOR software champion that it strives to be. There were those bugs with the "Times Square" display referred to in an earlier column, but they were resolved in time for the BARTG contest. I was not an serious participant but I did make about 35 QSOs to give the software a decent workout.

The handling of the contest exchange (exactly as outlined in the manual) was splendid. CR11's ability to pick up the call sign off the screen for a dupe check is first rate, almost magic. If not a dupe the mouse then picks up the call and inserts it in the buffer. The entire exchange takes but a couple of keystrokes. It is about as difficult as working DX with the help of the DX Cluster--almost automatic. So far so good.

There were problems. My notes suggest a few of them. The logging program falls short of its target. Picking up the call with the mouse, for example, does transfer the call to the exchange buffer but not to the log. The "Times Square" display disappears at the TX/RX switchover and there is no on-screen reference to my half of the previous QSO. And, finally, at one point the call HP1AC became the default exchange. I couldn't get rid of it so I just shut it down. Hi! Overall, the logging is somewhat clumsy. Working with the log after the contest does not improve things at all.

This is an ambitious program (with a marginal manual) that promises and delivers a great deal. There is definitely room for it on many hard disks. There is also room for improvement and I trust that David will keep working with it.

Ambitious Program

Talking about an "ambitious program" reminds me once again of Windows. Microsoft attempted to provide a package that includes everything from entertainment to a terminal program. Perhaps they have to do so to provide a complete environment. In building it, they have come up with a great game of Solitaire, a good if basic terminal program, and attractive icons. There were compromises and the sad fact is that the File Manager is the slighted sector. This element which is critical to the entire concept, is arguably the weakest link. Version 3.1 failed to correct the problem. Thus we need Norton Desktop for Windows to make the environment perform as it should, though we trade off some speed for effectiveness. And we invest hours optimizing an environment that will never pay us back through increased productivity before the next upgrade arrives!

The moral of the Windows story? Put a note on your computer that says "Beware of programs that promise to do every-

thing!" The adage applies to all kinds of software as far as I know, including software written for our digital modes. I hear few drums beating for the several integrated terminal/logging programs on the market. Few of us can run two computers, one for each function, though that is obviously the most elegant solution! Most of us could easily run two windows in either Desqview or Windows though, and that is almost as efficient. It strikes me that two programs designed for their specific function, with uncluttered screens, might just be faster and easier than integration, and save us time and money as well. What do you think?

A HAPPY ENDING

The whirlwind touched down at 3PM the Sunday after Dayton, then Peter, TY1PS,

left late the next evening. It was a wonderful time, at least for me. I will gradually get back to normal but my 386/25 radio machine may never recover for it was "restructured" inside and out. But Peter's scanning program and APlink have been running in side-by-side windows for almost a day now. All of the bugs are gone, at least for the Yaesu FT1000D. We will soon know if it runs on the Kenwood 850. I will be happy to send you a copy of the disk (SASE and a disk please). It includes a "C"-to-"F" temperature converter, a slick beam-heading program and SCAN.EXE. VBRUN is also included (Microsoft allows that) so that you need not own Visual Basic to run this excellent Windows program. It will soon be installed in many APlink stations for sure. Thanks a lot Peter, for a fine product and a great visit.

de Jim, N2HOS ■



Hospitality Suite. Front left: Peter, TY1PS, to his left and then clockwise, Bud, N0IA, Harvey, KK4CQ, Joe, VE6PD, Steve, K4CJX. All are dedicated APlink operators.

SUMMER PUBLISHING SCHEDULE

The RTTY Journal is published ten times per year. The May/June and the July/August issues are combined. The May/June issue is mailed in late May and the July/August issue is mailed in late August. If you are a first year subscriber, you may not be aware of this schedule. This publishing schedule, gives the RTTY Journal staff the Summer months off. We enjoy this nice break for it gives us all time to re-group our thoughts and gather material for the Fall. We wish you all a fun-filled Summer and we will be back with you in the Fall with renewed vigor. Maybe even a few surprises. de Dale, W6IWO, Publisher

SUMMER PUBLISHING

1992 SARTG W/W RTTY CONTEST

We have the great pleasure to invite you to join the 22nd worldwide RTTY Contest run by the Scandinavian Amateur Radio Teleprinter Group, S.A.R.T.G.

Contest periods: 0000-0800 UTC, Saturday, August 15th 1600-2400 UTC, Saturday, August 15th 0800-1600 UTC, Sunday, August 16th, 1992

Bands: 3.5 - 7 - 14 - 21 - 28 MHz. The same station may be contacted once on each band for QSO and multiplier credits.

Classes: A) Single Operator, All Band B) Single Operator, Single Band C) Multi Operator, Single TX, All Bands D) SWLs, All Bands Note: A Single Operator, All Bands operator may also enter a Single Band of own choice.

Message: RST and QSO number starting with 001

QSO Points: QSO with own country, five (5) points. QSO with other countries in own continent, ten (10) points. QSO with other continents, fifteen (15) points. In Australia, Canada, Japan and USA, each call district will be considered a separate country.

Multipliers: Each country per the DXCC list will count as one (1) multiplier on each band, including the first contact with Australia, Canada, Japan, and USA, will count as one (1) multiplier on each band.

Scoring: Sum of QSO points X sum of multipliers = Total Score

SWLs: Use the same rules for scoring, but based on stations and messages copied.

Awards: To the top stations in each class, country and district mentioned above, in number of QSOs is reasonable.

Logs: The logs must be received by October 10th, 1992. The logs must contain: Band, Date/Time UTC, Callsign, Message sent and received, Points and Multiplier. Use a separate sheet for each band and enclose a Summary Sheet showing the scoring, class, You Call, Name and address. For multi-operator stations, the Calls or Names of all operators involved.

Send Logs to:

SARTG Contest Manager
Bo Ohlsson, SM4CMG
Skulsta 1258
S- 710 41 Fellingbro
Sweden

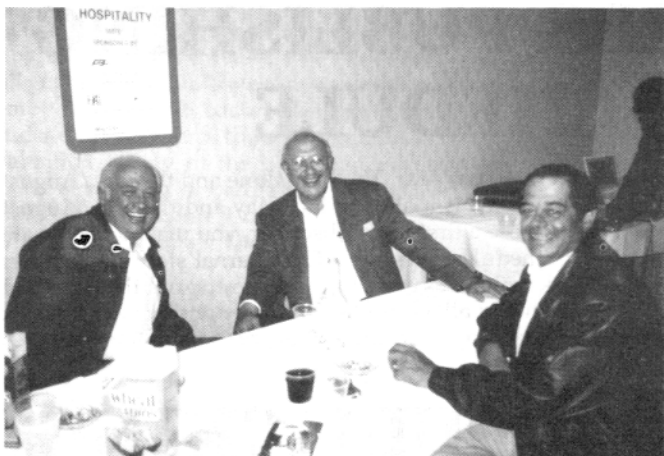
Your comments will be very much appreciated!



Kantronics folks: Jeff, Gloria, KA0ZTX, and Karl, WK5M. Dayton '92



Eddie, G0AZT, Peter, TY1PS, Ray, WF1B, Don, AA5AU, and Geoff, N2HOQ



From Mexico, Fernando, Arthur, XE1LL, Lorenzo. Dayton '92



Bob, K1UOL, John, WD4TKZ, Jay, K5CVD, Bill, K9GWT, Ray, W7GHM, Dayton '92

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MSOs

Dick Uhrmacher, K0VKH
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Hi Gang! By the time this issue of the RTTY Journal hits the streets, we will have once again ventured to that mecca in the East, the irresistible Dayton HAMVENTION. And, I hope to have some interesting information in the next MSO Column about all of the happenings. At this point in time, (early April), I hear all kinds of tidbits about RTTY, PC-CLOVER, PACTOR, APLINK, PAMS, etc., and it should be a very interesting HAMVENTION.

This month's "MSO Column" is a continuation of the subjects initially started in the March 1992 column, addressing use of "off the shelf" amateur radio equipment in digital service. Most of this information has been gained by my personal use of various pieces of equipment in digital service over the years, and I encourage anyone who has additional information to forward it along to me, and I'll be more than happy to include it in a future article.

FREQUENCY STABILIZATION OF MSO'S, CBMS'S, APLINK/PAMS SYSTEMS, ETC.

Nothing is more frustrating for either remote users, or SYSOP's, than a "wandering" MSO, CBMS (computer based mailbox system), APLINK/PAMS system, or other digital BBS system. The remote user quickly tires of having to "go fish" for the system he wants to use, by moving his transmit frequency up and down the spectrum until he's lucky enough to activate it, and he quickly decides to find a more reliable system to use. The SYSOP (system operator) wonders why he has dedicated time, money and equipment in the pursuit of public service, only to find that few utilize his wandering system. Frequency stabilization of dedicated BBS-type systems has to be near the very top of the SYSOP's list of "things to do". Without adequate frequency stability, the SYSOP's best efforts are probably doomed to failure, primarily because remote users will not want to take the time to "hunt" for his system, and once found, they doubt that it will appear again on the same frequency.

