

Worldradio

Year 18, Issue 7

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ARRL National Convention ... page 23

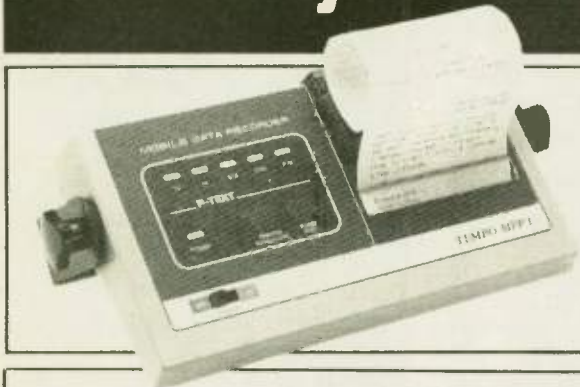


Kurt N. Sterba's "disguise" antenna ... page 52



High school students learn Amateur Radio ... page 27

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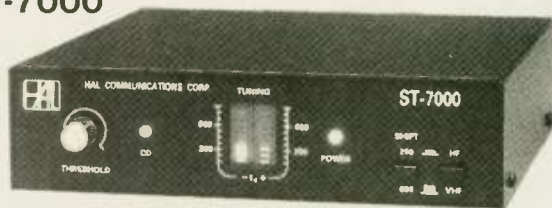


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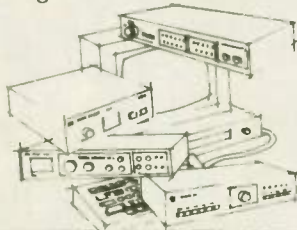
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Island DXpedition final days (series conclusion)

J.B. SMITH, VK9NS

We finally cleared the quay for Howland Island early next morning and some hours later were clear of the reef surrounding Tarawa. The sea was pretty rough and a strong 25 knot headwind very apparent. In fact, this weather pattern followed us all the way to our destination, and it took over four days to arrive off the island at about 9 p.m. In the bright moonlight we could see the old Amelia Earhart Beacon and the long edge of beach dead ahead. It was an exciting moment.

We drifted off the island until dawn next day, when we started going ashore. Our excitement had been dampened slightly as the breaking water on the reef looked very formidable; however, the first boat was soon loaded and on its way.

They landed well down from the target point opposite the beacon due to rough water. This resulted in a long slog bringing gear up to our intended area near the beacon.

The next boat was better and made it through the surf almost on target. So with one boatload after another, all the group and our gear gradually were floated ashore and were soon in position near the generator.

Setting up

A start was made to pitching the tent and the generator was already in place. It was quite windy, but the tent went up OK with many willing helpers. With the wooden pickets and rope in place, the tent started to look

like quite a substantial shelter. But that evening we were hit by a wild squall and heavy rain. I think we were very lucky the tent stayed up. Next morning we had a hurried reassessment of the tent guying and had no more trouble.

With the tent up, a station was quickly organized. One of the power cords was run and connected to the generator; in the meantime, Jean-Louis and Ron were assembling one of

brought into action. The DXpedition was very lucky with propagation and the bands remained open hour after hour. Always a huge pile up and always more and more to be done.

Conditions on the island were very basic, with more grass cover than had been expected. All around were the birds, which quickly adjusted to our presence. There was not much time for sightseeing, but gradually we got around

There is excitement, challenge and personal reward after these DXpeditions which is hard to describe.

the Butternut verticals. They quickly had this HF antenna ready, and the coax was plugged into the rig. "All switches off," I cried, and started the diesel. It was a comfortable sound as we finally had power available.

The rig was switched on and NO1Z/KH1 was finally on the air. We said hello on 14220 kHz, with Bob, KH9AC being first in the log. A quick resume and acknowledgement that all were ashore safely, and we moved to 14195 kHz, split to 14200-14210 kHz. The DXpedition was in business!

It was a great moment for us all. All the planning, hard work and the rough sea voyage were suddenly worth every minute.

As the hours progressed, another antenna was raised; then both beams were in the air and so on. Very quickly another station was connected and

Back in time

The focal point of the island is, of course, the Amelia Earhart beacon. Built in 1937 as a memorial to this famous aviatrix who disappeared over the Pacific en route to Howland Island, this is an aviation mystery which has never been solved.

In addition, the "settlers" of the 1930s built their town, Itascatown, and signs of their work are quite prominent.

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PUBLISHER'S MICROPHONE

The first item is giving due recognition to the leading lights of Amateur Radio: The latest Worldradio Lifetime Subscribers, our Super-Boosters — Hiram Wilder, Jr., NE4X, Dublin, GA; Jay Chase, N5NEF, Houston, TX; Ryan Namaka, WH6AMU, Camden, NJ; John Nagel, W7AQE, Camp Sherman, OR; Lawrence Shaw, N7JJQ, who is now at DU3; Lou Huber, W7UU, Seattle, WA; James Shroyer, Jr., WB9AQA, Swayzee, IN; And . . . Diane Courtney, WB4INN, Apex, NC, bought one as a Christmas present for Pam Courtney, Sacramento, CA. Ralph Anderson, W0NL, Holton, KS, who was one of our earliest LSs decided that he had received his money's worth and with a very nice note, took out another one!! Francis Kent, WA6EAL, Sacramento, CA, also in the honored ranks, sent in an appreciated donation.

Amateurs looking for an opportunity to serve may wish to look at the Civil Air Patrol. Radio plays a big part in their activities. Call your nearest USAF base for the contact. They do quite a bit of Search and Rescue and other good activities and CAP wel-

comes the gamut from youth to adult.

A recent newspaper article told of a boat adrift for a long period of time. When finally spotted and rescued the children aboard were near death. The first thing that comes to mind when reading that oft-told story is always if they had been radio amateurs, they would have been spared that tortuous ordeal.

There have been many, many cases of a boat sinking and the people going into the life raft, with no means of communication, never to be heard from again.

It is bizarre that in this day and age there is no small, totally self-contained HF rig. There should be a rig that the missionaries, bush pilots, anthropologists, archeologists, documentary filmmakers, boaters, hikers and the like could throw in a small bag.

ICOM, some years back, had a 2M rig that could serve as a model for a 20M transceiver. It had a handle and a telescopic antenna and it ran on flashlight batteries.

This type of battery is advantageous because you can buy them any place in the world. One hour total transmitting time is all you need for a

MAYDAY rig, and a jack could be the rig to accept external power for the Field Day, QPR, picknicker, camper crowd.

A fold-out panel could have a small key permanently mouted. An ear-phone jack should be there so battery life would be greater than listening on the high-drain speaker.

People who delight in putting themselves at risk or in harms way need such a radio. How much is your life worth? How much is it worth NOT to spend a week on the side of a snowy mountain while others search for you in random fashion?

HF is the way to go. There are no repeaters in the middle of the ocean. In a deep ravine HF will be heard when 2M will go nowhere.

It is a tragedy that no such equipment exists today. There have been oblique attempts, but all so far are unwieldy, unpublicized and withdrawn from the marketplace before anyone knows they exist.

Even away from the danger side, people taking a leisurely overseas vacation (with luggage restrictions) could carry such a radio in a bag no larger than a camera bag.

It's amazing how loud your five watt signal into a wire out the hotel window gets, if you are in Togo.

We'd give such a radio maximum publicity here in Worldradio (particularly if the manufacturer called it the "Mondo"). We need such a rig, we deserve such a rig. It is technically possible and with the number of people traveling to offbeat places, a necessity.

—Armond, N6WR

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Multimode versatility. The FT-747GX is ready to go on LSB, USB, CW, and AM. With provision for the FM-747 FM unit—great for watching 10-meter repeaters.

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Island DX

(continued from page 3)

Long stone walls mark the boundary of their small community buildings, representing many hours of hard labour. It must have been a lonely sort of life, perhaps compensated by the beautiful beach on the lee side of the island with its fringing reef and pure white sand. Thousands of shells are available to be picked up on every tide, but that too would become boring after several months.

However, the diaries of these settlers sound cheery and there is not one word of rivalry, back biting, etc. WWII put an end to all that, and any idea of permanent settlement on Howland Island was finally abandoned.

There are many mementos to their occupation of the island, and it was a surprise to talk to one station in Hawaii that had been one of those early settlers. He had many questions.

Were we really on Howland Island? Was the beacon still there? Had we seen an old bulldozer which was left behind? Had we had any luck on the North Reef with the lobsters, there for the catching at night with a suitable light? I promised him a few photo-

graphs on my return to Norfolk.

Howland Island has not been active in terms of Amateur Radio since 1948, but there are records of pre-war QSO's, and I have a couple of letters from people who were here before and during the war.

The days of our stay on the island merge into a blur. No sooner did Doug and Dick say cheerio as they left with the *Nei Momi* for Baker Island, than they seemed to be back again.

The departure of the *Nei Momi* had left us alone, out in the wide blue yonder. Our backup rations were soon part of our daily existence. The water seemed more important now, as it was all we had. Small things took a new look: we only had so much fuel, limited food, and so on.

Soon it was time to think about packing up. Kirsti worked quite a few stations during the opening on 6M. We had the excitement of one memorable sunset opening on 160M when the strength of the incoming signals was unbelievable. Long after sunset proper and many QSO's later, we were still being called and working stations.

The early moments of RTTY, giving Howland Island for the very first time in this mode, caused another major pileup. It was the same story for most of our 166 hours of continuous operating.

There seemed to be no end to the clamour for QSO's. It was exciting to see Kirsti giving all and sundry a new YL country. She was the only one to use this call, as all other operators used NO1Z/KH1. So it was with just around 27,500 QSO's in the log that it was time to go. During a final QSO with a JA station, we all said our own personal farewells to these memorable six days.

There is excitement, challenge and personal reward after these DXpeditions which is hard to describe. All DXpeditioners seem to feel the same

way. Certainly in our group we had the feeling that we had done a good job.

No problems

We had no major equipment failures. Usually this is the curse of DXpeditions — as the linear blows a string of diodes after a power surge or a front-end receiver MOSFET gives up the ghost in response to an overdose of RF as another operator opens up on the same band. The dozens of things that can and do go wrong, for some reason, stayed away this time. Lady Luck was smiling on us.

The loading and return to the *Nei Momi* is a bit blurred, as we were all tired and there was much to do. However, as is the nature of these things, beams, verticals, tents, etc. all came down much quicker than they were put up.

It had been a long wet morning, and many of our cardboard containers looked soggy. This reminded me of the one major point which turned out to be incorrect. In discussion with Doug in the early days, he had said to me, "It very rarely rains on Howland Island." We now know that this may have been true once, but with overcast skies and showers most days, the weather pattern has changed.

To all who helped make this DXpedition possible, many thanks — in particular, the members of HIDXA. Thanks to Kirsti, Chris, Ron and Jean-Louis for their support and hard work.

All major contributors are acknowledged on the QSL card. These QSL cards are now being mailed and we hope you like them. (See photo of card on page 3 of November, *Worldradio*.)

The total number of QSO's was around 27,416. A few 6M CW and about 200 RTTY QSO's should also be added. □

Nevada ham class

Carl Chaplin, W7QO

Fifty years of Amateur Radio taught me one thing in order to survive in the realm of CW, one has to do better than copy letter by letter. Hence, I developed a system of copying behind that anyone can learn in a few simple sessions of demonstration and application.

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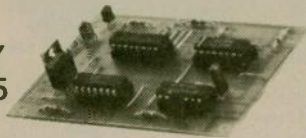
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We have oscilloscope demonstrations of certain electrical concepts, plus "live equipment" demo's of actual Amateur Radio stations, including CW, SSB, FM, Packet and RTTY.

The next Novice through General class starts in January 1989. For more info, call W7QO at (702) 265-3430, or write to me at Box 2800, Minden, NV 89423. □

RC volunteers learn about Radio

Every year, the American Red Cross holds a Disaster Institute, designed to better prepare Red Cross volunteers for emergencies. Last year, the Red Cross held its 12th annual institute at California State University in Sacramento, California, June 10-16.

Classes and workshops began early on Saturday the 11th, and offered attendees such choices as Safety and Survival in an Earthquake, Administering a Small Disaster, Emergency Assistance to Families, and Public Affairs in Disaster.

Amateur Radio was one of the topics discussed in a one-day Radio Communications Workshop on Monday, June 13. This non-technical workshop was designed for disaster personnel and chapter management. Those who attended learned how to use various methods of radio communication to effectively interface with other agencies and within the Red Cross itself.

Examples of the topics covered in this workshop were: Red Cross 47.42 radio system, CAP, packet radio, CB and color TV by radio.

Hands-on exercises and a demonstration of a multi-agency communications van gave participants an appreciation of the versatility and capabilities of radio. The van, which contains 31 radios for different frequencies, is available for use by Red Cross chapters throughout 13 Western states. However, its main purpose is

1989 DX Convention

The 1989 International DX Convention will be held April 21-23 at the Holiday Inn — Plaza Park, Visalia, California. The host — Northern California DX Club — is sponsoring the convention along with the Southern California DX Club.

Those planning to attend are encouraged to send in reservations early to have a shot at the super pre-registration prizes. Pre-registration deadline (postmark) is March 20, 1989.

Off to Cyprus

FLASH! The Yasme DXpedition is on the road again.

Iris (W6QL) and Lloyd (W6KG) Colvin, announce that they will operate from Cyprus followed by other DX spots in Asia and Africa. They should be in Cyprus by the time you read this.

They expect to operate from now until next spring from as many rare spots as they can obtain permission to operate.

They operate all bands, half SSB

Pre-registration is \$40; after deadline \$45.

Rooms fill up fast at the Holiday Inn, so make your reservations early. Call (209) 651-2900 to reserve a room. Don't forget to tell them you're with the International DX Convention, as a large block of rooms are reserved at special rates just for convention attendees until April 6.

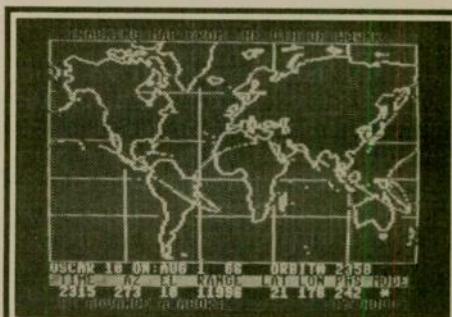
Send pre-registration to: 1989 International DX Convention, Dave Engle, KE6ZE, 1063 Summerwood Ct., San Jose, CA 95132. □

and half CW. They prefer the lower ends of all bands. Please, no duplicate or insurance QSO's on the same bands.

They use only one call in a country, although both of them always hold a license. They will use Iris's call in one country and then use Lloyd's call in the next country.

ROBERT B. VALLIO
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to support the Bay Area Executive Unit of Red Cross for five counties (Marin, San Francisco, San Mateo, Alameda and Contra Costa).

Ted Harris, N6IIU — Chief of Damage Assessment and Communications for the 13 Western states — said that in the past, large cities have not utilized Amateur Radio very much during emergencies.

"Our goal," said Harris, "is to try to get Red Cross volunteers in touch with local hams." Harris also urges radio amateurs to contact their local Red Cross offices, to make them aware of their availability.

Approximately 300 attended this year's institute, including some from as far away as Hawaii and Guam. □

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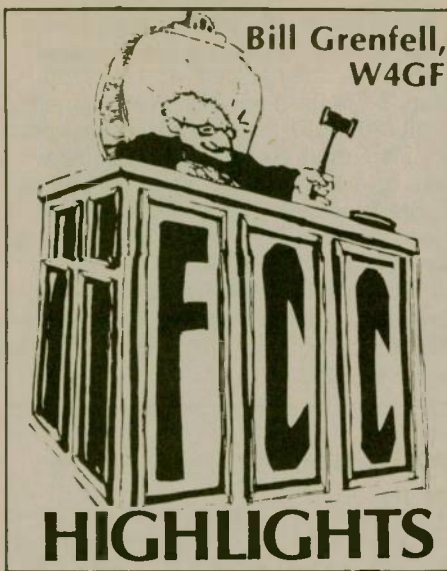
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"The ARRL has requested that the FCC issue an Order permitting immediate interim use of 17M, 18.068-18.168 MHz, by US radio amateurs on a secondary, non-interference basis. The FCC has already reallocated the band to the Amateur Radio Service on a primary, exclusive basis, effective July 1. Until that time, the band remains an alternative allocation to the Fixed Service and some government stations are still operating there. The FCC has initiated PR Docket 88-467 to develop permanent rules for amateur use of the band.

In support of its request, the ARRL said that the large number of amateurs from more than 60 other countries already operating on 17M has shown that immediate US amateur operation would cause no significant additional interference to the few, if any, remaining government stations still using the band." (ARRL Letter, 10/08/88).

"A National Teleconference Radio Net on 220 MHz reallocation drew an audience estimated in the tens of thousands Sunday evening, October 2. The general atmosphere was one of anger over the recent FCC Docket 87-14 decision reallocating 220-222 MHz to narrow-band land mobile interests." The ARRL General Counsel Chris Imlay, who appeared on the Net on his own behalf, cited a number of

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specific procedural and factual flaws in the FCC's handling of the action.

"Perhaps counselor Imlay's most significant point came in his conclusion when he asked rhetorically if the Commissioners' action in this matter meant that every time in the future they wanted to test a new technology for land mobile they would carve a few more MHz from some other service's spectrum, instead of requiring the service to accommodate desirable new modes within its own allocations?"

"In the next issue of *The ARRL Letter*, we plan to run a summary of the whole struggle to preserve 220-222 MHz, from the Notice of Proposed Rulemaking in General Docket 87-14, through to the end of the 100th Congress this week." (*The ARRL Letter*, 10/26/88) (*Westlink Report*, 10/14/88; *W5YI Report* 10/15/88, 11/01/88).

An amendment to the FCC Authorization Bill S.1048, is a resolution commending amateurs for their work in handling emergency communications for the rest of the public, and urging government agencies to take this record into account when they take any action affecting amateurs. However: "The Sense of Congress support for Radio Amateurs does not force anybody to do anything; it does not automatically wipe out the FCC Report and Order in Docket 87-14 adopted on August 4, 1988. But it may well be a building block toward a final solution amateurs can live with." (ARRL Letter, 10/26/88); *Westlink*

Report, 10/28/88).

A petition by W2FJ requesting amendment of rule Section 97.61(a) to permit SSB telephony in the entire 30-meter band (10.000-10.150 MHz) has been denied by the FCC. The petitioner "... alleged that the band was not being fully utilized by stations using digital and telegraphy modes."

In denying the petition the FCC cited (among other factors) the upcoming (07/01/89) opening of the 17M band, allowing additional amateur phone privileges, and that "telephony transmissions on frequencies shared with other emission mode transmissions tend to dominate those frequencies." (ARRL Letter, 10/08/88; *W5YI Report*, 11/01/88; *Westlink Report* 10/28/88).

Frequencies in the 420-450 MHz Amateur (shared with the government) band were being used temporarily for the coordination of tests of a US Army fiber optic missile control system in Alabama, through late December 1988. Observation of quiet hours by Amateurs was requested, "As expected, reaction from the amateur community has been mixed."

A spokesman for the Army said "... the use of the 70 cm amateur band (was) only for testing purposes and will not be used when the system is actually deployed." (*Westlink Report*, 10/14/88).

(please turn to page 10)

Amateur Radio call signs

Amateur Radio operators often ask the FCC what call signs have been assigned lately. This list shows the last call sign in each group to be assigned for each district, as of November 1, 1988.

For more information about the call sign assignment in the Amateur Radio Service, see Section 97.51 of the FCC Rules, or write to the FCC, Consumer Assistance Branch, Gettysburg, PA 17326.

Radio District	Group A Am. Extra	Group B Advanced	Group C Tech./Gen.	Group D Novice
0	WO0G	KE0YU	N0JWH	KB0DIZ
1	NU1A	KC1MC	N1GBL	KA1SQJ
2	WK2Q	KE2JT	N2IRI	KB2GMI
3	NS3M	KD3KB	N3GPO	KA3TSA
4	AB4LE	KM4JI	N4UEP	KC4HFS
5	AA5IM	KG5OT	N5NJO	KB5HON
6	AA6LG	KJ6OB	N6TOU	KC6AKH
7	WU7F	KF7PB	N7LVL	KB7FZE
8	WM8D	KE8UU	N8KBA	KB8PPP
9	WE9C	KE9NQ	N9HXL	KB9BQB
North Mariana Is.	AH0G	AH0AE	KH0AL	WH0AAH
Guam	KH2K	AH2CC	KH2DM	WH2ALT
Johnston Is.	AH3B	AH3AC	KH3AB	WH3AAC
Midway Is.		AH4AA	KH4AD	WH4AAF
Palmyra, Jarvis Is.	AH5A			
Hawaii		AH6JG	NH6RS	WH6CAK
Kure Is.			KH7AA	
American Samoa	AH8C	AH8AD	KH8AG	WH8AAAX
Wake Wilkes Peale	AH9A	AH9AD	KH9AD	WH9AAH
Alaska		AL7KL	NL7PB	WL7BSK
Virgin Is.	NP2E	KP2BN	NP2CR	WP2AGE
Puerto Rico		KP4PU	WP4RX	WP4IFK

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FCC Highlights

(continued from page 8)

A petition has been filed with the FCC to amend Amateur rule section 97.61 to allow Technical Class operators to transmit F1B (frequency shift keying) in the sub-bands 3700-3750, 7100-7159, 21100-21200 kHz. The petitioner would like to get Novices and Technician licensees some high frequency "... related rewards in the form of RTTY, AMTOR and packet radio privileges in exchange for upgrading to the Technician Class." (W5YI Report, 10/15/88).

WA2AJQ has petitioned to amend Section 97.28 of the Amateur rules "... to provide for FCC mandated retesting of any amateur operator that is cited by an FCC engineer for a violation of the rules in order to retain his/her amateur operator license.

His premise is that ... "a person who violates the rules obviously does

not understand them, and therefore the FCC should require retesting to be certain of his/her qualifications." He also has another petition pending which requests that the FCC "... seek license revocation instead of addressing forfeitures (fines) against any amateur causing intentional malicious interference." (W5YI Report, 10/15/88; Westlink Report, 10/28/88).

A petition by 66-year-old WB4-AZT/Technician for examination element credit for up-grade of license based solely on being age 65 and older was denied. He "... has filed an application for Review by the full Commission of his FCC denied petition ..." (W5YI Report, 10/15/88).

WB6HMS seeks amendment of Rule Section 97.21 "... to lower the code speed requirement for the General Class from 13 to 12 words-per-minute and to increase the code speed for Advanced Class applicants to 16 wpm.

"He advances his proposal as a rational expression of the incentive amateur licensing structure." He "... also believes that it would make it easier to advance through the license structure all the way up to Amateur Extra without lowering standards." (W5YI Report, 10/15/88).

The ARRL has filed a petition with the FCC concerning VHF/UHF amateur bands. The petition states "... that the present automatic beacon subbands are completely within the portions of each band used for weak-signal amateur communications. The presence of powerful beacons has ... resulted in interfer-

ence to moon-bounce and other weak-signal amateur experimentation. Overall, it would better serve the needs of weak-signal experimenters to have the beacons outside the band segments primarily used for weak-signal communications and experimentation."


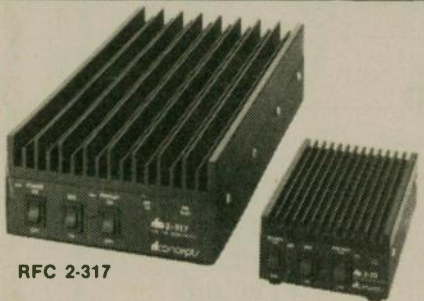
The subbands, present and proposed, in MHz, are Present: 144.050-144.060; 220.050-220.060; 222.05-222.06; 432.070-432.080 and Proposed: 144.275-144.300; 220.275-220.300; xxx.xxx-xxx.xxx; 432.300-432.400.

Concluding that this proposed change "... is not a controversial one, and that the proposed new subbands were arrived at only after a great deal of study and comment from the field," the League suggested the FCC could amend the rules by issuing an Order, which would avoid the delay of issuing a Notice of Proposed Rule Making, a comment period and other government procedures. (ARRL Letter, 10/26/88).

The ARRL "... continues to receive many inquiries ... about the status of PRB-3, the FCC notice which inquired if the private sector could establish a program to grant requests for specific call signs.

In July 1987, the ARRL had filed comments urging the Commission to retain the assignment of call signs. If the Commission would not conduct such a program, however, the ARRL could do so under certain conditions ... It has been more than a year since the comment period ended on this Notice, and no word has been received about its fate from the FCC." (ARRL Letter, 10/26/88).

"The present FCC Form 610-B, ...





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" 2-417	45W	IN =	170W OUT
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RFC 3-22	2W	IN =	20W OUT
" 3-211	2W	IN =	110W OUT
" 3-112	10W	IN =	120W OUT
" 3-312	30W	IN =	120W OUT
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used to renew or modify existing amateur club station licenses, has been extended through August 31, 1991. This means that although the forms carry an expiration date of August 31, 1988, they will continue to be valid for another three years." (ARRL Letter, 10/26/88).

Ham Operator Wins Interference Case; But Decision Is Appealed. A circuit court in Champaign County, IL, has dismissed an eviction suit brought against a resident licensee, NP4BU, by his village cooperative which accused him of creating a nuisance in his

community due to RFI. In his support, "... the court cited Federal preemption in matters involving RF interference by FCC-licensed Amateur Radio stations.

"The cooperative has appealed the case. Because the case has reached the Appellate level, the resulting decision could establish a legal precedent impacting the entire Amateur Radio community. (ARRL Letter, 10/08/88).

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IC-28H FM Mobile 45w		499.00	Call \$
IC-2GAT, New 7w HT		429.95	Call \$
IC 2AT FM HT		319.00	Call \$
IC 02AT FM HT, HP		409.00	Call \$
IC 2AT Micro HT		329.00	Call \$
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IC-38A 25w FM Xcvr		489.00	Call \$
IC 37A FM Mobile 25w		499.00	Call \$
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IC-03AT Deluxe HT		449.00	Call \$

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Please mark the envelope "VE Exams."

List the location, and information examinees should have (advance registration, etc.) and the name and telephone number of a person to contact for further information.

p/r = pre-register

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Jan 7	Fairbanks	AL7IF (907) 474-0842	w/i	Jan 21	Melrose	NC1V (617) 665-6061	w/i
Jan 7	Juneau	KL7KD (907) 789-0292	w/i	Michigan			
Jan 18	Eagle River	KL7HFQ (907) 243-2221	w/i	Jan 1	South Haven	WD8AGC/WD8MEU (616) 637-3095	w/i
Arizona				Jan 7	Saginaw	KO8M (517) 793-9636	w/i OK
Jan 7	Tucson	K7OPX (602) 886-7217	w/i OK	Nevada			
Arkansas				Jan 21	Minden	W6FFT (702) 266-3661	w/i only
Jan 28	Mountain Home	WM5W (501) 430-5123	p/r pref; ltd w/i	New Jersey			
California				Jan 14	Cranford	N2XJ (201) 635-7686	w/i OK
Jan 7	Burbank	W6JEP (818) 848-9340	w/i OK	Jan 19	Bellmawr	WA2VQG (609) 546-7710	w/i OK
Jan 14	Los Angeles	N6DYZ (213) 325-2965	p/r pref	New York			
Jan 21	Tehachapi	W6KQI (805) 822-6128	p/r pref	Jan 11	Bethpage	W2QUV (516) 354-6861	w/i OK
Colorado				Jan 14	Greenvale	W2NL (516) 541-2450	w/i OK
Jan 14	Denver	W0IJR (303) 366-9689	p/r pref	Jan 14	Selden	George Sintchek (516) 751-0894	w/i OK
Florida				Oregon			
Jan 3	New Port Rchy.	AA4FG (813) 849-1224	w/i OK	Jan 17	Portland	Randy (503) 649-5066	w/i only
Jan 21	W. Palm Beach	W4SS (407) 967-1477; KG4U (407) 582-7617	w/i	Jan 28	North Bend	WA7PHI (503) 756-6846	30 days p/r
Hawaii				Pennsylvania			
Jan 21	Hilo	AH6P (808) 969-0222	w/i	Jan 7	Erie	W3CG (814) 665-9124	w/i OK
Illinois				Tennessee			
Jan 14	Chicago	KA9HDN (312) 247-0650	w/i	Jan 7	Memphis	W4MI (901) 357-8148	p/r by 1/5
Jan 26	Lombard	(312) 495-0498		Texas			
Indiana				Jan 14	Midland	KT5G (915) 694-9450	
Jan 28	Lebanon	K9DFK (317) 249-2020; NX9Z (317) 482-1866		Vermont			
Louisiana				Jan 21	Montpelier	WB1AJG (802) 433-6172	p/r pref.; w/i OK
Jan 20	Baton Rouge	KA5YSY (504) 272-5088	w/i	Wisconsin			
Maryland				Feb 4	Racine	NW9P (414) 658-8390	p/r 30 days prior
Jan 7	College Park	NF31 (301) 963-4008	w/i				
Jan 22	Hagerstown	KC3TT (301) 824-3519	p/r				

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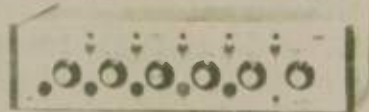
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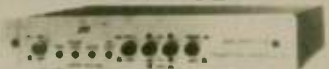
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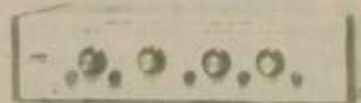
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OSCAR-13

NORM BROOKS, K6FO

OSCAR-10

In 1985, when OSCAR-10 was in its heyday, I assembled an OSCAR-10 station and had much success with it.

For Field Day 1985, I mounted the two antennas (2M and 70cm) on a wooden cross boom, which I supported on a 7' step ladder. The ladder was high enough so that the back end of the antennas cleared the ground as I pointed the antennas up at the satellite. This Field Day arrangement was steered by hand — the good old "arm-strong method."

I took this arrangement to our Worldradio Field Day (N6WR), and with it we worked 75 stations, which helped our score a lot. While the whole station was set up in the open, I made a videotape in which I explained all of the parts of an OSCAR Phase III station.