Over the past 14 years of providing BBS-type (MSO) activities, I've found that there are a few very basic techniques that will

improve overall frequency stability of most commercial, off-the-shelf, amateur radio equipment. Just a little forethought goes a long way! For example, both the Kenwood TS-820S and TS-830S transceivers will perform very adequately in MSO service, providing that they are properly prepared for this type service. MSO service, (as differentiated from AMTOR/APLINK/PAMS service), is 100 percent duty cycle, with long transmissions of RTTY code, which generate a great deal of heat. Although both of these transceivers have fans which exhaust heat from the final amplifier cage, radiant heat from the final amplifier section most certainly will have an effect on frequency stability.

As the ambient temperature within these transceivers change, (hotter while transmitting, with a cooling period while receiving), the values of components that determine output frequency change, causing the MSO to wander excessively. The SYSOP must institute measures to first eliminate as much of the unwanted heat as possible, and secondly to shield frequency determining components from that part of the heat that remains. With respect to the TS-820/830S, I have found that merely setting a "whisper fan" on top of the transceiver cabinet, immediately in front of the final amplifier RF cage, exhausts most of the unwanted heat during long RTTY transmissions. The combination of the whisper fan, and RF amplifier cage fan, keeps the transceiver at a reasonable temperature.

Secondly, there's absolutely no substitute for crystal control for these transceivers! In SSB, and even CW service, the VFOs in the TS-820S and TS-830S are stable enough without crystal control. The local operator adjusts the VFO as necessary to make the voice sound natural, or to make the CW tone sound to his liking. However, the BBS-type system, which must not drift more than 20 to 30 Hertz, cannot re-adjust itself while in automated service. The VFO is just not stable enough to provide this frequency stability, and crystal control is the answer. Very long-term frequency stability is assured with crystal control, (I find that my TS-830S crystal only needs calibration on an annual basis, and then it's still very close to the advertised frequency), almost totally eliminating worries about frequency stability.

Here's a tip I found that even improves on crystal control. This tip applies to not only the crystal used in the crystal oscillator (VFO) circuit, but also to ANY crystals that are used in the entire frequency determining system. Temperature swings, (hot, then cool, then hot, etc), effect crystals just as they effect other components. Try shielding your frequency determining crystals with a small cube, (about one inch square), of plain old styrofoam. Simply cut a small cube, make an indentation for the crystal in it, and tape it in place over the crystal. This "insulation" will spare the crystal from those hot and cold drafts, and do a lot to improve frequency stability.

The Kenwood TS-440S is probably one of the most often used transceivers these days in BBS-type service, and generally it performs admirably. Its solid-state, 12 VDC, architecture is ideally suited for automated service, and it's frequency stability is quite good, with one exception. I have used three different TS-440S's in RTTY MSO and APLINK/PAMS service, and all three units did display about 40 to 60 Hertz of "warm-up drift". For the MSO/APLINK/PAMS SYSOP, this drift is of little apparent consequence, since his equipment is left "on" all of the time. The frequency determining components arrive at some ambient temperature level, there isn't a lot of hot and cold variations, and the transceiver generally stays put.

For the remote user however, this "warm-up drift" can present some problems. If one typically turns the TS-440S "on", attempts to link or connect to his favorite MSO, APLINK or PAMS system, without letting the TS-440S warm up a bit, (about 45 minutes is needed), then he may have difficulty in finding the system of his choice. Forty to 60 Hertz of frequency drift really is quite acceptable in a unit like the TS-440S, and I'm not being critical when I mention it. However, the remote user must take this drift into account when he first fires up this transceiver, or "go fish" becomes a reality.

Finally, calibration of your transceiver, whether it be a new IC-781, or an old TS-820S, is essential if you are "system hopping". If you only check into one MSO, then calibration isn't as important, as you probably know where it appears on your digital readout. But, with MSOs, APLINK and PAMS systems available on most all of the HF bands these days, (through dedication

to one frequency, or through "scanning" of many frequencies), accurate calibration of your digital readout becomes paramount. Again, calibrate well, or "go fish!"

WHERE'S THE "NATIONAL AUTOSTART FREQUENCY", HOW DO I ACCESS SYSTEMS THERE?

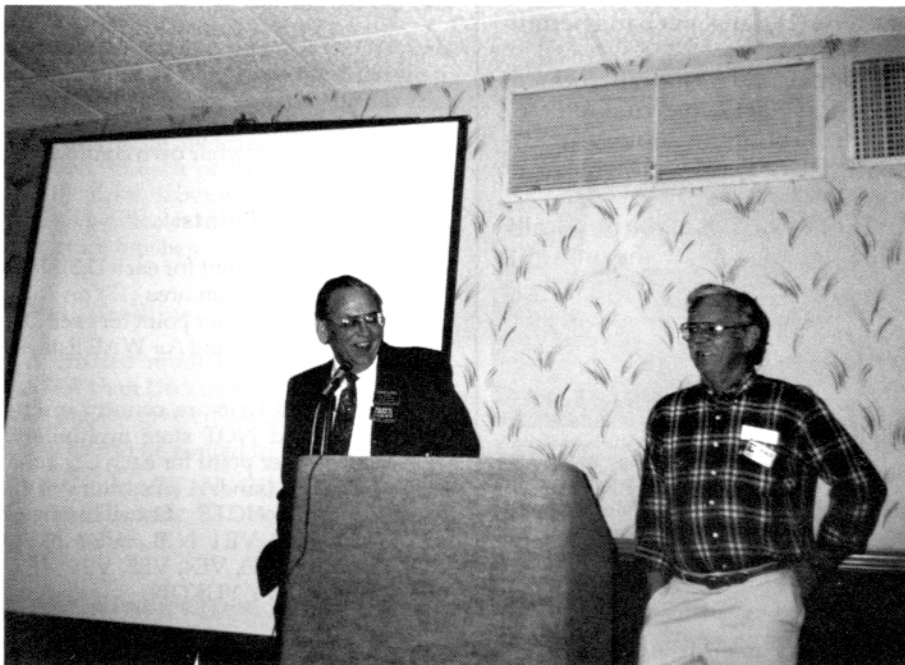
I had a very nice letter from Joe, KA2ENK, and he asks that I once again speak on the subject of the National Autostart Frequency, (NAF), and how to gain access to some of the systems parked there. The NAF is located on 14 085 625 Hertz, (mark frequency), 14 087 750 Hertz (carrier frequency). All of the systems parked on this frequency are on RTTY, 74 baud (100 WPM), normal polarity. All systems use the HAL MSO commands, and the "access code" consists of the letters "MSO", followed by the last three letters of the station callsign. For example, my MSO access code is: MSOVKH. Each of the systems have a

Help feature, that will list the commands essential for operating the system. Note that ALL commands to the MSO's must be "left justified", (received by the MSO on the left most margin), and you can accomplish this left-justification by prefacing each command to the MSO with a press of your ENTER (or in some cases RETURN) key. Secondly, all commands to the MSO must be prefaced with a "period", (i.e. .HELP .SDIR .EXIT), so that commands to the MSO are differentiated from normal text.

The National Autostart Frequency has been in existence since 1978, and all are more than welcome to utilize the systems parked there. You'll find a relaxed atmosphere, where rag-chewing, technical information, message traffic, etc., takes place. Drop in at any time!

That's it for this month Gang! Have fun, enjoy your favorite digital system, and I'll see you on the MSOs!

73 de Dick, K0VKH ■



L. to R. David Larsen KK4WW, and John Douglas, N0ISL, RTTY dinner speakers.

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RFI

Billy Capers, AL7BB, offers the following solution to an ugly RFI problem.

I recently retired old "Fat Albert" the overworked XT, and replaced it with a new 486 EISA system that is as RFI proof as they get. In fact, it is so clean that strange RFI started showing up as soon as I put the new system on line. Funny how the more noise you get rid of, the more noise you hear.

The problem I started having was a lock up of the system in the transmit mode on some bands when running in excess of a "few" hundred watts of RF. Reducing the power to less than 100 watts would clear up the problem. This problem was not noted on Old Fat Albert, so I assumed it was a computer related RF problem getting back into the system.

After trying to trace down the cause of the latest culprit in the RFI hunt, I found that the IF-232C interface for the Kenwood was the culprit. After doing a bit of checking, I find that Kenwood did not tie the case of the IF-232C to common ground, thus, the case is floating somewhere in the near region of whatever.. Anyway, a short jumper from pin 7 of the RS-232 cable to the shell of the DB-25 connector cleaned up the problem.

It seems that the case was acting as an antenna, and feeding the RF back to the serial port and locking up not only COM-2 but also COM-1 which feeds the TNC.

I could have gone into the IF-232C, and done the same thing, but in the early hours of the morning, I was looking for a quick and dirty cure, and since it worked so well, I have left well enough alone.

I know that Pin 1 is supposed to be case ground, and Pin 7 is signal ground, however, I have found on many RS-232 devices that Pin 1 is not used in some cases, whereas Pin 7 is used in almost all, therefore I chose Pin 7 over Pin 1.

Perhaps others using the IF-232C might also be having the same problem, therefore I offer this tidbit of info.

Billy Capers, AL7BB, 1414 Patterson St., Anchorage, AK 99504.