I added some shots later from my radio shack in which I demonstrated the sound of the beacons, showed how to figure the transmit frequency from a receive frequency, showed the time delay of signals coming back, etc.

I showed the tape at four radio clubs in Sacramento, and at the SEA-PAC convention at Seaside, Oregon in 1986.

OSCAR-13

Now that OSCAR-13 is in orbit, there is a new interest in the OSCAR Phase III. I was asked to bring my videotape out again, and re-explain Phase III to the local clubs. This time, Ed Merritt, KF6EN, helped by bringing his computer to show the members how we track the satellites.

We're finding that our Amateur Radio friends who are not into satellite operation are asking the same questions over and over. For this reason, I decided to use the question-and-answer format for this series of OSCAR-13 articles. I'll try to keep these articles as simple as possible so those of you who are beginners in satellite work won't feel too frustrated.

What is OSCAR-13? Why do you refer only to OSCARs 10 and 13?

The Amateur Radio satellite program has proceeded in stages which have been labeled "Phases" as follows:

Phase I. Experimental, short-life-time, low altitude. OSCARs 1, 2, 3 and 5 were in this category.

Phase II. Developmental, long-life-time, low altitude. OSCARs 6, 7, 8 and 9 fit here, as well as Russian satellites

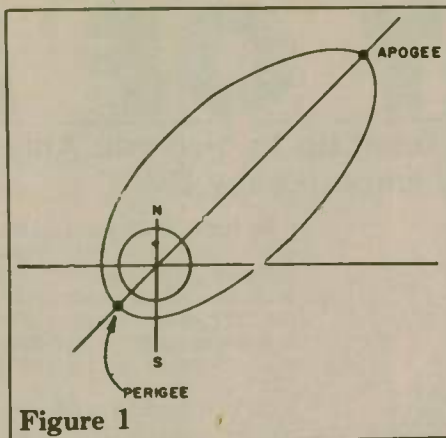


Figure 1

RS-1, 2, 3, 4, 5, 6, 7 and 8.

Phase III. Operational, long-life-time, high altitude. Here we have OSCARs 10 and 13. There was an OSCAR-4 that was in this category, but it lasted only a few weeks.

Phase IV. These are in the future. They will be operational, long-life-time and in geo-synchronous orbit (they will appear to be standing still as their orbit will match the speed of rotation of the Earth.)

Since OSCAR-13 is the only presently operational high-altitude satellite, that's why we emphasize it in these articles.

What do you mean by altitude?

By low altitude, we mean a few hun-

dred miles above the surface of the Earth. If you drew a circle on a sheet of paper and designated it as a diagram of the Earth, the altitude above the Earth on your diagram would be no higher than the thickness of your pencil line!

That's why a low-orbiting satellite only comes within range of a spot on the Earth for 20 minutes or less. To operate radio through such a satellite does not require a lot of power, nor high-gain antennas, because it is really not very far away when it is within your line of sight. The most difficult part of operating through the low-orbit satellites is to track the satellite to know when it will be within range of your location.

Phase III satellites have an elliptical orbit that takes them as far as 35,000 km from the Earth at the furthest point, which is called the apogee. The closest point to the Earth is called the perigee, and is about 3,000 km high. See Figure 1.

In such an orbit, several conditions exist that make operating through the satellite unique:

- Being so far away, the satellite "sees" an entire hemisphere of the Earth from apogee. Thus, stations anywhere in that half of the Earth can talk to each other through the satellite (please turn to page 20)

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Week-long event for WB200NFY

CHRISTINE WILSON, KA6TAL

For seven days, September 2-9, 20 radio amateurs did their part to help WB200NFY celebrate the U.S. Constitution's bicentennial. The number of contacts totaled 952, including all states, Washington, D.C. and 32 countries. Equipment consisted of a Drake TR7 with 2kW linear and a 5-band trap dipole at 270 feet.

Although 16 other Amateur Radio stations were scheduled to use the special "200" prefix that week, WB200NFY was the only Sacramento-based club station operating out of the state capital.

The station, more commonly known as WB6NFY/CARES (California Amateur Radio Emergency Services — no relation to ARES), is located in the basement of one of the "twin towers" state buildings, about four blocks from the state capitol.

Commemorative QSO's were sent to those sending SASE's and their contact numbers to: WB6NFY, State Health ARS — Sacramento Chapter, 744 "P" St., Office Bldg. 9 #B-40, Sacramento, CA 94814.

Much of the credit for the success of this station goes to John Hester, N6GKD; Jim Pratt, N6IG; Jim Pearce, N6ESV; and Paul Keller, WA6KGO.

Twelve years ago, the need for an emergency station was addressed by C.H. "Hank" Ostby — a California Department of Health (DOH) employee and radio amateur. The timing seemed perfect following the 1975 Oroville earthquake, when telephone communications were disrupted and the DOH was unable to contact the city.

In the early '80s, however, interest in the station's activities seemed low. But due to a series of natural



John Hester, N6GKD, doing his part for the celebration.

disasters, especially earthquakes (Calinga and Mexico City), interest was renewed.

The State Department of Health Services, the Emergency Medical Services Authority and the Department of Social Services — all agencies with major disaster response responsibilities — rebuilt the CARES station and funded a full-field HF, VHF and digital station. They began including the amateurs in their disaster response exercises and their planning processes.

In spring 1988, the state sent four amateurs to set up communications from Los Angeles (the Los Alamitos State Coordination Center near Long Beach) to Sacramento and Washington, D.C. With the support of the Sacramento City RACES staff, the

CARES operation demonstrated effective voice and digital communications.

The CARES station is now enjoying very good relations with state government, and has a dedicated membership. □

Kerboom!

Explosive hydrogen gas hangs around batteries. When connecting jumper cables to start a stalled vehicle, connect the black ground cable last, to a groundpoint as far as possible from the battery.

Sparks can be generated both in connecting and disconnecting the cable. Disconnect the ground cable first. That way, if a spark jumps, it will not blow up the battery.

Finally, consider this advice from Ross Sheldon, KG5AP, which appeared in an issue of *Splatter*, the newsletter of the Mississippi Coast ARA: When starting someone else's car, connect to his car last (better his battery than yours). That way, if he

goofs, his lawyer can only sue him, not you. —ARNS □

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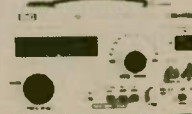
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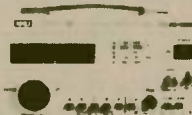


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Gordon West, WB6NOA

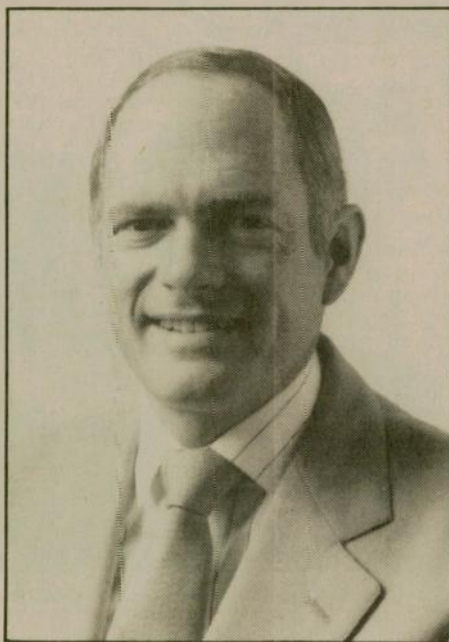
For 15 years, Seattle area amateur radio operators have provided communications for the *Special People's Christmas Cruise*, held on Lake Union in December. Hams keep over 300 boats on course during this six-hour event that lets over 3,000 disabled "special people" see Santa from the water.

Hams are up early in the morning on VHF and UHF repeaters coordinating a hundred buses that pick up these very excited and eager people and transport them to waiting boats at the many marinas on Lake Union. 6M, 2M, 220, 450 and even 1270 MHz repeater systems buzz with activity.

"Parade Control, K7NHE, to all stations, we will hold for another 30 minutes until the local storm-squall passes," radios Icom's Bob Brunkow, Cruise Director for the last 10 years. Bob operates from his 45 foot trawler yacht, decked out with the latest in radio and navigation equipment. Radio sets surround him everywhere aboard this floating com-station.

After the squall passes, hams relay the word for all boats to line-up for the two-hour cruise that passes by floating Santa. Santa even talks to the special people on 1270 MHz, a frequency free of QRM.

"... Hi honey, and thanks for coming out to see ol' Santa, and be good this coming year..." comes out of the Icom speaker on Bob's boat, to the utter delight of Sara, a very special person.



Bob Brunkow, K7NHE, has been cruise director for the last 10 years.

Other ham channels are reserved for other important traffic. "... Seattle Yacht Club just called and said the last bus just arrived... Can you turn the leaving boat around to pick up 30 more kids?" transmits Carolyn Pasquire, KA7TGL. Seconds later, engines go in reverse, and ham radio again saves the day for additional cruise hopefuls.

"Just look at the boat decorations," comments Brunkow, obviously

pleased with the effort that hundreds of hams and non-ham mariners put into the yearly program. Even a little bit of Seattle rain didn't dampen their spirits.

Area hams rehearsed this event months before the actual cruise. Portable repeaters and remote links were tested and retested before the actual day. Mark Allen, WJ7X, Icom's number 1 service manager, made sure that all gear was in tip-top shape.

"We have back ups for back ups... but usually everything goes slick as can be... thanks to all the hams who make this elaborate system fly." Last year, all Icom licensed ham employees took part in the communications... many, just recently licensed novice operators from a class held at the Icom facility for Icom employees and Icom families and friends.

Commercial radios were kept ready on emergency channels in case of a necessity for medical aid but these were not called upon. Too much excitement about a floating Santa to get sick!

Many hams who take part in the day long communications have never been out on the water themselves, yet they all feel that excitement of "being out there on the Lake" when they hear the special people operating "third party" to Santa.

As Bob noses the yacht back into the slip with the precision of a very experienced aircraft pilot (which he also is), he picks up the mike that ties in all the repeater systems and says just two short words with a big smile on his face... "Well done!" and a thanks to all the Seattle area Amateur Radio operators for making this Special People's Christmas Cruise another yearly success.

HOSARC 17th anniversary

The Hall of Science AR Club will issue a commemorative certificate to anyone working HOSARC club station WB2JSM on Sunday, Jan. 16, in celebration of our 17th anniversary.

SSB operation: 14.335, and 21.365.
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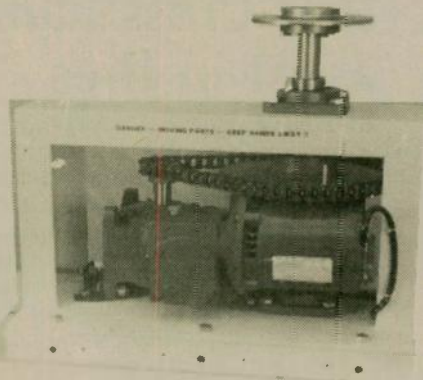
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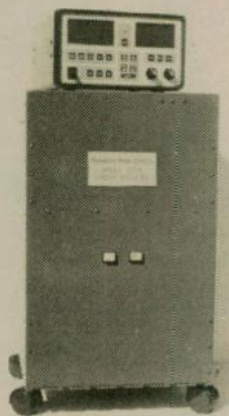
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PUBLIC SERVICE

Cooperation can save lives

Marian Dougherty

Early one Saturday afternoon in February 1987, Don Davenport, WB7OOY, came upon an elderly gentleman, Ed Blevins, collapsed from a heart attack, near a jeep trail on Juniper Wood Ranch 6 miles west of Ash Fork, Arizona.

Don called for help on CB Channel 9, and was quickly responded to by Pat — an EMT — in her pickup. Don handi-talked the Mingus Mountain 147.000 MHz repeater (a Phoenix-based, Mingus Mountain Repeater Group repeater, effective as far north as the Grand Canyon).

Don's call for assistance was responded to by Jack Dougherty, W7HWX, who was immediately patched through to a Williams, Arizona ambulance-base by the deputy sheriff responding to "911" emergency hotline calls. Soon after-

ward, Ed was in Flagstaff Hospital's ICU, released to a room by Tuesday and home safely at week's end.

On Saturday, August 22, Larry Cowden, K7DW — on that same I-40, with his licensed XYL driving — found himself suffering chest and arm pains of increasing severity. His request for an alerting phone call to a Prescott, Arizona hospital was responded to by Jack W7HWX.

Jim Wallace, WA7UJG, alerted the Arizona State Highway Patrol and kept the frequency clear. Daryl Hunt, W7CFH, 20 minutes driving time ahead of Larry, alerted Chino Valley police and emergency fire units, and Larry soon rested comfortably in an ambulance en route to the hospital.

Just to keep life from becoming dull and boring in his cabin hideaway, Don WB7OOY — later that mid-August day, on the same I-40 — came upon a Mustang that had gone through a railing, down an embankment and landed on its driver's side. The driver was pinned, bleeding from the mouth and clearly in critical, minutes-to-live condition. A call for help brought forth the same Daryl W7CFH, on the same "Mingus machine," now sometimes called "Mary Murphy: Marvelous, Magnificent Mingus Machine."

Although cases of assistance rendered solely by the Amateur Radio services of the world are beyond

count, instances such as this — in which amateur, CB, and police/fire and ambulance services combine to save lives — seem relatively rare.

But isn't that how volunteer emergency communicators, hams and CBers are "paid" — the rewards of having participated, using their own unique radio capabilities? □

Red Cross hams assist in fires

ROBERT PECK, KA7DEF

Just like one year ago, a lightning storm started numerous forest fires in the vicinity of Grants Pass, Oregon on the evening of Tuesday, August 23. By August 25, two fires remained uncontrolled, 1,000 acres in size, threatening a heavily wooded subdivision north of Grants Pass.

The sheriff's department called the Red Cross to establish an evacuation center at a local school. Red Cross radio officer, Doug Crick, WA7TZG, contacted the Josephine County Emergency Coordinator Robert Peck, KA7DEF, who immediately activated ARES and dispatched WM7K to set up a station at the Fleming evacuation center at 4:30 p.m.

WA7TZG was already manning the permanent VHF/HF station at the Red Cross HQ for contact with the evacuation center through the Southern Oregon Radio Club repeater, K7LIX. He was relieved later by Eldon Bottoms, KA7NCH, and Bob Farrant, W7TLK. Dale Le Barron, W7FBP, State EC, was contacted by HF on the State ARES Net frequency; he offered any help needed.

WM7K was later relieved by KF7HW, N7DFV, KC7IB, W7FQ, KA7ZAK, N7EEP, WA6SSO, KZ7A, KD6GG, and N7DG during the following 44 hours. The EC deactivated the ARES at noon on August 27, upon notification from the sheriff that the immediate emergency was over.

Twenty radio amateurs were directly involved and five indirectly. These 20 amateurs contributed 146 hours of service and drove 240 miles to perform the assignments. □

Beat the rust

For rusty chassis try Naval Jelly, obtainable in many K-Marts. Be careful that you don't "over-use." Daub a little aluminum paint on the affected areas. —David Knepper, W3BJZ; AM Press/Exchange, Woodlawn, TN □

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AWARDS

Ham wins middle schools vote



Paul George (left), noted middle level educator from the University of Florida, and Sherman Craig (right), president of the New York State Middle School Association, congratulate Joe Fairclough, WB2JKJ, on his election to the NYSMSA Board of Directors.