The 1992 CQ W/W RTTY DX Contest

Starts 0000 UTC Saturday - Ends 2400 UTC Sunday -- September 26-27, 1992

I. Announcing:

The Sixth Annual CQWW RTTY DX Contest, Co-Sponsored by The RTTY Journal and CQ magazine.

II. Objective:

For amateurs around the world to contact other amateurs in as many CQ Zones and countries as possible using the digital modes.

III. Contest Period:

0000 UTC September 26 to 2400 UTC September 27 1992. The total contest period is 48 hours, but no more than 30 hours of operation are permitted for single operator stations. The 18 hours of OFF time can be taken any time during the contest period, but OFF periods may NOT be less than Three (3) hours in length. All ON and OFF periods MUST be clearly noted in the log and summary sheets.

(a) Multi-Operator and Multi-Multi stations may operate the entire 48 hour period.

(b) A Single Operator MAY operate more than the 30 hours, but only the FIRST 30 hours will count toward their Official Score. (this allows rarer DX to give their multiplier to more stations)

NOTE OPERATOR CLASSES!!!

IV. Operator Classes:

- 1. Single Operator, All Band and Single Band. One person performs all operating and logging functions. Use of spotting nets, DX Alert Packet Systems, telephone etc. is NOT permitted.
- 2. Single Operator Assisted, All Band Only. One person performs all operating and logging functions, however the use of DX spotting nets or any other form of DX alerting assistance is allowed. The operator can change bands at any time. Single operator stations are allowed only one transmitted signal at any given time.
- 3. Multi-Operator, Single Transmitter. All band entry only. More than one person operates, logs, checks for duplicates, use of a spotting net,

etc. (a) Only one (1) transmitter and one (1) band permitted during the same time period (defined as ten (10) minutes). Once the station has begun operation on a given band, it MUST remain on that band for 10 minutes; listening time counts as operating time. Exception: One --- and only one--- other band may be used during the same time period if and only if --the station worked is a new multiplier. Logs found in violation of the ten(10) minute rule will be automatically reclassified as multi-multi to reflect their actual status.

- 4. Multi-Operator, Multi-Transmitter. All band entry only. No limit to the number of transmitters, but only one (1) signal per band permitted.

(a) All transmitters must be located within a 500 meter diameter or within the property limits of the station licensee's address, whichever is greater.

(b) The antennas must be physically connected by wires to the transmitter.

V. Entry Categories:

Single Operator entries may enter either:

- (A) All Band.
- (B) Single Band.

Single Operator Assisted and Multi Operator entries can only enter all band only.

VI. Modes:

Contacts may be made using Baudot, ASCII, AMTOR (FEC & ARQ) Packet. (No unattended operation or contacts through Gateways or Digipeaters).

VII. Bands:

80, 40, 20, 15 and 10 meters.

VIII. Valid Contacts:

A given station may be contacted only ONCE per band regardless of the Digital MODE employed. Additional contacts are allowed with the same station on each of the other bands as well.

IX. Exchange:

Stations within the 48 Continental United States and the 13 Canadian areas must transmit RST, State or VE area, and CQ ZONE number. All other stations must transmit RST and CQ Zone number.

X. Countries:

The ARRL and WAE Country lists will be used.

NOTE: THE U.S.A. AND CANADA COUNT AS COUNTRY MULTIPLIERS.

EXAMPLE: The 1st US State and Canadian area you work not only count as a multiplier for the state or area, but also count as a country multiplier for each band.

XI. QSO Points:

One (1) QSO point for contacts within your own country. Two (2) QSO points for contacts outside your own country but within your own continent. Three (3) QSO points for contacts outside your own continent.

XII. Multiplier Points:

One (1) multiplier point for each U.S. state (48) and each Canadian area (13) on each band. One (1) multiplier point for each DX country in the ARRL and/or WAE lists on each band.

NOTE: KL7 and KH6 are country multiplier ONLY and NOT state multipliers. One (1) multiplier point for each CQ zone worked on each band. A maximum of 40 Zones per band. NOTE: Canadian areas are VO1, VO2, VE1 N.B., VE1 N.S., VE1 P.E.I., VE2, VE3, VE4, VE5, VE6, VE7, VE8 N.W.T and VY YUKON.

XIII. Final Score:

Total QSO points times the total multipliers equals the total claimed score.

XIV. Contest Entries and Logging Instructions:

CQWW RTTY DX logs and forms should be used to facilitate scoring and checking. All Logs must show: 1. Times in UTC. 2. All sent and received exchanges are to be logged. (Callsign, RST, Zone, Country, State/VE, points claimed) 3. Indicate State/VE area, Zone and Country Multiplier only the FIRST TIME it is worked on EACH BAND. 4. Use a separate log sheet for EACH BAND. 5. A check list of dupli-

cate contacts for EACH BAND (DUPE SHEET)6. A MULTIPLIER Check Sheet for each band.7. An overall SUMMARY SHEET showing total QSOs, Points, Zones countries and states/VE areas worked.8. Each entry must be accompanied by a signed declaration that all contest rules and regulations for amateur radio in the country of operation have been observed. Contest forms are available from CQ, The RTTY Journal and the Contest Director. The RTTY Journal's address is 9085 La Casita Avenue, Fountain Valley, CA 92708. Please include a large SASE with 2 units of US first class postage or IRCs.

XV. Disqualifications:

Operating in an unsportsmanlike manner, manipulating scores or times to achieve a score advantage, or failure to omit duplicate contacts which would reduce the overall score more than 2% are grounds for disqualification. The use of Non Amateur means such as telephones, telegrams ,etc., to elicit contacts or multipliers DURING the contest is unsportsmanlike and the entry is subject to disqualification. Actions and decisions of the Contest Committee are official and final.

XVI. Awards:

Plaques will be awarded to the first-place finishers in each of the operator classes. Certificates will be awarded to second and third. Certificates will be awarded to the first place finishers in each DX Country.

XVII. Deadline:

All entries must be postmarked NO LATER than December 1, 1992. An extension may be given if requested.

Logs should be mailed to:

Roy Gould, KT1N, CQWW RTTY DX Contest Director, P.O. Box DX, Stow, MA 01775, U.S.A.

XVIII. Plaques (Donors):

Single Operator, All Band:

World - AEA, Advanced Electronic Applications, Inc.

North America - HAL Communications Corp.

South America - Association of DX-EX, Ecuador

Europe - HAL Communications Corp.

Oceania - The RTTY Journal

Asia - N5JJ, Memorial

Africa - Roy, KT1N & Roland, N1FTD

Single Operator, Single Band:

14 MHZ. - Kunihiko Fujii, JH1QDB

21 MHZ. - Denis, WD4KXB & Mike, KA4RRU

28 MHZ. - Barbara, SP2FF & Chris, SP2UUU

Single Operator Assisted:

World - CQ MAGAZINE

Continents - Open

Multi Operator Single Transmitter:

World - AEA, Advanced Electronic Applications, Inc.

Continents - Open

Multi Operator, Multi Transmitter:

World - CQ MAGAZINE

Continents - Open

There are many plaques looking for sponsors, Single Band, a specific country, Multi Op by continent etc. If interested, contact the Contest Director.

de Roy, KT1N ■



Antennas at DL1BFZ, CQ RTTY Contest 1991



Antennas at ON4UN, 10 mtr: 6 El. at 60ft., 15 mtr: 6 El. at 70ft., 20 mtr: 5 El. at 85ft., 40 mtr: 3 El. at 100ft., 80 mtr: 85ft. vertical and 135ft. vertical, 160 mtr: 135 ft. vertical and beverages (1000ft. long in 12 directions)



The operating position at the famous UZ9CWA station. Always a winner or top contender.

RTTY DINNER



David, KK4WW, (hidden) Gaynell, KD4GMW, John, N0ISL, Bob, W6YMR, ron, N2JAW, John, WA9FCH, Bud, N0IA, Jim, W4NQB, Steve, K4CJX.



Jody, VP5JM, Bob, W4NPX-VP5CPX, Mel, K0PFX, Arthur, XE1LL, Helen, WB1AOB (XYL of W1JY), Johnny, W1JY, Linda, (xyl of Peter, WA2MFY, Joe, VE6PD.



Ray, WF1B, (partially hidden), Bill, K2PEQ, Jose, PJ2MI, Doris, NW2B, Jerry, NO2T, Joseph, VE3RDW, Ray, VE3UR, Bob, VE3JAN, Ed, AA4TH



Stewart, KE5PO, John, TG9VT (partially hidden), Ted, HC5K, Peter, TY1PS, Jay, WS7I, Betsy, WV7Y, Larry, KA0JRQ, Martin W5HTY, Tony, WA4JQS, Bob, WB2CTL.



Don, AASAU, and Eddie, G0AZT are missing in this picture but were at the table. Next was Gary, N4LIG, Barbara, N4LIH, Gladys (XYL) or N0FMR, Frank, N0FMR, Dewey, W8GE, Al, W8PBX



Tom, N5TC, (mostly hidden), Al, W5UJF, Jo, N5RKC (XYL of Ed), Ed, W5TOO, Vic, W5SMM, Jim, KE5HE, Connie, (XYL of Jim, missed the picture)

DAYTON 1992



Joan, WS8JH, Jay, WB8ZTY, and Clark, WD9CD were out of camera scope, next is Frank, K4KOZ, Rich, KC0KT, Dick, K0VKH, Jay, KB0ATQ, Don, K8WZX, and James, W8EXI.