For the first time ever, Amateur Radio was presented as an educational tool to teachers and administrators from across New York state at their annual middle schools convention in Rochester, at the beginning of the year. Speaking on behalf of "Education thru Communication" was Joe Fairclough, WB2JKJ.

The story of the "Crew at 22" came through loud and clear to an audience of non-hams that were concerned with vitalizing the middle school experience of the state's millions of children. WB2JKJ is the director of the Radio Club of Junior High School 22, based

in Manhattan. The club funds and supports, nationwide, classrooms that use Amateur Radio to enrich and enhance the education of young people.

Evidently, Amateur Radio is a winner among Empire State educators. At the election for new officers, which was the wind-up to the convention, Joe Fairclough won the position of New York City Director for the New York State Middle Schools Association in a hotly contested race. Score a big victory for the educational applications of Amateur Radio. □

Eletronica Popular Atlantic Award

The Eletronica Popular Atlantic Award (EP-AA) is available to all licensed amateurs, for contacts made on or after March 31, 1967. The award is issued to the amateur, not the call sign, but all contacts must be made from the same call area or, where no call areas exist, from the state or county.

Do not send QSL cards. A list (GCR) showing full details of QSL-verified contacts must be certified by a recognized Amateur Radio society. There is no fee for non-Brazilian ap-

plicants. (It is suggested that 5 IRC's be sent with claim to help defray costs.)

Applications should be addressed to sponsor: Antenna Editorial Group, Caixa Postal 1131, 20001 Rio de Janeiro, RJ, BRAZIL, SO. AMERICA

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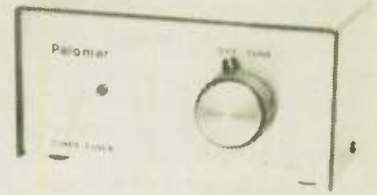
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Rules

QSL-confirmed two-way contact (any band, any mode) with 60 different countries of the Atlantic Ocean border. One of the countries must be a Brazilian oceanic island (PY0). Minimum report: 3-3 (phone) or 3-3-8 (CW).

The current official DXCC countries list will be adopted; consult it before making your application log. Only countries of the Atlantic border proper (and not of interior seas such as Baltic or Mediterranean) are valid for the EP-AA.

SPECIAL NOTE: Sponsor has the right of requiring originals or photocopies of one or more QSL's of contacts logged.

Prefixes of countries valid for EP-AA*: C5 - C6 - CE - CE9 - CM, CO - CN - CT - CT2 - CT3 - CX - D2, 3 - D4 - DJ - EA - EA8 - EI - EL - F - FG - FM - FP - FY - G - GD - GI - GJ, GC - GM - GU - GW - HH - HI - HK - HP - HR - J3 - VP2G - J5, CR3 - J6, VP2L, J7VP2D, JW - JX - K, W, N, A - KC4 - KG4 - KP3 - KP4 - KP4 (Desecheo) - KS4 - KV - LA - LU - LU-Z - ON - OR4 - OX, XP - OY - OZ - PA - PJ - PJ (St. Marteen & Dep) - PY - PY0 (Fern. Noronha) - PY0 (St. Peter & St. Paul) - PY0 (Trindade & Martin Vaz) - PZ - S9 (CR5) - SM - TF - TG - TI - TJ - TN - TR - TU - TY - VE, VO - VE1 (Sable) - VE1 (St. Paul) - VP1 - VP2A - VP2E - VP2K - VP2M - VP2S - VP2V - VP5 - VP8 (Falkland) - VP8 (So. Georgia) - VP8 (So. Orkney) - VP8 (So. Sandwich) - VP8 (So. Shetland) - VP9 - XE - YN - YS - YV - YV0 (Aves) - ZB - ZD7 - ZD8 - ZD9 - ZF - ZS1, 2, 4, 5, 6 - ZS3 - 3C - 3C0 - 3X - 3Y - 4K - 4U1UN - 5N - 5T - 5V - 6W - 6Y - 8J - 8P - 8R - 9G - 9L - 9Y.

*Only basic DXCC prefixes are shown; subject to additions and changes, according to the current list, additional or special prefixes, etc.)

QRP operation: A special "sticker" is available to applicant's QRP operation in all contacts. Requirement: a signed statement that no more than 10W input was used in all contacts.

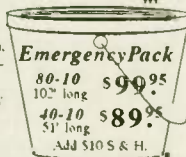
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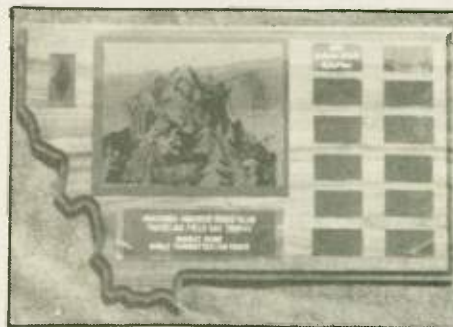


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Traveling trophy premiere



Pictured here is the Anaconda (Montana) ARC's Traveling Field Day Trophy, being presented for the first time. The plaque features one of the famous "Gil" QST Field Day cover cartoons, and goes to the Montana Section Field Day entry with the highest score in the single-transmitter, low-power category, as published in QST. The AARC sponsors the trophy as an incentive for groups in the Montana Section to participate in Field Day, and for club publicity. (Left to right): AARC President Rose Kopp, N7HKW; presenting the trophy to Gallatin Ham Radio Club QRPers Fred Cady, KE7X, Wendell Morrill, NV7Y, and Dick Mack, N0RM/7.



Close-up of the Anaconda ARC's Traveling Field Day Trophy

OSCAR 13

(continued from page 14)

lite. This makes a Phase III satellite a "DX" satellite.

- Signals are weak after traveling 35,000 km (about 21,000 miles), so high-gain antennas — both receive and transmit — must be used at an OSCAR-13 station. A high-gain pre-amplifier is used at the receive antenna, too. Unfortunately, these things cost money if you're not a do-it-yourselfer in VHF or UHF gear. We'll cover hardware in a future article.

- Tracking OSCAR-13 is easier than tracking a low-orbiting satellite, as the satellite does not move so fast across the sky. At certain parts of its

orbit, it appears to be standing still. While talking through OSCAR-13, you need check your antenna positioning only every half hour or so.

- Satellite operation is "full duplex," which means you hear yourself come back. This helps you get set up in the first place. When you can hear your own signal, you know what the other stations are hearing.

To be continued next month. If you are seriously interested in satellite operation, get a copy of *The Satellite Experimenter's Handbook*, published by the ARRL. It covers everything I will be covering in this series. □



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* Transmitting equipment sold only to licensed radio amateurs verified in the Callbook for legal purposes. If newly licensed or upgraded, send copy of license. Receiving downconv. available to all starting @\$49 (TVC-2G).

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NOTE: Flea Market participants must be registered for the convention.

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ARRL National Convention Highlights

JOHN MINKE, N6JM

At the 1988 ARRL National Convention in Portland, Oregon, September 9-11, several DXpeditions were discussed.

Navassa DXpedition

Robert Shelton, N2EDF, presided over the first of the DX-related sessions at the convention. First licensed in 1983, Bob served as a New Jersey legislator for two years and a Superior Court judge for nine years. He is now a practicing attorney in northwestern New Jersey.

Bob's topic was his recent N2EDF/NP1 DXpedition to Navassa Island. One of the most important considerations of a DXpedition is the paperwork. DXpedition operators must be properly licensed to be able to operate from U.S. territories. As the island is administered by the Coast Guard, permission was needed to land there.

Bob had helped out with the paperwork during the 6Y5NR/KP1 DXpedition in 1985, so it was suggested he go along with the group. As a result, he made plans for another one three years later, where he operated in February 1988 as N2EDR/NP1.

In addition to his talk he presented a short video, including excerpts from a longer video made by Lefty Bog-gess, KE4VU. Quite evident on the video was the noise of the generators running all the time. One's mind can tune out the noise, but the video cannot.

Total outlay for the trip was \$12,000. Costs for the QSL cards far exceeded the incoming funds for confirmed contacts. Bob said his DXCC count was 270 and he still needed Navassa Island.

DXpedition

There were two presentations given during this session, introduced by convention committee member Jim Fenstermaker, K9JF.

The first presentation was by Jim Neiger, N6TJ, who discussed his contest activities from Egypt and Cape Verde. In Egypt, Jim was the guest of Ezzat, SU1ER, whose call was used for SSB contacts. On CW, Jim used the call of Ezzat's daughter, SU1MR. It is almost impossible to obtain a license from this country, so Jim had to settle with Ezzat's call.

Pictured on cover: Alan Chandler, K6RFX, Ph.D., explained "The Mystique of Grounding."

Hamming from Nepal

Another one of the more popular presentations was by the well-known Father Marshall Moran, 9N1MM. Originally from the Midwest, Father Moran has spent most of his life helping others. At age 23 he volunteered to go to India. In 1949 the government of Nepal invited him to come to their country as an educator, and he was the second or third American to enter that country.

This remarkable gentleman explained how he was able to obtain a license from Nepal. As there was no Amateur Radio in that country, Father Moran prepared his own license under the rules of ITU and the king's executive order. Therefore, he received license #1.

Father Moran also commented on meeting Juan Carlos, EA0JC, before he became king of Spain. When the time came for Juan Carlos, now king, to visit the king of Nepal, Father Moran watched the procession coming down the street and saw Juan Carlos waving at him.

Father Moran was later invited to visit with both kings and queens during that visit. He was given 30 minutes, while the ambassadors were only allowed 15 minutes. The comment from 9N1MM was, "So if you want to meet the big shots, become a ham!"

Father Moran is given leave to return to the States every few years and will return to Nepal this December.

The DX Forum

The DX Forum was opened by Rush Drake, W7RM, ARRL Northwestern Division Director and DXer. He extended the hospitality of recognizing the following DX calls at the forum: OH2BA, OH1ZAA, DK3GI, JA2EZT and KH6BZF.

Chod Harris, VP2ML, of *The DX Bulletin* fame, was first on the program. He explained how he published his DX newsletter each week. From what we gather, his faithful assistant "also named Donica" kept things going while Chod talked on the phone.

David Norton, AB9O, prepared a

DXCC Honor Roll Quiz printed on handouts that the DXers could work on in their free time. Accompanying the quiz was a set of facts and figures based on the Honor Roll listings in the June issue of *QST*.

Rusty Epps, W6OAT, the new president of the Northern California DX Foundation, was given the floor to give details on a DXpedition to a brand new DXCC country the end of October. The new country — Rotuma — is based on the new wording of points 1 and 2A of the DXCC rules.



Dave Phemister, WB7ESV, gave the scoop on the Larsen mobile antenna.

Under the old ruling, the separation had to be 500 miles or more from the nearest island of an island nation for separate country status. Rotuma, part of Fiji, is 287.4 miles from Kia Island in the Fiji group, and therefore did not qualify. Point 2A was modified to include islands of a nation and not just the mainland only for the 225 mile minimum distance requirement. As Rotuma is more than 225 miles from the nearest island of the group of islands that make up the parent DX-CC country of Fiji, it will now count.

Rusty reported that the DXpedition (please turn to page 27)

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Where's YOUR license?

Have you seen your Amateur Radio license — the original, not photocopy — lately? Do you have it "readily available for inspection by any authorized government official, upon request made by an authorized representative of the Commission?" (97.82)

You are operating illegally if you cannot account for its whereabouts, or have not submitted a Form 610 for a duplicate replacement.

Make sure your original license is in a safe place, and carry/send photocopies of that original. If you lose or misplace the original, submit a Form 610 with a letter of explanation as to what has happened to the original. It costs nothing but a stamp, and it'll ensure you operating in accordance with the rules.

While at it, check that expiration date. If it's near or past the expiration date, immediately submit a Form 610 for renewal if you want to keep your license.

Finally, remember that FCC rules — not the VEC/VE — demand that the original, not a photocopy, be presented for proof at examination sessions. Without it you can be denied the chance to take the exam you are applying for.

FRED WASIELEWSKI, WA2VJL
San Benito, Texas

Mixed-up priorities

Whenever there is a story in *Worldradio* or one of the other leading radio magazines about a ham in any part of the United States, who has run afoul of the zoning regulations by putting up an antenna tower that exceeds the legal limit and who is threatened with arrest, hams all over the country rise up in anger and some even contribute to a defense fund to get him out of trouble. Yet, in the Baltimore area, an old-time ham was in much more serious trouble — charged with attempted murder — and, according to reports, no one would give him a quarter so he could call a lawyer from the police station.

David Clark White was a retired electronics engineer, at one time an FCC inspector, who lived alone on the

north edge of Baltimore. For years he had been involved in Amateur Radio. Old-timers remembered him as W3FUV. His current Extra Class call sign was W3TE.

Dave was born in 1921 and spent practically his entire life in the Baltimore area. He attended Baltimore Polytechnic Institute, graduating about 1940. He had an early interest in electronics and Amateur Radio, and got his first FCC license while still in school. He attended meetings of the local radio clubs; he loved experimenting with electronic equipment.

In the days of AM radio, with a BC-610 transmitter and a 100' tower, his signal was one of the strongest in the entire area. His knowledge of radio led to a job as inspector with the FCC. In addition to his tower, Dave also built a 20' x 40' swimming pool in his backyard. For a while he invited the neighborhood children to swim in his pool. Then problems arose, and he refused to let the children in.

Later Dave had more serious problems. He contracted a form of sleeping sickness. His frequent periods of sleepiness interfered with his work, and he was forced to give up his FCC job. The disease finally resulted in neurotic behavior, which led neighbors to consider him an oddball. Children in

the neighborhood, once his friends, now considered him a prime target for pranks and harassment.

After several previous altercations with the older boys, on the night of February 2, 1988, Dave heard noises in his back yard. Looking out the window, Dave saw what appeared to be three grown teenage boys tearing down a concrete-block wall that he was building around his swimming pool, and breaking the blocks by throwing them into the empty pool.

Dave had no telephone to call the police, no one to turn to for help. In desperation he grabbed his bow and arrow, stepped outside the door, and called to the boys. One of the invaders threatened him and approached in a menacing manner. Dave feared bodily harm and let fly an arrow. The arrow struck its mark. The boy was hit. Soon police and an ambulance arrived. The injured one was taken to a hospital for treatment of his wound, which later proved to be not very serious, and Dave was hauled off to a police station where he was charged with assault with intent to murder. The boys who instigated the trouble were not charged with any offense.

At a later hearing, the judge refused to release him, and Dave was sent to the Baltimore County Detention Center. During his incarceration it is reported that the prison officials refused to get the medication that he normally took to control his sleeping sickness, and he grew more irrational. He was then transferred to a mental hospital for psychiatric evaluation.

Dave had no attorney so a public defender was appointed to represent him. He was not satisfied with this arrangement and wanted a private attorney to represent him but didn't know whom to call and, according to reports, didn't have a quarter in change to use the pay phone. He was not, however, a pauper, as newspaper articles implied, but apparently had no money with him when taken to jail.

In spite of considerable newspaper publicity, no one offered to help him get a lawyer. Between time spent in the hospital and in jail, he was held prisoner nearly four months before charges were dropped. Dave then returned to his home, which had been broken into more than once during his confinement.

Because of his illness, Dave also had other problems. The Maryland Motor Vehicle Administration had refused to renew his driver's license so he could no longer drive an automobile. He then acquired a moped, which could be operated without a license. But it was difficult for him to travel any distance to get needed medical treatment.

(please turn to page 26)

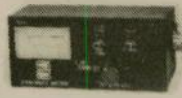
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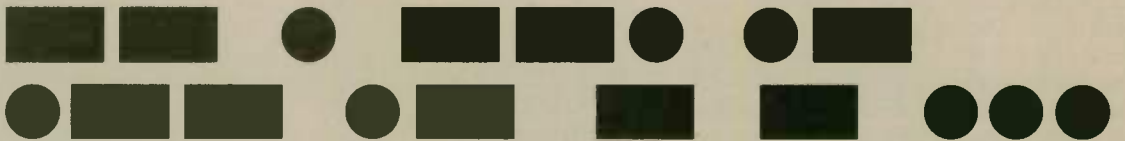
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Off the Air

(continued from page 24)

About a month after he returned home, a friend went to Dave's home to check on him and found his body lying on the floor near his bed. A medical report said death, probably on July 3, was due to heart disease. He was buried next to his parents in an Elkridge, Maryland cemetery. He had no relatives, or at least none that could be reached. A few friends attended the funeral.

But during the many weeks that David Clark White was held in confinement no lawyer, no individual, no radio club came to his assistance — even though newspaper accounts mentioned that he was an Amateur Radio operator and his case received considerable publicity. One local radio club magazine even refused to print an article about Dave's problems saying they preferred articles of a more upbeat nature on ham activities.

And yet amateurs all over the country — and even the ARRL — have come to the aid of hams who have been charged with violation of antenna ordinances. Why the difference? Is it a matter of priorities? Which is more serious — to be limited to a 50' tower, or to be imprisoned for four months, charged with assault with intent to

murder when the person charged was only trying to defend his property? Maybe our radio clubs, when electing a president, should also elect an ombudsman to assist hams in distress.

WILLARD PRENTICE, W3VBM
Timonium, Maryland □

RV park rebuttal

In your August 1988 issue on page 27, an item appeared regarding the refusal of our park manager here at Desert Shadows RV Resort to admit an RV having an Amateur Radio antenna.

In the interests of clarity, let me say first that while we do have an Owners Association rule against ANY kind of antenna since we have a cable TV system and are trying to preserve our view of the Santa Rosas on the south and Mt. San Jacinto to the west, there is always room for negotiation.

Unfortunately, the park manager at that time — who, by the way, is no longer with us, was not a negotiator and in fact was something of a martinet, a quality which contributed to his downfall.

Thank you for allowing us to clarify the impression left by your reader.

GARY HESS
Desert Shadows RV Resort
Cathedral City, California □

Who are they kidding?

I am increasingly and wryly amused by manufacturers' ads for *limited space* antennas. One I received today proclaims the virtues of a *limited space* multi-band dipole that measures 137 feet.

Perhaps the ad writers share a dorm in some uninhabited area of Wyoming, but I live in a densely-populated urban area where 137 feet is not limited space.

My home is a 2½-story townhouse. The roof measures 18 x 36 feet, which is hardly suitable for an antenna farm. Yet I do operate, without RFI or TVI, a tri-band HF beam (not a mini-model) a four-band HF V-dipole, a 2M vertical and a commercial TV receiving antenna. And I'm talking limited space!

Maybe ad writers think that term means not hearing a Wyoming neighbor's axe ring in woods across a canyon four miles away. But limited space is where America's population is going . . . hams included.

So I suggest that antenna makers consult census trends, adjust their research and goals and revise their offerings and ads accordingly.

JAY REISMAN, Advanced Class

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Rechargeable battery packs on hand-held transceivers are like athletes: they don't like constant feedings/chargings without healthy workouts. Use them until your hand-held's battery indicator just says "low", then swap to your spare pack while recharging the other. They'll reward you with nice, long life. Helpful Hint compliment of Gordon West, WB6NOA.

—Porter County ARC, Valparaiso, IN

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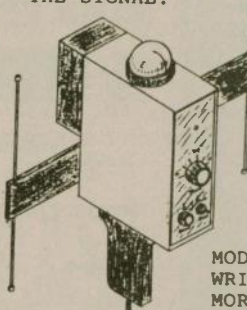
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Arizona youths learn Amateur Radio

Cal Turner, WI6S

A youth program sponsored by the Verde Valley Amateur Radio Association (VVARA) in the Verde Valley of Arizona developed into a full-time "Show & Do" project. In January 1988, Cal (WI6S) and Mary (KA6-RCM) Turner, as president and secretary of the VVARA, began Amateur Radio demonstrations in the elementary and high schools in the Verde Valley.

Demonstration sessions began with the videotape *The New World of Amateur Radio*, followed by 2M and 440 hand-held demonstrations. The students were permitted actual on-the-air contacts, even though some demonstrated a bit of "mike fright."

Through the efforts of high school student Jerry Boling, KB7EAD, the high school permitted members of VVARA to put on a three-hour program in the school yard on March 22, where two low-band rigs, packet radio and VHF stations were operated. The students were again permitted on-the-air contacts, which created a great deal of enthusiasm. Certificates were prepared and handed out to anyone who successfully tapped out a CW message on a code oscillator.

VVARA members participating were Jerry Boling, KB7EAD; George Hopping, NZ7I; Paul Travis, W7EI; Martin Kirk, N7ACZ; Mike Purser, KB7EDK; Arthur Rissberger, KC2-

EN; John Sullivan, KQ7T; and Cal Turner, WI6S.

Prior to the closing of school for the summer, two students — Jerry, KB7EAD, and Mike, KB7EDK — arranged for the VVARA to participate in the Camp Verde High School "Career Days" program. The program



Jerry Boling, KB7EAD, operating 10M SSB station on the campus of the Camp Verde High School. Members of the Verde Valley ARA provided the radios and coaxial cable antennas for the noontime seminar. Jerry was the first new licensee under the VVARA's youth program. (Photos by Cal Turner, WI6S)

lasted for three days, April 26-28, for eight hours per day.

The students were permitted to visit various programs and learn what was available beyond high school curriculum. Members of the VVARA again responded by providing hourly seminars which included the ARRL tape, and live HF and VHF contacts on both SSB and CW. Particularly noteworthy was a contact made with Jerusalem on 10M via a coaxial cable antenna laying on the roof of the school building.

The CW certificates were again used and became a prize possession. VVARA members participating were Frank Funk, N7EBT; Arthur Rissberger, KC2EN; George Hopping, NZ7I; John Sullivan, KQ7T; Jerry Boling, KB7EAD; and Mike Purser, KB7EDK.

During "Career Days," KB7EAD and KB7EDK signed up 40 students for a summer program of Novice training. They also formed a high school radio club to be affiliated with VVARA.

The VVARA's Novice program has resulted in 14 new licensees and was expected to increase this number by a substantial margin during the summer months. □

ARRL National Convention

(continued from page 23)

is planned for the period October 22 to November 5. The anticipated call will be 3D2XX, and in addition to Rusty the other members will include VK8XX, K3NA, KN3T and W3SZN.

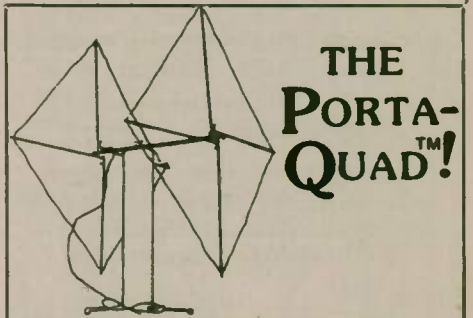
Rotuma is just west of the International Date Line and is 44 square miles in area. The island has a population of several thousand, and visits to the island are by invitation only.

Randy Brink, KD7IK, of the Western Washington DX Club, discussed the efforts of the May 1989 joint U.S./USSR DXpedition to UG6-land (Armenia). Much of the credit for this goes to Jack Bock, K7ZR. Mostly members of the Washington club, they will be paying their own way

over, including the hotel accommodations. There is a planned follow-up DXpedition by Soviet DXers to come here and operate from Wyoming for two weeks.

A panel of leading DXers was formed which included Don Search, W3AZD, of the DXCC Desk at ARRL Headquarters; Jack Bock, K7ZR, and Jim Maxwell, W6CF, of the DX Advisory Committee; and Roland Mensch, DK3GI, of the Bavarian Contest Club.

Don reported that as of July 1, 233 applications had been received for the new 10M DXCC. Processing has been slow, and they are processing them in the order of highest countries submitted.



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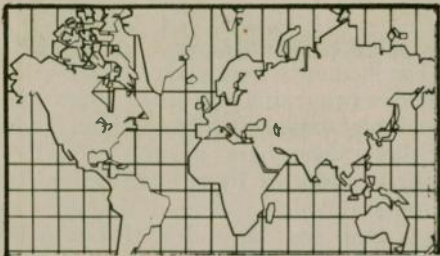
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Activities Calendar

- 21-22 Jan. MRASZ Hungarian DX Contest (CW)
- 27-29 Jan. CQ Worldwide 160 Meter Contest (CW)
- 28-29 Jan. UBA/REF French Contest (CW)
- 04-05 Feb. RSGB 7.0 MHz Contest (SSB)
- 11-12 Feb. VERON PACC Contest
- 11-12 Feb. RSGB 1st 1.8 MHz Contest (CW)
- 11-12 Feb. SRJ Yugoslavian DX Contest (CW)
- 18-19 Feb. RSGB 7.0 MHz Contest (CW)
- 18-19 Feb. ARRL International DX Contest (CW)
- 24-26 Feb. CQ Worldwide 160 Meter Contest (SSB)
- 25-26 Feb. UBA/REF French Contest (SSB)

W-100-N

Evidently the bands have been good, as DXers have been too busy to apply for **WORLD RADIO's** Worked 100 Nations Award. However, we did receive one application during October. Our congratulations to the following DXer:

348. K6ICS Michael K. Gauthier

Information is available for this award for an SASE to either N6JM or from **WORLD RADIO** headquarters.

China (BY)

With the improved band conditions, the BY's are back in full force. We finally worked our first one on 10M — BY9GA, on 28.526 MHz using CW in the phone band. In the next two days we worked two more — BY4RB and BY5RT. Feast or famine!

At least 12 BY calls were listed in the DX reports this past period. They include BY1BJ, BY1QH, BY4AA, BY4RB, BY4SZ, BY4WNG, BY5HZ, BY5NC, BY5QA, BY5RT, BY8AC and BY9GA. They are plentiful and very active.

Since working a BY station is new to most of us, many DXers prefer to



Many DXers attending the ARRL National Convention in Portland last summer had the opportunity to meet Father Marshall Moran, 9N1MM (right), the world renowned DXer from Nepal. A few days later Father Moran made a visit to Sun City, AZ, where he visited his QSL Manager, Ed Blaszczyk, N7EB.

send their QSL direct. Therefore, we have provided the latest QSL information for Chinese stations, courtesy of *The JARL News*.

- BY1BH P.O. Box 1656, Beijing
- BY1BJ P.O. Box 6111, Beijing
- BY1CKJ P.O. Box 6207, Beijing
- BY1PK P.O. Box 6106, Beijing
- BY1QH P.O. Box 2654, Beijing
- BY1SK P.O. Box 2916, Beijing
- BY4AA P.O. Box 205, Shanghai
- BY4AJT P.O. Box 5221, Shanghai
- BY4ALC P.O. Box 4043, Shanghai
- BY4AOM P.O. Box 227, Shanghai
- BY4AY P.O. Box 5304, Shanghai
- BY4RB P.O. Box 413, Zhenjiang
- BY4RN P.O. Box 2405, Nanjing
- BY4SZ P.O. Box 51, Suzhou
- BY4WNG P.O. Box 1827, Nanjing
- BY5HZ P.O. Box 804, Hangzhou
- BY5NC P.O. Box 1033, Nanchang
- BY5QA P.O. Box 507, Fuzhou
- BY5RA P.O. Box 730, Fuzhou
- BY5RF P.O. Box 209, Fuzhou

- BY5RT P.O. Box 707, Fuzhou
- BY7HL P.O. Box 105, Changsha
- BY7HY P.O. Box 14, Yueyang, Hunan
- BY7KT P.O. Box 1285, Guangzhou
- BY8AA P.O. Box 607, Chengdu
- BY8AC 38 Guzhongsi St., Chengdu
- BY9GA P.O. Box 12, Lanzhou
- BY0AA P.O. Box 202, Wulumuqi

Be sure to include **People's Republic of China** in the address, and also include sufficient funds for return postage. We have sent both "green-stamps" and IRCs in the past. However, probably the preference is IRCs.

Morocco (CN)

Inside DX reports that Steve Hawley, CN8FC, is active on 28.610 MHz at 1500 UTC and looking for contacts with North America. Also on the same frequency is Paul, CN8VE, from

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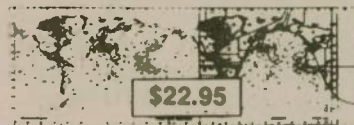
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1930 UTC. Joining them soon will be Kathy, CN8YL. Newly licensed, she is Paul's XYL.

Other 10M activity from Morocco includes the following stations:

CN2AQ	28.524 MHz	1730 UTC
CN8DZ	28.530 MHz	2000 UTC
CN8EL	28.517 MHz	1945 UTC

CN8FC has also been found on CW. If you need Morocco on CW try near 28.027 MHz from 1930 UTC.

RTTY buffs might take a listen near 14.088 MHz around 2300 UTC for CN8BX, who was reported working in to Ohio mid-October.

Comoros (D68)

QRZ DX states that John, KY0T, has been active from Grand Comore Island as KY0T/D68. His license was valid through November 15th. John was active in the recent Worldwide DX Contest, making several DXers very happy. We worked John on 10M, and it was an all-time new one for us.

Also active from Comoros is mainly on CW D668JL. Look for this one between 14.014 and 14.032 MHz from 0300 UTC. Try the other bands on 21.005 MHz around 1830 UTC and 28.019 MHz at 1130 UTC.

D68JL is not limited to CW, as he has been found on RTTY working Europeans around 1815 UTC on 14.089 MHz, and on SSB near 21.335 MHz at 2000 UTC and 28.484 MHz at 1600 UTC.

Amsterdam Island (FT5ZB)

After dishing out a brand new one for many a deserving DXer, Danny, FT5ZB, has left the island. Danny had been very active on all bands, both SSB and CW. His replacement will be FT5ZD, whom we all hope will be as active.

Jan Mayen (JX)

Ivar Svendsen, LA1UG, should be on Jan Mayen signing JW1UG until the middle of April, according to *In-side DX*. The location will be the eastern side of the island, which due to the high mountains, is unfavorable for working into North America. However, he plans to spend some time on the other side of the mountains.

We saw one report for JW1UG with an Oregon station in mid-October on 14.028 MHz at 1800 UTC. We do not know whether this was from the eastern side of the island.