Left front, Joe, K0BX, Elroy, N0BUS, and Win, KB0KK, are hidden, next is Gordon, N00G, Curt, W0SN, Rick, AB4U, John, WA5FAC, Harvey, KK4CQ, Nick, N4SS, and Ken, KS9I



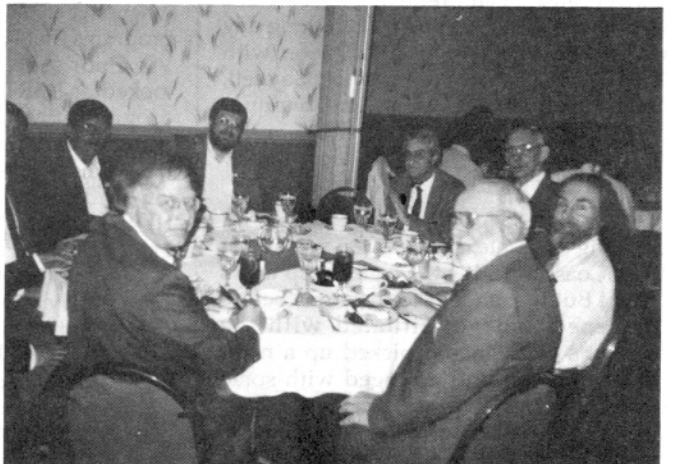
Red, WB0ESF, partially hidden, next Arthur, guest of Red's, Enid (XYL to Red) and Margaret (XYL of Arthur and winner of door prize)



Left front, John, N10M, Frank, N2FF and Steve, AC4IW, are hidden, Richard, AC2P, Robert, KE2FE, Jim, KA2LCC, Jules, W2JGR, Bill, W0LHS, and Bob, W0HAH.



Geoff, N2HOQ, and Stephen, N2HOP, out of view; next is Bob, WA9AKT, David, KB1PJ, Al, W2TKU, Jay, K5CVD, Frank, WA1URA, Bob, K1UOL.



Left front, Drew, K9CW, Mark, KA9JDQ (hidden), Mark, WB9HFK, Jim, N9LNQ, Tom, WB9RWQ, Wayne, NZ4W, Bill, K9GWT, Ray, W7GHM, Bob, KC9UU.



Jay Townsend, WS7I
P.O. BOX 644
Spokane, WA 99210

THE MAILBAG

This month's mail bag seemed never ending. Ryan, N7NSI, of AEA sent me a nice list of terminal programs that are purported to work for the PK-232. Joel, AA5YA, sent me a letter about interfacing the TU470 and the BMKMULTY program. I also received my Flesher TU-470 back from Steven at Schnedler Systems with a cable made for the BMKMULTY program. I had spoken with Steven at Dayton. Tom, KC4CH, wrote me a lengthy letter about the MFJ 1278 and his experiences with their Multicom program. Tom closed with a humorous letter about the "No hassle Amateur Radio License" which I will save for an April column some year. Another gem, from the far North (Alaska) should be printed elsewhere in this issue. Thanks, BB.

DAYTON A DAY AT A TIME

Betsy and I arrived Thursday in Dayton. This was our first trip to Dayton and for those of you who haven't yet attended, I can only say, "one day you must go." We wandered into the lounge and promptly met many people who are digital legends. Clark, W9CD, Bill, W0LHS, Dick, K0VKH, Bill, K9GWT, Peter, TY1PS, John, TG9VT, Jim, KE5HE, Mr. Clown, Bob, W0HAH (kept us laughing for days), Ted HC5K, Steve, K4CJX, Ray, W7GHM (Mr. Clover) and a bunch of others who I have left out only because I can't remember their calls. Gentlemen all. We capped off the long day with a dinner party in the dining room with David, KK4WW, and his wife Gaynell. David was scheduled as the banquet speaker on Saturday night.

FRIDAY ARRIVES

Partying until late is easy when you are on West Coast time, it's the waking up that's tough. But we made it to the arena before it opened and got situated with the speaker's committee. I picked up a notebook computer and arranged with some others to get a viewing screen for the overhead to project my software discussion on Saturday. I made several trips to all the digital manufactures just as the gates opened to the flood of humanity. I must say Dayton is just too large to believe!

I had lots of configuring to do, so left rather early from the arena and went back to the Radisson Hotel to prepare for Saturday. The software loaded nicely and configured for the screen, but I couldn't test the projection device since the only viewgraph didn't put out light but reflected it. I sneaked a few peaks at a presentation in the RTTY Hospitality Suite on an APLINK discussion given by Bud Thompson, N0IA, and Vic Poor, W5SMM, to APLINKsysops and other interested hams. This meeting was hosted by Steve, K4CJX.

Friday evening Betsy and I had a quiet dinner with a dear friend, Ted, HC5K, and then retired to the hospitality suite to visit other friends. Jules, W2JGR, and others came in from the DX dinner. Bill Henry and I closed down the room at 0200 after a big round of discussions. Topics of the evening were: Digital thru-put, ARRL, DX, Contesting, and Packet. A few of us heard a story about another friend in a little Kansas town and a call to the local sheriff to check on him. The fun, is beyond description, the experience I can only say needs to be done and YOU must someday do Dayton. As a member of the Digital community you have a place to stay, you have a bunch of friends to be with and it will be a great time!

SATURDAY AT THE ARENA

This is the day of the Digital Digest Forum where we took a look at some software programs that I chose to feature. Following Vic Poor's presentation came mine. I looked at DSRTTY my favorite keyboard program; BMKMULTY a great piece of software and an outstanding idea; two new programs for the Kantronics KAM, KAM-GOLD by the authors of PK-GOLD, Interflex Systems; and Kantronic's own HostMaster II Plus. I closed with a look at SCOTCHLG, a fine example of a contest program by a contesteer. Luckily the major disaster struck before the forum as the computer bag I had my KAM in fell apart and the KAM bounced a few times on the concrete floor of the Dayton Arena. Thanks to Kantronics for a loaner and a repair.

Saturday was the big banquet (the food was even good) and I hate banquets. Tony, WA4JQS, of recent VP8SSI (South Sandwich) fame was at our table with still a bit of battle fatigue apparent. But he did announce that more DXpeditions were in the wind for the ice regions of that part of the world. We met PJ2MI, and Jody, VP5JM, in the hospitality suite. The swamp rat Don, AA5AU, Barbara, N4LIH, and Eddie, G0AZT were making plans for a multi operator contest as P40V in September.

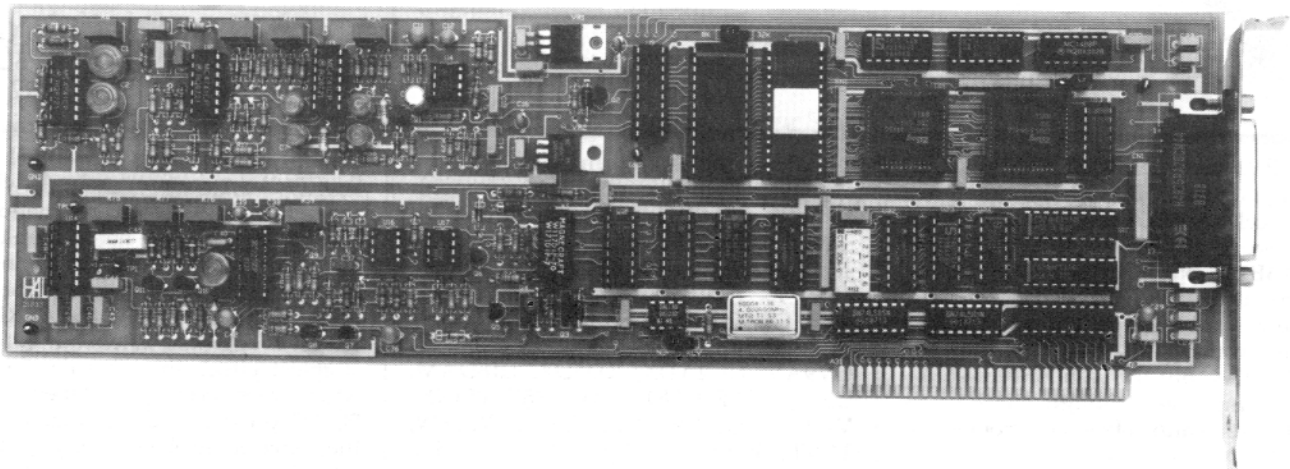
DOWN TO THE FINISH – SUNDAY

This was actually the best day of all. It was quiet and I made all the booths that I had wanted to see. I bought a couple of items. A rotator delay from C.A.T.S. which delays the brake on a tail wister. It works marvelously. Picked up some information on modems from DRSI. Bought a couple of items from Dick, AK1A, the PacketCluster software man. Had a nice chat with Gwyn Reedy president of PacComm. I hope to get a couple of their items for packet and do some hardware articles based on them. 9600 baud seemed to be the hot topic along with PACTOR. I believe Eddie will be doing some PACTOR articles and I will be looking at the 9600 baud stuff. Kantronics had a new prototype of a real neat looking small (tiny & Foxy) modem for portable VHF work. AEA had the DSP 2232 going and Hal Communications had the Clover PCI-4000 running. A couple of new software programs were out by WF1B and the InterFlex folks with KAM-GOLD. One of the hottest interest items was in a new area of digital. Digital Voice by K1EA of CT program/contest fame. This unit will revolutionize SSB contesting.