Rotuma (3D2XX)

The Rotuma DXpedition team showed as expected. The first few days the pileups were humongous, with every red-blooded DXer in there calling. After a few days things eased, so stations with modest power were able to get through. We hope you were

able to work this one. Remember, please include a SASE with your QSL requests to WB6GFJ. Also, a contribution would be appreciated. Make your checks payable to: NCDXF - Special Projects Fund. Your contribution is tax deductible.

Vietnam (3W8)

After a long absence of amateur radio in Vietnam, a Hungarian DXpedition team put on this one. Operating from Hanoi, the team was signing with two calls: 3W8CW on CW (what else?) and 3W8DX on SSB. The team was scheduled to leave the end of November.

If you missed this one, perhaps you will have another shot at it, as club station RL8PYL is reported to have permission to go there to operate this month.

Madagascar (5R8)

QRZ DX reports that Alain, 5R8AL, is scheduled to return to the island in October, and promises to be very active. According to *The DX Bulletin*, this is the only station that is being accepted for DXCC. Two other recent calls, 5R8JD and 5R8VT, have not been accepted, as the proper documentation has yet to be received at the DXCC desk.

Lebanon (OD5)

Several stations have been reported from this one during October, including CW, SSB and RTTY. Take a listen for the following:

OD5AS	14.243 MHz	0445 UTC
OD5BK	21.167 MHz	1900 UTC
OD5LX	14.012 MHz	0215 UTC
OD5MW	28.372 MHz	1430 UTC
OD5NC	14.072 MHz	0415 UTC
OD5QX	28.363 MHz	1430 UTC
OD5QZ	28.423 MHz	1300 UTC
OD5VT	28.512 MHz	1345 UTC

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Phone: (619) 747-3343

1989 International DX Convention

It isn't too early to make plans for the International DX Convention this Spring. Hosted this year by the Northern California DX Club, the bash will again be held at the Holiday Inn in

DX Prediction

Maximum Usable Frequency from West Coast, Central U.S., and East Coast (courtesy of Engineering Systems Incorporated, Box 939, Vienna, VA 22180).

The numbers listed in each section are the average Maximum Usable Frequencies (MUF) in MHz for contacting five major areas of the world centered on Africa-Kenya/Nairobi, Asia-Japan/Tokyo, Oceania-Australia/Melbourne, Europe-Germany/Frankfurt, and South America-Brazil/Rio De Janeiro. Chance of contact as determined by path loss is indicated as bold MUF for good, plain MUF for fair, and in parentheses for poor. UTC in hours.

JANUARY 1989 WEST COAST

UTC	AFRI	ASIA	OCEA	EURO	SO AM
10	(11)	11	14	(9)	14
12	(10)	11	14	(9)	13
14	(23)	11	13	9	34
16	28	11	20	(15)	40
18	28	(11)	21	(10)	42
20	23	(15)	26	(10)	43
22	20	29	33	(9)	41
24	17	31	37	9	33
2	13	26	35	9	18
4	12	14	18	9	16
6	(11)	13	16	9	15
8	(11)	12	15	9	14

CENTRAL USA

UTC	AFRI	ASIA	OCEA	EURO	SO AM
8	(13)	9	14	9	14
10	(13)	9	14	(9)	13
12	30	9	13	(9)	26
14	37	9	22	2	36
16	40	(9)	19	20	40
18	29	(9)	(23)	16	42
20	24	(9)	30	(10)	43
22	20	23	35	(10)	39
24	17	22	389		29
2	15	(12)	27	9	18
4	14	(11)	(17)	9	16
6	(14)	(10)	(15)	9	15

EAST COAST

UTC	AFRI	ASIA	PCEA	EURO	SO AM
7	(13)	9	(14)	9	14
9	(13)	9	13	9	14
11	31	9	13	19	26
13	38	10	25	23	37
15	41	(9)	21	23	40
17	33	(9)	(22)	20	42
19	27	(9)	27	(11)	43
21	23	19	33	10	40
23	17	19	34	9	31
1	16	(11)	18	9	19
3	15	(10)	(16)	9	17
5	14	(9)	(15)	9	15

Visalia the weekend of April 21, 22 and 23.

Pre-registration this year is \$40, which includes a banquet and breakfast. Send your check prior to March 20 to: 1989 International DX Convention, Dave Engle, KE6ZE, 1063 Summerwood Court, San Jose, CA 95132.

Make your hotel reservations now if you want a place to stay. Call the hotel directly at 209/651-2900. Don't forget to tell them you're with the International DX Convention. A large block of rooms are reserved at special rates just for attending DXers until April 6th. See you there!

Clubs

The Northern California DX Club announces their recently elected officers for the 1988/89 term: President, Jerry Griffin, W8MEP; Vice President, Larry Souza, KG6GF; Secretary, Tom Jones, K6TS, and Treasurer Stan Kuhl, K6MA. Dave Engle, KE6ZE, is the new editor of *The DX-er*, the official club newspaper. He replaced Jim Maxwell, W6CF, who resigned to accept a position on the ARRL DX Advisory Committee.

Double 5-Band WAZ

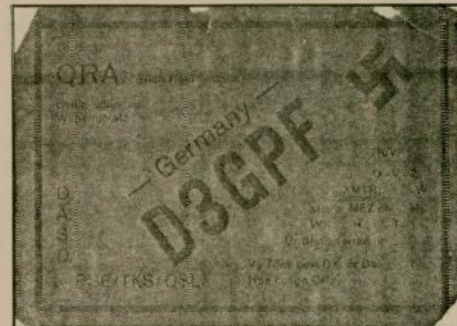
Mike Smedal, 5B4TI, reports that he has just applied for his second 5-Band WAZ. Mike presently holds 5-Band WAZ #102, from his previous operation as A71AD. We would like to know if there are any other DXers that have worked and applied for this award more than once.

Antique QSL Department

From the estate of Roy Weisbach, W9UX, we have a card for ET1IR of Ethiopia, whom Roy worked on 20M on August 30, 1947. The operator sent



Roy an RST of 458 for this CW contact. The card is printed in green and brown on buff card stock.



ACHTUNG! Mac McDaniel, W3HCW, submitted this card, which was from the estate of Sam Maiolo, W3LUA, who became a Silent Key several years ago. The entered QSO information has almost faded out completely. The contact was made on 20M, probably in 1938. Sam's call at that time was W8LUA, since western Pennsylvania was included in the 8th call area. The call D3GPF was assigned to Erich Hohl, whose whereabouts today is unknown.

QSL Information

Phil Strack, N9CMB, writes that he is now QSL manager for Alex, UB5ILA. He still has to work out some details, so there may be a delay in getting the cards out.

Phil reports that Alex has also offered to help with obtaining cards from other Soviet stations. When requesting your card(s) through Phil be sure to include a SASE with each request. For the cards from other Soviet stations besides UB5ILA, please include an IRC or greenstamp.

John Rouse, KA3DBN, reports that he still has the logs for the April/May 1980 operation of HS1AMT. If anyone needs a card please drop John a note. He will be returning to BV/BY/VS6/YB in March.

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QSL routes

AHOB	-JA2VUP	TE1L	-TI2LTA
AM0ADE	-EA3CUU	TE5JS	-N2AU
ATOW	-WA2YMX	TE5JS	-N2AU
AX9YG	-G4JVG	TE88M	-T18CBT
CE0FID	-ON4IZ	TG9VT	-W3HNK
CR3EU	-G3PFS	TR4A	-F6FNU
CT9BZ	-OH2BH	TR5A	-F6FNU
CT9GEF	-CT3EE	TU0A	-F6FNU
CX6BM	-CX4VA	TV6DNF	-F6CQU
CY0SAB	-VE1CBA	TX8A	-F1HWB
D88JL	-AK1E	UA90A/UJ2K	-UA90BA
DK6AS/SV5	-DJ8MT	(See Note 6)	(See Note 6)
EK8HWT	-UA90J	UA90BA/	-UA90BA
EK8IZN	-UA90J	UJ3K	(See Note 6)
FE0A	-F6FNU	UB5LA	-N9CMB
FK8FU	-NA5U	UD6DKW	-W3HNK
(See Note 1)	(See Note 1)	UD6GAT	-UQ2MU
FM4A	-F6FNU	UM9MWA	-UM8MRG
FM5WD	-W3HNK	(See Note 7)	(See Note 7)
FR4FD	-F6FYA	UZ90WM/	-UA90BA
FR0A	-F6FNU	UJ7K	(See Note 6)
FT6ZB	-F6EYS	V21LJ	-G4LJF
FY6EW	-F6BFH	(See Note 8)	(See Note 8)
FY6YE	-W6JLU	V47NC	-WB4QBB
FY0A	-FY5AN	V47Z	-N4FD
GB0DOG	-GM4WEW	VE2LJ	-VE3JDO
HA6DW	-K8DHK	VI88XPO	-VK4SS
HA8XX	-K8DHK	VK9LH	-VK2AGT
(See Note 2)	(See Note 2)	VK9YG	-G4JVG
HC1MD	-K8LJG	VK0NE	-VK9NS
HC1MD/HC5	-K8LJG	VO7BD	-VO1BD
HL9AJ	-N6TP	VP2ET	-K6RX
HX6CDJ	-Y44UI	VP2MBK	-K8UE
IU2A	-I2UIY	VP8BUO	-G0IHK
(See Note 1)	(See Note 1)	V86WO	-K9EC
J6L/F2JD	-F6AJA	(See Note 3)	(See Note 3)
JA0UQY/HR3	-JH8FAJ	V86WU	-K9EL
(See Note 3)	(See Note 3)	Y88SOP	-Y42DA
JX1UG	-LA5NM	YB2BNJ	-W8AH
K8UE/VP2M	-K8UE	YB0ARA	-WA6AHF
KA2DX	-KD7P	YE2Z	-YB0TK
Kc6MZ	-JA2KVD	YJ8NJS	-N4EVS
KC6MZ	-JA2KVD	YZ2S	-YU2AKL
KC8NX	-JA2KVD	ZB2X	-OH2KI
KC8SW	-JA2KVD	ZF2JI	-K6GAR
KH8/		ZF2JR	-N6RJ
SM7PKK	-SM7PEK	ZF2LW/ZF8	-N6KNN
KP2N	-K80HC	(See Note 1)	(See Note 1)
NE8Z/OA4	-K8LJG		
OA7MP	-K8LJG		
P40A	-KA1XN	ZL0AJB	-HB9CSA
P40T	-KB2HZ	3D2OM	-WA5Y
P40TL	-WA4TLI	3D2VV	-OH2BAZ
P40V	(See Note 4)	3D2XX	-WB6GFJ
P40VK	-AA4VK	4K1F	-UQ2MU
PJ1W	-NX4N	4U1UN	-NA2K
PJ2FR	-K18EE	5H3GW	-AK1E
PJ2X	-KQ1F	5R8AL	-WA4VDE
PJ0Z	-K4EIH	5T6CK	-DL1HH
ROBUB	-UB4UWA	5UV386	-DJ6SI
S01MZ	-EA2JG	5V7TM	-F6FNU
SV0GM	-N4FD	5V7WD	-WB4LFM
T20AA	-N4FJL	5W1HK	-SM7PKK
T41CW	-CO2QQ	6W6JX	-F6FNU
(See Note 5)	(See Note 5)	7S6BE	-SK6BE
T41DX	-CO2QQ	8P21BBS	-8P6AW
(See Note 5)	(See Note 5)	9H3EH	-DL2GBT
		9M8VD	-OH2XD

YS1JBL	-P.O. Box 1476, San Salvador, EL SALVADOR
ZP6RJB	-P.O. Box 512, Ascension, PARAGUAY
ZY0TX	-P.O. Box 12012, Golan, BRAZIL 74211
3C8CW	-Erica Brunntaler, P.O. Box 131, 1141 Vienna, AUSTRIA
3W6DX	-Erica Brunntaler, P.O. Box 271, 141 Vienna, AUSTRIA

Notes


1. For this route use the address given in the 1988 Callbook.
2. This route applies for Statewide stations only.
3. Address given in Callbook may be incorrect. Route via Akita Takashi, P.O. Box 1, Sendaik 981, Japan.
4. Super station P40V cards will be automatically sent via the bureaus. Be sure to have an envelope on file at your respective bureau.
5. Cards to this manager must be sent direct only.
6. Address for this station: Yuri Zaruba, P.O. Box 1, Novosibirsk, 630 092 USSR.
7. And the address for this: Alex A. Lavrenchenco (UM8MRG), P.O. Box 392, Frunze 55, Kirghiz, 720 055 USSR.
8. SWL types send their cards to G0BTY.

Our thanks go to the following contributors: K6WZ, K7JYE, W9LNQ, AA 6IT, N4EVS, W7YR, KA3DBN, N9CMB, W3HCW, FS5UQ, 5B4IT, UA9YAB, Southern California DX Club (NK6A), Northern California DX Club (K6TS), Redwood Empire DX Association (VP2ML), Western Washington DX Club (K7ZR), Kansas City DX Club (AB0X), Western New York DX Association (W2FXA), Salt City DX Association (KB2G), Grupo DX Cuba, *The JARL News*, International Amateur Radio Union (K1ZZ), (VP2ML), *DX News Sheet* (G4DYO), and *QRZ DX* (W5KNE).
(please turn to page 34)

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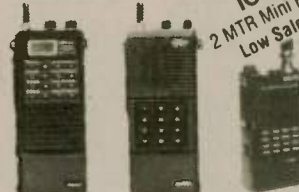
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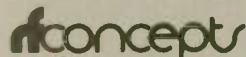
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DX World

(continued from page 31)

We the elite of the Amateur Radio fraternity (DXers) are aware of the controversy of lists and DX nets. One excuse is that it helps the little guy with only 100 watts and a dipole. Perhaps.

However, the recent Worldwide DX Contest in October had some terrific openings on 10M. The little guy could have increased his DXCC count tremendously that weekend — provided he ventured away from list operations. That weekend we worked 75 DXCC countries, and 68 were on 10 meters alone. We only ran 100 watts, although we were equipped with a TH6DXX. No spotting net was used. Therefore, if I can do it, you can do it.

The ARRL DX Contests are just around the corner. Give them a try. Good luck DX es 73 de John N6JM. □

Pass it on . . . **WORLDRADIO**



On July 24 a group of DXers from Guadeloupe took time out during a DX-pedition to French Saint Martin. From left to right: Emile FG5BT, Andre FG5BP, Georges FG5BG, Mort FG5UQ, Germain FG5CK, Jean FG5CI and Joseph FG5CA. (Photo courtesy of FS5YL)

ANNOUNCING!

The 1989 Worldradio DXathon

ELIGIBILITY — All licensed Amateur Radio operators, worldwide.

DATES — Start: 0000 1 January, 1989. End: 2359 31 December, 1989.

Exceptions: No contacts made during the time frame of any DX Contest will be valid. This is to be a prestigious award program, made so by its difficulty.

BANDS — 80, 40, 20, 15, 10 meter bands, plus satellite/moonbounce frequencies.

MODES — Phone, CW, Digital (includes RTTY, AMTOR, packet), Visual (SSTV), and Satellite (includes moonbounce).

Five Bands/Five Modes equals DXathon.

CATEGORIES — There is only one category — Single Operator.

OBJECTIVE — Contact as many NATIONS on as many modes as possible. A NATION is defined as an entity with enough sovereignty to issue its own postage stamps.