Summing up my impressions of Dayton 1992, "Dayton is people." Good friends, good times, big crowds, lots of laughter and much pleasure. I was glad that this time we could attend. Hope that you can do so some year.

73, de Jay Ws7i ■

A Winning Combination . . . The PCI-3000 and SPT-2 from HAL!



The HAL PCI-3000/PC-AMTOR system is designed to put your PC on the HF bands with outstanding performance at an affordable price. Amtor allows you to get through when other methods fail. If you've ever been DX-ing with someone on Amtor when 20 meters dies out in the evening, you know what we mean. Things may slow down, but you can usually keep up the QSO!

The PCI-3000 doesn't limit you to Amtor. You also get high-performance Baudot and ASCII RTTY, CW, and Search Mode. Search Mode lets you simply tune in the signal—we take it from there. The PCI-3000 automatically finds the correct code, speed, and polarity. No more guessing!

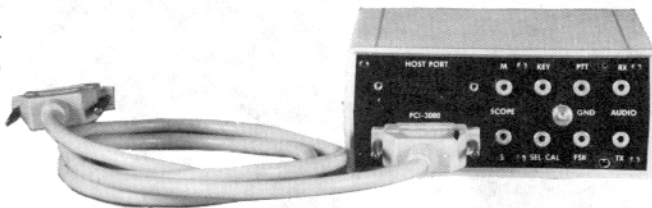
If you want to communicate on HF, do it right with the PCI-3000! Call HAL Communications—your AMTOR source—and put your PC on the air today!



SPT-2 Spectra-Tune:

For ease of tuning your PCI-3000, add the SPT-2 Spectra-Tune. The Spectra-Tune lets you tune in CW and RTTY signals quickly and accurately with a calibrated linear 30-segment bar graph. The bar graph represents a 600 Hz range of the audio spectrum, centered at 2210 Hz for RTTY and AMTOR, and 800 Hz for CW. Calibrated marks indicate the proper frequency for AMTOR, RTTY, and CW tuning.

A cable is included with the SPT-2 for providing power and control from the PCI-3000. The rear panel of the SPT-2 provides convenient "RCA" phono connectors for all radio connections. This avoids having to make radio connections directly to the PCI-3000. Enhance your PCI-3000 system with the SPT-2 Spectra-Tune Today!



HAL Communications Corp.
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Urbana, IL 61801
Phone (217) 367-7373
FAX (217) 367-1701

PCI-3000/PC-AMTOR with software **\$395.**
SPT-2 Spectra-Tune with cable **\$169.**
FIL-1 Amtor/RTTY filter (installs in SPT-2) **\$69.**

(Low tone export models available.)



DX NEWS

John Troost, TG9VT
P.O. BOX 524263
Miami, FL 33152-4263

April 92 has certainly been an outstanding month for DX. Not often that we get to work 3 New Ones in One Month, but here were VP9SSI, VP8CBA, and S2/HA5BUS, one after the other, giving new countries away, like it was nothing. Maybe we had to be patient with the VP8 stations, waiting till they were finished working CW, but the results were surely outstanding, even though some of us might have to miss a few days from work.

As to the tremendous hardships on SOUTH SANDWICH ISLAND, the rumor is that Martti Laine is now writing a new book, called: "WHY DID WE HAVE TO COME HERE NEXT."

Plus, it has now been proven with the faultless S2/HA5BUS operation from BANGLADESH, that it is possible to get a Permit or License: apparently all it takes is some Government to Government pressure, plus a few amenities.

Then there was Dayton, a major success for the RTTY Crowd: over 100 people attended the RTTY dinner, amongst which was Tony de Prato, WA4QS, the head honcho of RTTY in VP8. There were such notables as Peter, TY1PS, and Jody, VP5JM. Thanks to Steve, K4CJX, for his effort in insuring success.

Of course, this is only the surface of the available DX for the month. Anyone with a little time, and without complete concentration on the VP8s or the S2, would find such goodies as A92FG, VK9CK, 9L3DX, 8Q7PY, A22BW, Z21HJ, ZA1TAA, VP9/G0AZT, ZC4AB, SV5AF, 7P8SR, 3C1EA, FR4FR, C9RTC, HS0ZAA, UV9AV, UC2ADX, RD6DZ, UI8DAM, UF6FJ, UL7FU, UO5OLW, 9X5T, V51KH, V73DH, VQ9QW, PJ2PA, ES7FQ, YL3FW, TG9JL, SU1AH, 6W1QB, SV9/SV1AHH, SV0DV/9, AP/WA2WYR, AP2KS, 9V1YW, 5T5/F61TP, XX9AS, KH8/LA4LN, ZD8LII, XQ0X, VS6WV, EA9JV, A71BS, V31AP, J88BS, GJ4YMX, FO5LO, TR8MD, EL0BR, BV7CN, TZ6BGE, HH2BZ, P29BT, 4U1WB, 5B4ZL, 8P6SM, V51GB, A45ZX, 7Z1AB, OD5EN, V21GC, 9K2AS, 9K2DZ, GU5LP, 5U7M, YI1BGD, H44JS, BY4WNG, YU2OP, VP5JM, TY1PS, plus too many to list: this was the month for a 30 day DXCC. Is this not a great hobby (though some times expensive?)

TOM, OD5NG

In the April '91 issue of CQ magazine appears an interesting article by the DX editor, Chod Harris, VP2ML. Chod reviews

the operations of Baldur, DJ6SI, and of DJ7FT/SV/A some years back, who were called PIRATES by the whole nation. Chod shows that things are not as simple as they may appear to someone who is prejudiced in the first place, even though the fight in both cases was taken to the ARRL and to whom-ever would listen, but without the slightest effect, though rules for Mount Athos were recently tightened up by the DXAC, yet, ever under the amended Rules, the above stations were fully qualified for DXCC.

Now we have a similar case: It appears that a Nation, or group of Amateurs in that Nation, or maybe just one Schiemel, has an ax to grind with OD5NG, who was a well known operator with a QTH just across the Israeli border, in Lebanon. After almost 10 years of operating Tom made a long planned move to South Africa; no sooner is he gone, mischievous messages start emanating over the Herzlia HF Packet network, on 24 April, claiming that Tom has been a Pirate for those ten years, and was really located in Israel, and on top of that: a South African (what is so bad about that?; I am a damned Dutch-man). Now, Tom having been a true friend to me for all those years, I am finally losing my patience and find that someone has to stand up for him.

Now, I am pretty much of an ingenue and always believe the first thing I hear, but something does not strike me right here. So I went back through my logs and my QSL cards and found that I QSO'd with Tom the first time the 23rd of July 1983. I also saw that I QSL'd the contact via the Lebanese QSL Bureau and received a card back from that source about a year later. That struck me as pretty strange: how come a guy, who supposedly is a Pirate, can receive and send QSL cards via the OD5 Bureau, while he is accused of being in Israel?

Of course it is a fact that the border in that area is a little fluid, with Israel's need to find land for housing the great influx of refugees, but how can it be explained that here is a guy, accused to being an unlicensed Pirate for 10 years, can operate in such an illegal manner right under the eyes of the Mossad, one of the finest, best trained and modern intelligence apparatuses in the world: that just makes no sense to me; were all these belated accusations true, he would have been in the Israel equivalent of Siberia 8 years ago.



Good fellowship enjoyed by three DXers at RTTY Journal hospitality suite. L. to R. John, TG9VT, Jody, VP5JM, Peter, TY1PS

Why all those belated accusations? Is it plain jealousy? Tom was an excellent RTTY and AMTOR operator and constructed his own BBS programs on an antiquated Apple computer. Tom did an excellent job during operation "Last Voice From Kuwait" and was one of those invited to assist in the ceremonies in Kuwait. But at that time he had already made his plans for South Africa and could not attend: there was a Plaque for him there. Is that the cause of the jealousy?

Then, the initiator of this "hate mail" alleges that Tom never worked SSB, reason being, his South African accent would be obvious. What Bull: I looked through my log and found about 30 percent of the QSOs were SSB, 45 ARQ and the rest RTTY. Yes, Tom was not in favor of the HF Packet boys appropriating a part of the RTTY band and made no secret of that.

I also have Tom's Log for the last several years, complete, and the same percentage holds true there, more or less. Besides, I did not hear the accent as South African but rather high English.

As to Tom's leaving Lebanon, he had told me long before that his family affairs required him to move to South Africa, at least temporarily, so one night he said: this will be our last QSO for a while, I am packing up today. Tom will be in touch, but right then, he took the rig down and prepared for his move.

I miss Tom: not only is he an outstanding skillful operator but he possesses the tech-

nical knowledge and initiative to build his own digital programs and make them compatible with APlink and the G3PLX system. Remarkable!

Well, it is no wonder that so qualified a person should be subject to vile allegations and criticism after he is no longer available to defend himself. SHAME!

ADIOS

With that we will leave you for your Summer vacations... have a good long and hot Summer, with excellent propagation and plenty of DX. May no day go by without a new Country worked (my, my, are we not optimists). Anyway, let it be fun, like Trommelin, or North Korea: the Rumor mill says both will be up in May/June, but I have long learned that rumors are just that, and facts often something else.

This column could not have been possible without the much appreciated help of W2JGR, KB2VO, VK2SG, WB2CJL, I5FLN, 9K2EC, WA4JQS, SU1ER, DK3CU, TY1PS, 9X5LJ, 4X1RU(?), CE3GDN, VP8CGK, HA5HO, and many others who spoon-fed me DX information, without you, there would be no column.

And don't forget the **INTERNATIONAL DX CONVENTION**, to be held in New Orleans 28 to 30 August. The price is right, DELTA airlines gives a fare discount, and it is held in one of the finest Hotels in New Orleans, the Royal Sonesta Hotel. There will be no flea market, no vendors as such,

but talks about DX by famous DXers and Expeditioners, the ARRL will check your QSL cards, and some new developments in DX gear will be demonstrated.. We expect 4-500 people, so you will be able to meet some of those you like to meet and hear some of the things you should be aware of. Besides, New Orleans is a fun town and it will not set you back a whole mint.

May the Good Lord, our God, bless you all, not just with DX, but with a whole, healthy and plentiful life.

de **John, TG9VT**, and the Guatemalan Volcanos ■

CORRECTION!

In the March '92 Hits & Misses column, it was mentioned that W6ZH, was still a subscriber. That was true but with qualifications. Hebert Hoover, Jr died in 1969 and his call was retired. Herbert Hoover, III (Pete) was first licensed in 1947 as W6APW. In 1975 when it became legal for an Extra Class licensee with over 25 years continuous activity, to request an un-issued call, H.H. III (Pete) traded his original call W6APW, for the W6ZH call-sign. Pete also sent me a copy of the active operators listed in the first RTTY Journal, January 1953. In that issue he and his dad were both listed. Thanks for correcting me Pete and for completing the picture of the past. ED.

DX COMINGS

The secret with Baldur, DJ6SL, is finally out. Starting 13 May he will be active from **GLORIOSO** for a week and after that from **COMOROS ISLAND**, accompanied by DJ3OS, for RTTY. By the time this RJ reaches you, they will probably have QRT'd.

From 26 May to 9 June, **MV-ISLAND** will be active as **4J1FS**, RTTY and other digital modes will take place in the second week, starting 1 June. Watch 28.084, 21.084 and 14.084. This is a major operation with the avowed aim of making **4J1** no longer a wanted country.

No sooner has **VP8CBA** finished his great operation on **SOUTH GEORGIA**, but what happens: a team of young Biologists, on an Antarctic survey and stationed on Bird Island, get interested in radio and are able to obtain some PK-232 units. As a result, here is John, **VP8CGK**, extremely active on AMTOR. A

new man just joined them, Keith, **VP8CKB**, who will be on Bird Island till April '94, is extremely interested in RTTY and plans to make that his main operating mode. **SOUTH GEORGIA** will no longer be rare.

Minor, **TI2YO (TI9YP)** advises that those, who have not received a QSL from him for last year's **COCOS ISLAND** expedition, should send one directly to him at: Minor Barantes, POB 17, San Joe 1003, Costa Rica. No IRC or Green Stamp. On top of that comes the rumor that **TI2JPP** will operate RTTY from **COCOS ISLAND** early June. By the way, the **IRDXA** Hal Teller is still in Costa Rica customs and we may be able to buy it back in the next month or so.

For those who still have not worked **ALBANIA** on digital modes, **ZA1TAA**, promises to be active practically very evening, U.S. time.

Peter, XT2BW, is active on "other modes" from **BURKINA FASO**. Though his current Contract runs out at year end, there is a good possibility of a year's extension. As Peter is not now on RTTY, the **IRDXA** is making an effort to get Peter interested and supply him with RTTY gear. Stay tuned. It is believed that Peter is the only Ham currently active from this country.

Nothing further has been heard from the **LACCADIVE ISLANDS** operation and we assume that it has fallen through.

I reported to you last month what countries are under consideration for deletion from the DXCC list by the DXAC. I forgot to tell you that several new Countries are under consideration by this distinguished entity for new Country Status: there is **PRATAS ISLAND** in the South China Sea: consideration is being given to splitting up **CEUTA**

and **MELILLA** into two separate DXCC Countries, and again they are looking to see if the Vienna International Center, **4U1VIC** does not qualify for Separate Country status after all. Plus sooner or later the ARRL will have to recognize Separate country status for the former Yugoslav Republics, which are now recognized as separate countries by the U.S. State Department.

Andre, TN1AT, CONGO, has still not shown on RTTY with the gear donated to him by **Henry, DJ6JC**. Any time now, we hope.

And finally, all of us are still hoping for an early activity from **NORTH KOREA**, Albania Style. There are a myriad of rumors, but I would not be surprised to **P5** comes on the air in June.

de **John, TG9VT** on a mountain top.

External Modem & PK-232

Using an External modem with the PK-232. Another approach suggested by Billy Capers, AL7BB.

After receiving many requests over the air on how I modified my PK-232 for External Modem operation, I thought I would outline the procedure for the readers of the RJ.

The only items needed for the Mod, are about 10 feet of hookup wire (number 22 or 24 gage) and a triple pole, double throw toggle switch. Obtain one of the switches designed for low current applications with a 1/4 inch diameter threaded shaft due to the limited space in the unit.

First off, there are two different versions of the PK-232 motherboards. The early ones have a circuit trace between the internal modem connections and the CPU, and the later version have above board jumpers.

Step one is to remove the cover from the PK-232 and verify which board you have. Look at the center-rear of the motherboard and you will see jumpers JP-4, JP-5 and JP-6. If you have the late version with the Header Plugs, go now further. If not, then remove the motherboard by first taking off the knob for the Threshold, and remove the retaining nut. Then remove the screws holding the board to the case, and lifting gently on the rear of the board, sliding it up and back to clear the LEDs and switches.

For the OLD version boards, turn it over, and locate the traces between the front and center holes of the three jumpers (JP-4,5,6) and using a razorblade or hobby knife, carefully cut the trace on each one.

Wire the switch so that each Pole is connected to a set of the jumper pins, with the center contact of each pole connected to the center pad of the jumper, and likewise the top of the pad of each to the top contact of the switch. Now do the same for the bottom pad and bottom contacts of the switch pole. For the old motherboards, simply solder each wire to the header pin, or obtain a .100 center header strip to attach the wire and plug them onto the existing pins.

While the PK-232 is disassembled, carefully mark the center location for the switch, half way between the Blue Border of the Radio switches, and the Blue Border of the line directly below the Model PK-232 markings. Drill a 1/4 inch hole here. Using Rub-on letters or similar marking methods, mark the left side of the hole INT, and the right side EXT. Allow enough room from the edge of the hole to the edge of the letters for the nut of the switch. After the marking is placed on the Panel, apply a light coat of clear fingernail polish over the letters.

For those of you who are a bit hesitant to mount the switch on the front panel, you can route the wires out the back of the case through one of the existing openings.

Now, reassemble the PK-232 in reverse order of how it was taken apart, and after securing the board to the case, orient the switch so that when

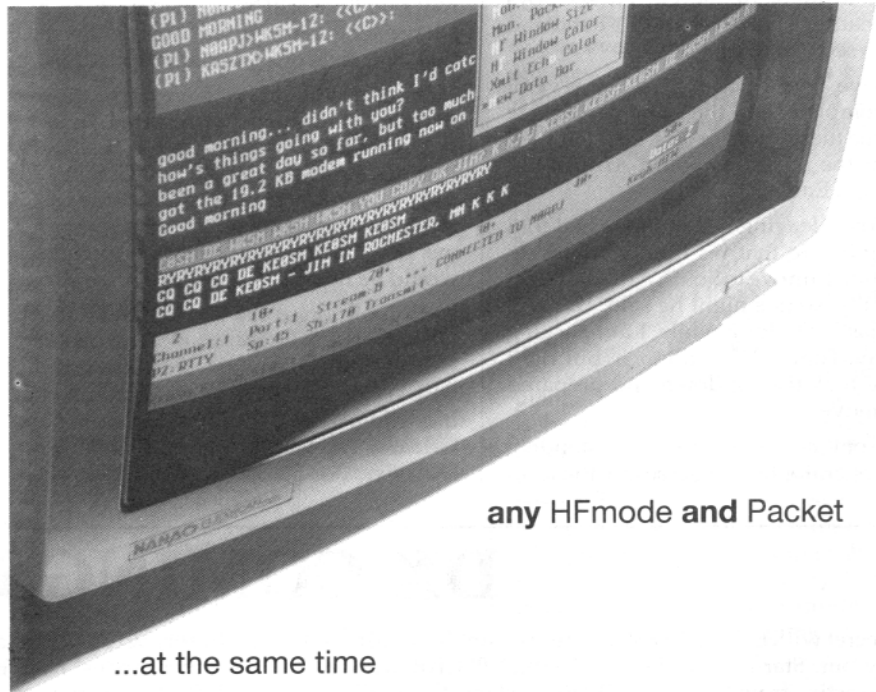
the Toggle is to the left, the right most contacts as viewed from the front go to the front set of holes on JP-4 5, and 6. Otherwise you will have to turn the switch over in order to have the INT and EXT positions correct.