VALID CONTACTS — A NATION may be worked but once, on each mode, regardless of the frequency band. This is not a five-band per mode contest.

SCORING — Final score will be the total number of NATIONS contacted on the various modes. Contact with your own NATION does not count. The highest possible score would be about 900.

SUBMISSIONS — Entries must be received by 1 February, 1990. No QSL cards need be submitted or received by the entrants. Send signed log extracts to:

WORLDRADIO

2120 · 28th Street

Sacramento, CA 95818 USA

Award winning logs will be published in *Worldradio*. Decisions of the DXathon committee will be final. The committee has the right to disqualify entries for violation of the letter or the spirit of the rules. By submitting an entry, the participant agrees to abide by the decision of the DXathon Committee.

AWARDS

World Champion — The World Champion will receive a trophy significant enough to honor the effort.

Gold, Silver and Bronze Medals will be awarded for the highest scores on each continent.

Certificates will be awarded for:
A.—The highest score in each NATION.

B.—The highest score in each USA call area.

C.—The top single-band score in A. and B. above.

D.—Technician/Novice scores as warranted.

E.—High scoring 4 mode, 3 mode, 2 mode participants.

Nations with the highest participation (weighted vs. Radio Amateur population) will be honored.

In case of ties, duplicate awards will be made.

A certificate of participation will be awarded each "radio athlete."

It would be appreciated if monthly scores were sent in for publication.

RULE CHANGES — Rules may be modified in time before the contest actually starts to reflect suggestions from potential participants. Send your suggestions to *Worldradio* at the above address.

Rules may be modified over the years to reflect feedback from the participants. Please send copies of this page to your DX friends.



STATION APPEARANCE

JANUARY WINNER

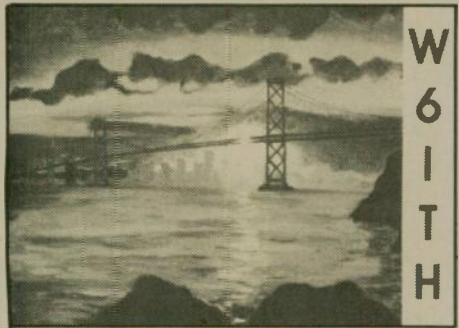
D. Reginald Tibbets
W6ITH

D. Reginald Tibbets, W6ITH, is this month's winner. He has created an impressive equipment set-up and packaged it very nicely.

Following is a description of his equipment.

Lower left, bottom to top: Collins 651-S Receiver, HP 3580-A Spectrum Analyzer, KeyTel 424 Surge Generator, Wilcom T-207 Longitudinal Balance Test Set, HP 1222A Oscilloscope and VU Audion Level Meters.

Center, bottom to top: Collins HF-380 Transceiver, Conway DTMF-2000 Test Set, HP 6228B Power Supply, HP 4324A High Resistance Test



W6ITH's QSL card, featuring the San Francisco-Oakland Bay Bridge.

Set, Invertron AC Supply 16 Hz to 3 KHz, Wiltron 9602 Transmission Measuring Set, HP 4800A Vector Impedance Meter, control switches and three 454A Monitor Speakers.

Lower right, bottom to top: Collins HF-380 Transceiver, Halcion 150B

Win a one-year Worldradio subscription! Submit photos and description of your shack to "Station Appearance." Entries are judged on neatness and accessibility, not monetary value.

Transmission Measuring Set, Pair HP 3466A True RMS Digital Multimeters, Amtron 3488C TV/Monitor, three Gardner Communications SR4000 Satellite Receivers, Collins 312B Control, audio pads and dual clocks.

Right side desk: Weston 301 Meters, Audio Patch Panel, Kenwood TS-700SP 2M Transceiver and KLM Antenna Rotor Control. □

Boy, am I steamed

"Recently I was doing a ham radio demonstration for students in the Humboldt (IA) Junior High. As part of the presentation, I tuned in on the 40-meter phone band. While listening to the QSO, one of our fellow hams displayed his lack of command of the English language by his use of profanity. I was embarrassed for myself and the entire amateur community. Needless to say, this did not impress the room full of 12- and 13-year-old students. Without thinking, I immediately changed frequency, and made our apology to the class."

The above words are from an editorial in *Hark Hetrodyne*, the newsletter of the Humboldt ARC. Who among us has not had a similar experience? In Cherokee, we heard a ham using profanity one day on 146.52 MHz. There was no anger and the subject matter was quite routine. Every other word was a cuss word for

no particular reason. It is just the way this guy talks.

This gives listeners a bad impression of our hobby. "Old-timers" are as guilty as newcomers, and if we tolerate it we are guilty too. We should make our feelings known, and if the person to whom we are talking persists in this kind of language, we should terminate the QSO. There's no point in arguing with an idiot.

—Kerchunk; Editor Tom Folkes, W0PDT □

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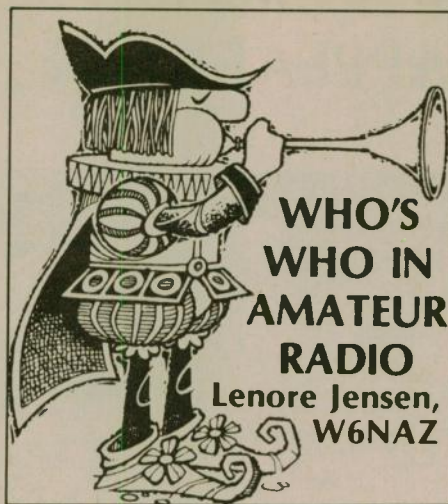
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HS1YL likes to visit the United States once a year, a joy for her American friends as Mayuree Sachati Chotikul is not only beautiful, but also charming and intelligent.

Her late husband, Kamchai, HS1WR, was the first Amateur Radio operator in Thailand, having started as a teenager eager to learn about electronics. He became a general in the Thai Army and was given the responsibility to serve as liaison between the government and ham operators, who now number 5,000 in that country.

What's more, he so loved to construct equipment, he eventually operated six broadcast stations across Thailand, whose population is 60 million. He personally built all the big transmitters, some 20W, FM as well as AM. While he took care of all technical matters, Mayuree handled management.

After Kam's untimely death, she took over the stations, now numbering four. "They have varied programming, popular music, rock, classical, news on-the-hour and — oh yes — we have soap operas, too," she said. In Thailand, all stations belong to the government but are "leased" out to investors.

Mayuree is quite a lady, not only having raised four children, but also active with the Business Women's Club and its international counterpart, Zonta. Charity work is high on her list, as well.

She continues her interest in Amateur Radio, as vice president of the HF Radio Club which Kam organized 24

years ago. "We have another club for 2M operators," she said. Mayuree is a two-meter fan and has rigs in her car, home and office.

Among her friends in Southern California is Loyd (SigAlert) Sigmon, W6LQ, who used to keep regular skeds with Kam. When daughter Margot (now HS1DF) invited Loyd to her high school graduation (she attended school in Los Angeles), Loyd recalls, "I took along a camera to the ceremony, brought home a picture and fed it on 20M to Kam by slow-scan. He was very happy to see her." Margot is now with the computer department of a bank in Bangkok.

Mayuree and Kam's other children are also hams: Lex, HS1ER (a freshman in a California college working toward a degree in Business), YL



Mayuree Sachati Chotikul, HS1YL, visits Loyd Sigmon, W6LQ.

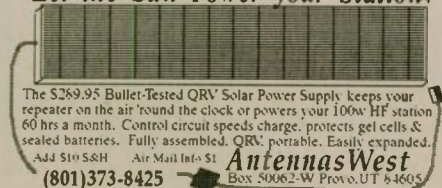
Sadudee, HS1FG, and Khemika, HS1GA. A completely ham family!

The 1988 SEANET Convention was held November 11-13 in Bangkok, so Mayuree was very active with its visitors from Singapore, Malaysia, the Philippines, Brunei and Indonesia, as well as Thailand. The countries take turns as hosts.

"In our country," explains Mayuree, "we have three license grades: Novice (no code), Tech (includes 10 wpm), and Advanced (12 wpm). As in the United States, we participate in public service with emergency work, helping parades and calling in traffic accidents."

Carry on, nice YL! □

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ALABAMA

Montgomery Amateur Radio Club (W4AP). Alabama State Trooper Dist. Office. Intersection of Coliseum Blvd. & Federal Dr. Randy Smith, N4LZK, (205) 832-4598. Meets 3rd Monday/monthly, 7:00 p.m.

ALASKA

Arctic Amateur Radio Club. Geophysical Institute West Ridge U of A, P.O. Box 81389, College, AK 99708. 1st Friday/monthly, 7:30 p.m.

ARIZONA

Arizona Amateur Radio Club. Meets 2nd Thursday/monthly, 7:30 p.m. 1510 E. Flower St., Phoenix, AZ. Net: W7IO Information Net every Thurs., 7:00 p.m. W7WGW/R 147.88/147.28 Rptr.

Tucson Repeater Assoc. P.O. Box 40371, Tucson, AZ 85717-0371. 2nd Sat./monthly, 7:30 p.m., Pima Co. Communicaitons Bldg., 2545 E. Ajo. Net Thurs. 7:30 p.m. 146.28/88 (146.22/82, 147.68/08, 147.70/10-PKT).

CALIFORNIA

Amador County Amateur Radio Club. P.O. Box 1094, Pine Grove, CA 95665. Senior Citizens Center, Jackson, CA. Meets: first Thursday/monthly, 7:30 p.m. WA6WY/Rpr., 146.835, 146.235. Net Tues. 7:30 p.m.

Associated Radio Amateurs of Long Beach, W6RO. P.O. Box 7493, Long Beach, CA 90807. Meets: 1st Friday/monthly, 7:30 p.m. Signal Hill Recreation Hall, 1708 E. Hill St., Signal Hill, CA.

Butte Amateur Radio Club. Meets: 3rd Thursday/monthly, 8 p.m., Chico Community Hosp. Conf. Center on Rio Lindo off Cohasset Rd. Net: 28.330 Wednesdays, 8:30 p.m. For info: 893-5208, KE6EP or KB6COH.

Caltrans RACES Club. Meets at Carrows Restaurant, 1825 10th St., Sacramento, CA, last Friday/monthly, 11:00 a.m. Contact: J.J. West, N6AAD.

Citrus Belt Amateur Radio Club. 777 East Riatico Ave., San Bernardino, CA. P.O. Box 3788, Zip: 92413-3788. Meets: 1st Friday/monthly, 7:00 p.m.

Contra Costa Communications Club WD6EZR/R. P.O. Box 661, San Pablo, CA 94806. Meets 2nd Sunday at 9:00 a.m. Hickory Post Restaurant/Lucky Lanes. For info call Don K6DPQ, (415) 222-2449.

East Bay Amateur Radio Club. P.O. Box 1393, El Cerrito, CA 94530. Meets: 2nd Fri./monthly 8 p.m., Salvation Army, 4600 Appian Way, El Sobrante. Nets: Slow CW, Wed., 8 p.m. & SSB Net, Wed., 9 p.m., 21.395. Info, Bob Fields, KC6AOH, 415/237-3761.

Fresno Amateur Radio Club, Inc. P.O. Box 783, Fresno, CA 93712. Meets 2nd Friday/monthly, 8:00 p.m. Manchester School, 2307 E. Dakota, Fresno, CA. W6TO/R 146.34/94.

Gabilan Amateur Radio Club GARC. P.O. Box 2178, Gilroy, CA 95020-2178. Meets. South Valley Jr High School, 385 I.O.O.F. Ave., Gilroy. 2nd Thurs/monthly. 7:30 p.m. Talk-in 145.47/144.87.

Golden Empire Amateur Radio Society (VEC). P.O. Box 508, Chico, CA 95927. Club call W6RHC, Repeater 146.25/85. Meets: 3rd Friday/monthly, 8 p.m. at 1528 Esplanade, Room 110B, Chico.

Hilltop Amateur Mastertie System (HAMS). Informal mtgs. weekly/Mon. 5 p.m. at Shakey's Pizza, 12924 Washington Blvd., Mar Vista, CA. Meets 3rd Mon./monthly at Bicycle Shop Cafe, 12217 W. Wilshire Blvd., W. LA. Info, N6FD 213/823-0767.

Kern River Valley Amateur Radio Club. P.O. Box 2611, Lake Isabella, CA 93240. Meets 4th Sat./monthly at 4 p.m. (Pot Luck). Veteran's Hall, Lake Isabella WA6UYW Rptrs. 146.085/146.685 224.22/Down 1.6 WB6ODZ Rptr.-224.58 Down 1.6 Low-Level.

Lee DeForest Radio Club of Hemet. 1930 Local each Third Thursday at 625 Pico, San Jacinto, CA.

Livermore Amateur Radio Klub (LARK). First Presbyterian Church, 5th & L St. Bill Richards, WD6J, (415) 829-5229. Net Mondays 1900 on 147.12+. Meets 3rd Saturdays/monthly, 9:30 a.m.

Marin Amateur Radio Club (MARC) W6SG. Box 1231, San Rafael, CA 94901. Meets 1st Fri./8 p.m.; MARC Clubhouse Bldg. 549, HAFB, Novato, CA (415) 883-9789 (Summer exceptions; contact Pete N6IYU, 924-1578). Sunday AM Club at Red Cross, San Rafael.

Moreno Valley Amateur Radio Assoc. P.O. Box 1304, Moreno Valley, CA 92337. Meets: 4th Monday/monthly, 7 p.m., Moreno Valley Unified Sch. Dist. offices, 13911 Perris Blvd., Moreno Valley. Net Tuesdays, 8 p.m. 146.655/055

Mount Diablo Amateur Radio Club. P.O. Box 23222, Pleasant Hill, CA 94523. Meets: 3rd Fri./monthly, 8 p.m., Grace Presbyterian Church, 2100 Tice Valley Blvd., Walnut Creek, CA. Net Thurs., 7:30 p.m. 147.06+. Info, Vicki, (415) 458-4527.

North Hills Radio Club. P.O. Box 41635, Sacramento, CA 95841. 3rd Tuesday/monthly, 7:30 p.m., Carmichael Elks Lodge, 5631 Cypress Ave., Carmichael, CA. Net 145.19 Thur. at 8:00 p.m.

North Shores ARC. (619-275-1495) So. Clairemont Recreation Center, 3605 Clairemont Dr., San Diego, CA. 1st Tuesday/monthly, 7:30 p.m. Club net each Monday, 7:00 p.m. 28.485 MHz.

River City A.R.C.S. Meets: 1st Tuesday/monthly, 7 p.m. SMUD Bldg., Room B & C, Elkhorn & Don Julio, Sacramento, CA. For info: (916) 483-3293.

Sacramento Amateur Radio Club. Contact: Gary Bryant, KB6KZZ, (916) 646-1171. Meets Sacramento Blood Bank, 32nd St. & Stockton Blvd., Sacramento, CA, 2nd Wednesday/monthly, 7 p.m.

Sacramento "Old Timers" Ham Radio Brkfst Club. Meets 2nd Wednesday/monthly, 8 a.m., Carrows Restaurant near Watt Ave. and Hwy 80 exit. For info contact Paul Wolf, W6RPL (916) 331-1830.