Replace the top cover on the PK-232, and you are ready to operate with either the internal modem, or with an external modem. I use a Dovetron MPC-1000 for receive in RTTY, and can switch between the PK-232 and the MPC while receiving and never lose a character. Just remember, if you are going to use an external modem, make sure that the voltage levels going to the PK-232 are at TTL (5 volts) levels. On the MPC, it is

simply a matter of connecting a 4.2 volt Zener diode between the Regenerator Out jack and ground, then take that output and feed the PK-232. Note: The Zener I used was a 1N3824; make sure the ANODE is grounded, (arrow pointing away from ground).

So dig out all those dedicated RTTY modems with the super receive filters and variable shift frequencies, and put them to use. You will then get the ease of the PK-232 operating system and your current software, plus the superior receive capabilities of the dedicated RTTY modem.

Billy Capers, AL7BB, 1414 Patterson st., Anchorage, AK 99504.



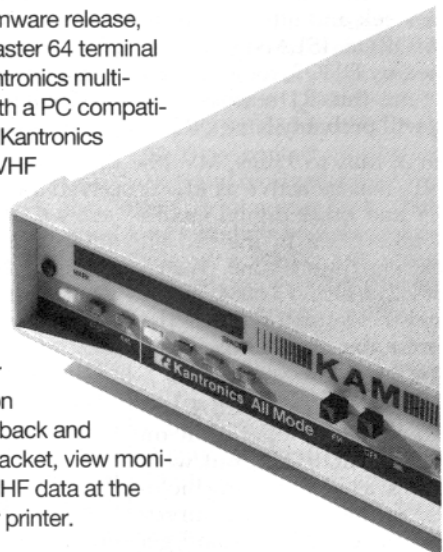
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THE LINK

Jim Jennings, KE5HE
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Well, I survived Dayton without spending very much money. But I had nice visits with many of the APLINK SYSOPs from around the world. What a pleasure to meet these folks. Besides visiting and attending the Digital Forum, most of my time was spent just snooping around the displays and flea market. I saw several things in the way of new hardware that should be reported on.

First, CLOVER is getting closer. I hear now that some hardware will be available by July. Ray Petit (the inventor of CLOVER) was at the HAL Communications booth and demonstrating CLOVER. It is really looking good. Second, PacComm had their new PACTOR box on display and running. They are talking several weeks on delivery of the first units. HAL has also released a new version of the PCI-3000 ROM (version 1.8).

The following few paragraphs is excerpted from one of 3 bulletins that Bud, N0IA, circulated around reporting on the Dayton meeting. As far as APLINK is concerned, there were 2 meetings of primary interest, the APLINK SYSOPs meeting and the DIGITAL FORUM. Both meetings were well attended and everyone realizes the dramatic increase in interest in the Digital modes, but even so we were a very small



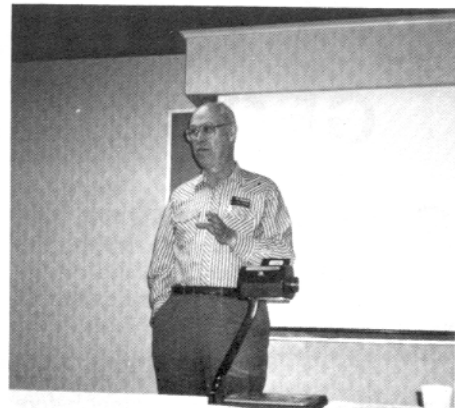
Bud Thompson, N0IA, giving his presentation at APLink meeting, Dayton '92

part of what I can only describe as the rest of humanity. There were about 40,000 people registered at the meeting and I would say that 200 at most attended either or both of the 2 meetings listed above. We are still small in numbers.

APLINK SYSOPs or AP supporters at the meeting (please excuse any inadvertent omissions): DK0MHZ, K4CJX, K5CVD, K9GWT, KA0JRQ, K1UOL, W9WCN, VE6PD, WD4TKZ, N8LCU, W5UJF, WD4GNV, K1CD, W2MJ, VE2DOD, DJ2HZ, KB1PJ, KE5HE, KK4CQ, KK4WW, N0IA, N0ISL, N2JAW, N4SS, N5TC, TG9VT, TY1PS, VE6PD, GOAZT, AA5AU, W2TKU, W5SMM, W5TOO, W6IWO, WA1URA, WA9FCH, W8KCQ. It was certainly a pleasure to put a face with the print I have been seeing for so long.

From the presentation made by N0IA: Prior to 1989, there were 5 APLINKs in North America. Nine were added in 1989, six in 1990, and ten in 1991. In the first 3 months of 1992, seven additional APLINKs have gone on the air. Bud gathered the following data from 23 APLINKs over a 3 day period just before the Hamvention. He found a total of 514 total entries of stations having logged into the 23 MBOs involving 246 individual calls (some checked into more than one MBO or more than one each day). 72 percent of the calls only linked to one MBO, 11 percent linked with 2 MBOs. So each MBO tends to have a different clientele.

At the SYSOPs meeting, chaired by Steve, K4CJX, we had introductions all around and there were first remarks by Tom, N5TC, Digital Coordinator for the Central Area and ARRL Director (West Gulf Division). Tom thanked the APLINK group for its direct NTS and public service support. Bud, N0IA, provided a very good report on the growth of the APLINK NETWORK along with some interesting statistics. It turns out that most users only check into one MBO. Also, the total number of regular users seems to be only about 300 or so throughout the country. Vic, W5SMM, demonstrated how the next version of APLINK will work in the WINDOWS environment. Certainly we can say that we have new and interesting things coming down the pike what with CLOVER, PACTOR, PACKET, and AMTOR all being available with APLINK at some time in the future (maybe 6-12 months?) Following



Vic, W5SMM, presents his Windows innovation for APLink and other uses, Dayton '92

this was a presentation by Peter, TY1PS, of his scan control program that runs under WINDOWS also. The fact that what Vic and Peter had done could be immediately integrated shows us the powerful aspects of the WINDOWS environment. After a fabulous dinner at the Barnsider we returned to the RTTY Journal hospitality room for more demos by Peter and viewing of the "Last Voice from Kuwait."

The DIGITAL DIGEST forum presentations were made by Vic, W5SMM, and Jay, WS7I. Vic gave a presentation on the reasons behind the limited usable data rate in HF FSK digital communications. This talk was excellent. The gist of the presentation was that reliable HF digital communications using FSK (or AF5K) is limited to 200 baud usually and 100 baud or less much of the time because of multipath conditions common on HF. It is interesting to see that CLOVER is designed specifically to get a high data throughput under these adverse conditions by the use of a different modulation scheme. One could say that CLOVER uses a symbol length that is equivalent to about 30 baud, but at the same time multiplexes the data so as to send more than one bit at a time. Having a symbol length about 10 times as long as that of HF packet makes CLOVER very robust in the multipath environment. Vic has promised to send me copies of his slides and I will try to reproduce his talk in this column shortly.

The Dayton meeting was a fine experience for me, I hope it was not one of those once in a lifetime events. A lot was learned and we all had fun. Dale has agreed to insert some photos from Dayton in the column this month. I am back on the road again, off to the Middle East for 3 weeks. I hope to visit with Ezzat, SU1ER, while in Cairo.

73 AND GOD BLESS de JIM, KE5HE AT KE5HE.TX.USA.NA

SOUTH SANDWICH ISLAND & SOUTH GEORGIA ISLAND. All in six weeks.

On the morning of 7 March 1992 eight men boarded airplanes in KY, WI, FL, MT, MN, CA, Japan and Finland on the first leg of a trip that would take them to one of the most inhospitable places in the world.

Some of these men had never met before but had talked together for over 3 years working and planning this adventure that would take them to a group of 9 small ice covered, wind swept, volcanic islands. These islands are uninhabited, attacked by winds reaching 75 to 90 knots with temperatures ranging from 20 Deg. F. during the short span of daylight to below zero at night during what is referred to as Summer in this area of the world.

This group of little known islands are 59 Deg south Lat. 27 Deg west Long. which is considered south of South America and near Antarctica. They have been visited less than a dozen times since they were discovered in 1775 by Capt. J. Cook, Master of H.M.S. Resolution.

These Islands are "The South Sandwich Islands" and are claimed by both England and Argentina. The southern most island was the site of a quick air attack by the British Air Commandos during the Falkland Island war.

Why would this group of eight men go to such a place? Is it in their line of work? Are they researchers from different colleges? No! These are just plain people from different walks of life, one is a Doctor, one a businessman, another is with the State Department, and the rest were electronics engineers in various fields. They all have one common interest, however, and that is "Amateur Radio."

The South Sandwich Islands were the most sought after place on earth. A amateur radio operators number only about 1.5 million worldwide but 95 percent of this 1.5 million were watching for these eight men to land in Ferguson Bay on Thule Island. Transport 65 crates of equipment, shelters, food, and what they would need to abstain life on this frozen wasteland for two weeks, setting up amateur radio stations and operating around the clock to give Amateurs worldwide a contact with this the rarest of places.

These devoted Amateur radio operators had taken time off from their jobs and families without pay to go and do something that very few people in the past 200 years have done or are likely to do again. Especially, to provide their fellow Amateurs around the world with this rare country, at a cost of \$140,000.00 U.S. as transportation

to this remote area is not like calling a cab or getting airline tickets because no one goes to the South Sandwich Islands. Now the rest is history written with sweat and labor; these men landed setup their Amateur radio stations and made 40,000 contacts worldwide with their fellow Amateurs. Faced with conditions that go beyond a Hollywood movie scrip, these Amateurs fought off seals, winds that blow without stopping for over 50 hours at one time. Dropping below 40 miles per hour and reaching a peak of 132 miles per hour at times. Pelted by blinding snow storms, the daily routine of rebuilding their tents and antennas kept them from making more contacts. More time was spent holding the tents up at night trying to save them from the ever present winds than sleeping.

But even after all of these hardships were incurred during these 14 days, the team departed Thule Island with all of their gear minus the bits of broken fiberglass and nylon that at one time were their tents and headed for yet another rare island 700 miles away. This was South Georgia Island and the team landed and made 6,000 contacts on Morse code and RTTY during the 48 hours they were allowed to stay on this island.

Again boarding the U.S. research vessel Abel-3, the team sailed away from the bottom of the world for Port Stanley, in the Falkland Islands over 1400 miles away,

very tired, sea sick, but happy to know that they made 60,000 fellow Amateurs worldwide very happy.

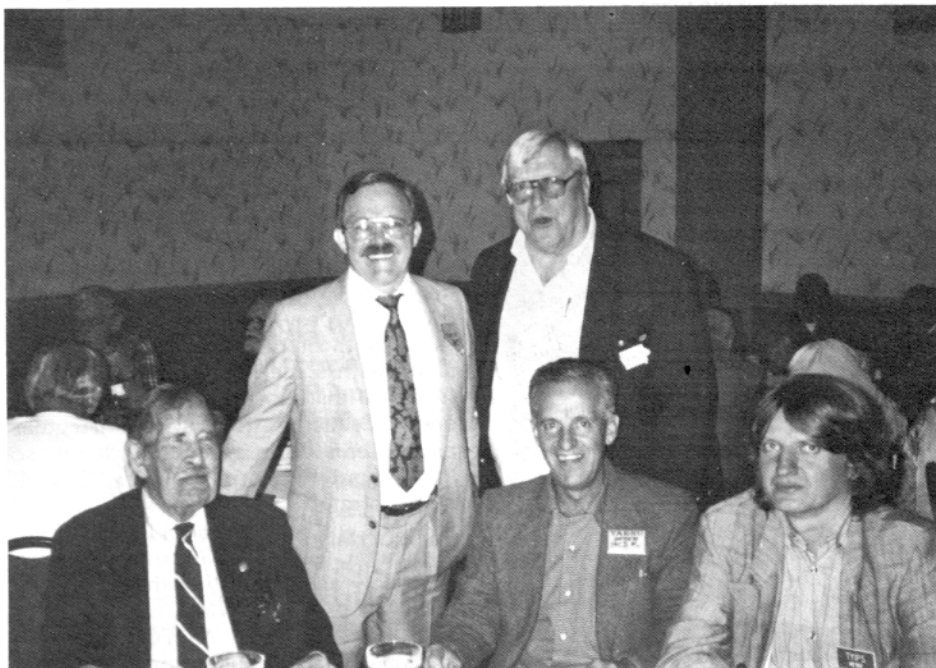
The whole story can not be told in just a few words but the eight rolls of video tape and 40 rolls of slide film do. All of which will be shown at gatherings of Amateur radio operators the world over.

One member of the team, Martti Laine, OH2BH, from Finland, who is world renowned and brought us rare ones from 127 different countries, and has released a book of such trips entitled "Where Do WE Go From Here?" looked at me as we departed Ferguson Bay, leaving Thule Island behind and remarked, "I think I have a name for the next chapter in my book! I think I will call it, "Why The Hell Did We Come Here!"

Upon their return six weeks later, these men started planning another trip of this type to another small glacier covered island known to few but Amateur radio operators as "Peter the 1st Island" located off the Northern coast of Antarctica.

A final note. Upon return to my home in Kentucky, I received in the mail a green and white flag with the word "Calypso" printed on it with a letter acknowledging our Expedition and giving me permission to fly it on our next venture to the bottom of the world.

73 de Tony DePrato, WA4JQS, VP8BZL, V31SS, ZD8SS Leader of the South Sandwich Island DXpedition



RTTY Dinner, Dayton '92. Seated, John, TG9VT, Ted, HC5K, Peter, TY1PS. Standing, Bud, N0IA, and Larry, KA0JRQ



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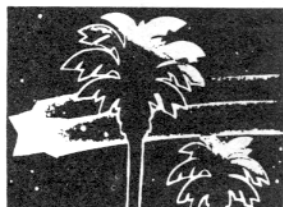
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Lakewood, CA 90713

THE FUTURE

Packet growth will start flattening out. I say this because the initial newness of the mode has worn out. People will move into the mode out of curiosity and something new to try out. Newcomers to the hobby will try it, if they are computer literate. I believe that HF use of packet will slowly fade away into the sunset, where it belongs. CLOVER will replace Packet and AMTOR as the digital mode of choice for HF operation. It's throughput is faster and the bandwidth needed is much less. This is an asset to the mode. Packet will remain on VHF and higher.

Have a nice summer out there. Introduce someone to Amateur Radio. You may find another genius out there.

73 de Richard, N6NKO ■

WRAP UP

Unfortunately, I was not able to attend Dayton this year. Work schedules and family concerns have taken up the bulk of the time. Let's see what is happening out in the market right now for us. The major radio manufacturers are starting to be more concerned with the use of their radios in packet. They are claiming to offer true FM which is better for keeping the quality of the transmitted signal high and distortion to a minimum. Because of this, you will be able to operate these radios on 9600 baud with little change. You may end up having to do a bit of surgery but you should be able to make the additions with little difficulty.

We, as amateurs, have to manage our spectrum wisely and allow for new modes to come on line. The biggest pressure is going to be felt on the two meter band. Coordinating committees are going to feel the pressure from both sides. We have to keep cool heads about this. Growth will be advantageous for us all.

WIDE OPEN STORAGE

Several months ago, I discussed my situation with hard drive space and getting a larger drive. Well, one does not look a gift horse in the mouth. I was the recipient of two drives from the same location. They were swapped out and declared surplus. So, I was given them by this good samaritan. One drive worked just fine and the other one was reported to be bad. So, I found out the details on the smaller of the two units. I proceeded to format the unit. That took some time since the drive is rather large. The second unit had an interesting problem. The heads would not release unless the drive was installed upside down. No problem. I probably have a cracked surface mount joint on the control card mounted to the drive. Now I have 130 MB of disk space between two drives.

What proved to be the interesting part was getting the drive table set up right. The drive table tells the BIOS the type of drive to expect and how it is organized. Well the smaller of the two drives is not supported in the BIOS where the larger one is. I had to go and pick a setting that allowed the drive to work. I lost 2 MB of storage with the selection that I picked out but the drive

works. The motherboard that I am using is old and does not support many of the larger drives that are out on the market now. I am happy with what I have now. No more program swapping. now to get the 486 and tape backup system ...



Steve, K4CJX, presents special award to Vic, W5SMM, for his extensive work with APLink software. The award was presented on behalf of the APLink community.



L. to R. Peter, TY1PS, Barbara, N4LIH, Gary, N4LIG, and in blue, Eddie, G0AZT

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FOR SALE: DS-3100 with all upgrades, 2 DS-3100 disk drives, RMX-33100 (multiplex switch with all options), very professional system, \$699.00. Also ST-8000, \$1799.00. Larry Workman, KAOJRQ, RR#3 Box 199, Glenwood, IA 51534. (712) 527-4144

WANTED: Putting my Model 37 TTY machine on the air. Need hook-up info, schematics, and help. Anyone into nostalgia? Wes Herdeg, W6XO, 1892 Litchfield Ave., Long Beach, CA 90815

RS-232C and COM PORT booklet: This is a compilation of all articles published in past issues of the *RTTY Journal* on these two very important topics. If you are using a computer in conjunction with Ham Radio, you will find this booklet an invaluable tool to have in your shack. The booklet contains information about COM ports 1,2,3 and 4 as well as the RS-232C information. Send \$5.00 to the *RTTY Journal* and you will receive a copy of this invaluable booklet by return mail, post paid.

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