San Gabriel Valley ARC. Bowling Green Clubhouse, 405 S. Santa Anita Ave., Arcadia, CA 91006. Meets: 1st Tuesday/monthly, 7:30 p.m., except Dec. W6QFK, Repeater 147.165/765.

San Mateo Radio Club. Beresford Park Recreation Center, 28th Ave. and Alameda de las Pulgas, San Mateo, CA 94403. 3rd Friday/monthly, 7:30 p.m.

Santa Clara County Amateur Radio Assoc. (SCCARRA) W6UW. P.O. Box 6, San Jose, CA 95103. (408) 249-6909. Meets: 2nd Mondays/monthly, 7:30 p.m. Net other Mondays, 7:30 p.m. W6UU 146.385 + /425.425 +.

Santa Clara Valley Rptr. Society (SCVRS). P.O. Box 3085, Sunnyvale, CA 95087. (408) 247-2877. 146.76(-600 kHz), 224.26(-1.6 MHz), 444.60(+5 MHz). 2 meter/220 net Mon. 9 p.m. Mtgs.-3rd Fridays.

Shasta Cascade Amateur Radio Society (SCARS) P.O. Box 664, Anderson, CA 96007. Meets: 3rd Wed./monthly, 7 p.m. at the C.D.F. Conf. Rm., Grape St., near Parkview Ave., Redding, CA. Net 146.64 Wed., 8 p.m.

Simi Settlers Amateur Radio Club. P.O. Box 3035, Simi Valley, CA 93063. Meets: 2nd Thurs./monthly, 7:30 p.m., at Seventh-Day Adventist Church, 1636 Sinaloa, Simi Valley. Rptr. 147.93/33

Solano County Amateur Radio Society. P.O. Box 457, Fairfield, CA 94533. Meets: 3rd Wed. 7 p.m., Vanden High School. 441.150 + 5 (Remote 145.69 simplex) 77Hz, (707) 448-1461.

Sonoma County Radio Amateurs, Inc. Meets 1st Wednesday/monthly (except Dec.) at the Emergency Operations Center (behind the County Courthouse), P.O. Box 116, Santa Rosa, CA 95402.

Southern California Six Meter Club. P.O. Box 448, Cypress, CA 90630. USB Net Tue., 8:00 p.m., 50.150. FM Rpt. Net Thurs., 8:00 p.m., 52.28/88. FM Smpix Net Thur., 9:00 p.m., 50.300.

Stanislaus Amateur Radio Assoc. (SARA). P.O. Box 4601, Modesto, CA 95352. Stanislaus Co. Administration Bldg., 12th & H Streets, 3rd Tues./monthly, 7:30 p.m. 145.39 MHz WD6EJF, 223.68 MHz.

Tri-County Amateur Radio Assoc. P.O. Box 142, Pomona, CA 91769. Meets: 2nd Monday/monthly, 7:30 p.m. Pomona First Federal S&L, (basement), 399 N. Garey, Pomona, CA.

The Trinity County ARC. P.O. Box 2283, Weaverville, CA 96093. Meets 2nd Wednesday/monthly, at the CD Hall in Weaverville, 7:30 p.m. WD6FHX Rptr. 146.13/73.

West Coast Amateur Radio Club. Fountain Valley School. Talbert/Bushard. Fountain Valley, CA. Meets 3rd Thursday/monthly. 145.44-4Z.

Western Amateur Radio Assoc. Cerritos Park East, 166th St. and Carnerita Ave., Cerritos, CA. Meets: 1st-Tuesday/monthly, 7 p.m. Rptr., N6ME 145.40/224.18 MHz.

West Valley Amateur Radio Assoc. 18011 Saratoga — Los Gatos Road, Los Gatos, CA 95030. Meets: 3rd Wednesday/monthly, 7:30 p.m. W6PIY/R. Net Tuesday, 8:30 p.m., 147.39 + , 223.96.

Yucaipa Valley Amateur Radio Club (YVARC). Gibraltar Saving's Community Room, 34880 Yucaipa Blvd., Yucaipa, CA 92399. Pres: Jack Prather W6KJP (714) 797-1276. Meets: 3rd Monday/monthly, 7:30 p.m.

CONNECTICUT

Tri-City ARC. Groton Public Library, Route 117, P.O. Box 686, Groton, CT 06340. Meets: 2nd Tuesdays/monthly, 7:30 p.m.

FLORIDA

Indian River ARC, Inc. (IRARC). 597 Capri Rd., Cocoa Beach, FL 32931. Martin Andersen Senior Center, 1025 S. Florida Ave., Rockledge, FL. Meets: 1st Thurs./monthly, 7:30 p.m.

Sarasota Amateur Radio Ass'n, Inc. Meets: 3rd Tues./monthly, 8 p.m. on the 6th floor (board rm.) of the County Admin. Bldg., corner of 301 & Ringling Blvd. Club Rptr. W4IE, freq. 146.91/31, open to all. Phone patch *Up #Down. Welcome.

South Brevard Amateur Radio Club. P.O. Box 2205, Melbourne, FL 32902. Meets 1st Tuesday/monthly, 7 p.m., Melbourne Library, 2275 S. Babcock St., Melbourne, FL.

West Palm Beach Amateur Radio Club, Inc. P.O. Box 6834, Southboro Station, W. Palm Beach, FL 33405. Meets: 2nd Tues./monthly, 7:30 p.m., Palm Beach Emergency Op. Cntr., 3723 Belevedere Rd., W. Palm Beach. Info: H. Felton, 655-4632 or H. Logan, 848-0513.

HAWAII

Big Island Amateur Radio Club. P.O. Box 1938, Hilo, HI 96721-1938. Meets: 2nd Tuesday/monthly, 7:00 p.m., Helco Auditorium, 1200 Kilauea, Hilo. Talk-in on 146.76 (-).

ILLINOIS

Bolingbrook Amateur Radio Society. Meets: 3rd Mon./monthly, 7:30 p.m., Anerino Rec. Cntr., Recreation Dr., Bolingbrook, IL. Info net Thursdays, 8 p.m., WA9DIP/R 224.54/222.94 and WD9AKO/R 147.33/147.93.

Chicago Suburban Radio Assoc.

(CSRA). P.O. Box 88, Lyons, IL 60534. Meets 2nd Wed./monthly, 8 p.m. Community Rm. Clyde Federal Savings & Loan Assoc., 7222 W. Cermak Rd., North Riverside, IL.

Dupage Amateur Radio Club W9DUP.

Mid-America Savings & Loan, 55th & Holmes (55th St. near RT 83), Clarendon Hill, IL. 4th Monday/monthly, 7:30 p.m. Club rptr. 145.250 — 600 kHz.

Elgin Amateur Radio Society. P.O. Box 1351, Elgin, IL 60120. (WB9EEA President), Meets in EOC Rm. of Elgin Municipal Bldg. 2nd Friday/monthly, 8:00 p.m.

Fox River Radio League. Valley National Bank, Lower Level, Northgate Shopping Ctr. & RT. 31, Aurora, IL (312) 584-4925 for more info. Meets: 2nd Tuesday/monthly, 7:30 p.m.

North Shore Radio Club. Meets: 2nd Monday/monthly. Net 8 p.m. Tues. Karger Center, 1850 Green Bay, Highland Pk, IL. WB9FRM Rptr. 147.345 + 600 (PL 1B). Info: NSRC, P.O. Box 1066, Highland Pk., IL 60035.

Northwest ARC/W9LW. Meets: 2nd and 4th Tuesday/monthly, 7:00 p.m., Oehler Funeral Home downstairs community room, Lee & Perry Street, Des Plaines, Illinois.

Schaumburg ARC (SARC). Meets: Schaumburg Park District Community Rec. Cntr. at Bode and Springinguth Roads, Schaumburg, Illinois. Third Thursday/monthly, 7:30 p.m. Net 28.350 8:00 p.m. Thursdays.

Six Meter Club of Chicago K9ONA. Bank of Lyons, Lower Level, 8601 West Ogden Ave., Lyons, IL. 2nd Friday/monthly, 7:30 p.m. Club Rptrs: 146.37/97, 448.30/444.30.

York Radio Club. Meets: 3rd Fridays/monthly, 8 p.m., Elmhurst College (Science Bldg.), Elmhurst, IL. Net Mondays, 8 p.m. W9PCS/147.42 simplex.

INDIANA

Fort Wayne Radio Club. James Wolf, KR9U, P.O. Box 15127, Fort Wayne, IN 46885. The Salem Church. Meets: 3rd Friday/monthly, 7:30 p.m.

KANSAS

Kansas City Heart of America Radio Club. Red Cross Building, 211 West Armour Blvd. Meets: 3rd Tuesdays/monthly, 7:30 p.m.

MARYLAND

The Peninsula Radio Operators Society (PROS). Family oriented activities, training and exams held throughout the year. PROS Rptrs. 146.925 and 146.625. PROS, P.O. Box 2315, Salisbury, MD 21801.

MICHIGAN

Hazel Park Amateur Radio Club. Hoover Elementary School-Hazel Park, P.O. Box 368, Hazel Park, MI 48030. 2nd Wed/monthly, 7:30 p.m. Sept. thru May. 147.51 Simplex Call-In.

Oak Park Amateur Radio Club. Oak Park Community Center, 14300 Oak Park Blvd. (same as 9½ Mile Rd., west of Coolidge). Oak Park, MI 48237. 2nd Monday/monthly, 7:45 p.m. Talk-in on our 224.86 Mhz or 146.64 Mhz.

MISSOURI

PHD Amateur Radio Assn. Inc. P.O. Box 11, Liberty, MO 64068. Meets last Tuesday/monthly, 7 p.m. Red Cross Bldg. (816) 781-7313, Volunteer Examiner Coordinator.

NEBRASKA

Pioneer Amateur Radio Club (PARC). P.O. Box 445, Fremont, NE 68025. Meets: 4th Friday/monthly, 7:30 p.m. at Keene Memorial Library, 1030 North Broad. Wed. ARES net 146.67 19:30 CDT/19:00 CST.

NEVADA

Frontier Amateur Radio Society (FARS). Meets: 3rd Monday/monthly, 7 p.m., Denny's Restaurant across from Nevada Palace, 5318 Boulder Hwy. Net Mondays 7:30 p.m., 145.39 rptr. on Black Mountain. Club info, Jim Frye, NW70, 456-5396.

Las Vegas Radio Amateur Club (LVRAC). Meets: 2nd Tuesday/monthly at 7 p.m., Nevada Power Building, Wengert Rm., 6226 W. Sahara Ave. (Near Jones). Net Tuesdays 8:00 p.m. on 146.94 MHz. Info: Call Lyle at 456-9510.

Nevada Amateur Radio Assoc. (NARA) 2333 Rodney Cir., Reno, NV 89509. Meets: 3rd Tuesday/monthly, 7:00 p.m. at First Federal Savings & Loan Bldg., 2330 So. Virginia St., Reno, NV.

Sierra Intermountain Emergency Radio Assoc. (SIERA). P.O. Box 2348, Minden, NV 89423. (702) 782-8266. Meets: 2nd Tuesdays/monthly, 7:30 p.m., Douglas County Lib., Minden, NV. Talk-in: 147.270 +.

NEW HAMPSHIRE

Great Bay Radio Assn., WB1CAG. P.O. Box 911, Dover NH 03820. (603) 742-0130/755-2600. 2nd Sunday/monthly, 7:00 p.m. Dover Dist. Court. Talk-in 147.57.

NEW JERSEY

Bayonne Emergency Mgt. ARC (BEMARC). 16th St. & Ave. A Firehouse, Bayonne, New Jersey 07002. Rptrs: 145.430 & 224.280. Meets: 2nd Tuesday/monthly, 7:30 p.m.

Delaware Valley Radio Assoc.

(DVAR). Our Lady of Good Counsel Church. 137 W. Upper Ferry Rd., West Trenton, NJ 08628. Meets: 2nd Wednesday/monthly, 8:00 p.m.

Gloucester County Amateur Radio Club

(GCARC). Woodbury V.F.W. 1st Wednesday/monthly, 8:00 p.m., Woodbury, NJ. Talk-in 147.18/78. For info call K2JF (609) 589-2318.

South Jersey Radio Assoc. (SJRA). Pennsauken Sr. Hi Sch. at Hynton Rd. & Remington Ave., Pennsauken, NJ 08109. Jan.-Oct. 4th Wed./monthly, 7:30 p.m. Nov.-Dec. 3rd Wed. due to Thanksgiving and Christmas. Talk-in 145.290 rptr. Club call K2AA.

NEW YORK

Communications Club of New Rochelle, NY. Harrison Street Firehouse. Bill McCarren, K2LV, (914) 738-0768. Meets: 1st Monday/monthly, 8 p.m.

Orleans Amateur Radio Club

(WA2DQL). Meets: Office of Disaster Preparedness (CD), West County House Rd., Albion, NY 14411, 4th Wednesday/monthly, 7:30 p.m., 147.527-WA2DQL.

The Radio Club of J.H.S. 22, N.Y.C., Inc. WB2JKJ, P.O. Box 1052, New York, NY 10002. 24-hr. hotline, (516) 674-4072. Non-profit org. uses Amateur Radio to enhance education of young people, nationwide. Join us — "Classroom Net", 7.238 MHz, 7 a.m. E.S.T. PSE QSL!

Westchester Amateur Radio Assoc.

(WARA). Scarsdale Village Hall, Scarsdale, New York. Meets: 1st Wednesday/monthly, 8:00 p.m. For info call B. Dubbs, Pres. (WA2FSR). (914) 725-1191.

NORTH CAROLINA

Raleigh Amateur Radio Society, Inc. P.O. Box 17124, Raleigh, NC 27619. Club net nightly, 8 p.m., W4DW, 04/64. Meets: 1st Wednesdays/monthly, 7:30 p.m., YMCA. 18th Annual Hamfest, April 16, 1989.

NORTH DAKOTA

Forx Amateur Radio Club. United Hospital, Grand Forks, N.D. Call-in 34/94. Meets last Tuesday/monthly, 7:30 p.m.

OHIO

Amateur Radio Fellowship (ARF). N8HUN, Linda Delugach, Sec. P.O. Box 2486, Streetsboro, OH 44241. Meets: 1st Sat./monthly at Kent Wally Waffle. N8HPI rptr. 147.675/075.

Ashtabula County ARC. Ken Stenback, A18S (964-7316). County Justice Center, Jefferson, OH. 3rd Tuesday/monthly, 7:30 p.m. County Rptr., 146.715.

OREGON

Salem Amateur Radio Club (SARC). Northwest Natural Gas Auditorium, 3123 Broadway N.E., Salem, Oregon 97303. Talk-in 146.86. Meets 4th Tuesday/monthly, 7:30 p.m.

PENNSYLVANIA

Butler County Amateur Radio Assoc. Meets: 1st Tuesday/monthly, 7:30 p.m. at Red Cross Bldg., 312 Mercer St., Butler, PA 16001. Call-in 147.96/36

Mercer County Amateur Radio Club W3LIF. P.O. Box 996, Sharon, PA 16146. Meets: 4th Tuesday/monthly at 7:30 p.m. at Shenango Valley Medical Center, Farrell, PA. Net, Thursdays 8:45 p.m. on 147.75/15 W3LIF/R.

Warminster Amateur Radio Club. Meets: 1st Wednesday/monthly 8 p.m., St. John's Lutheran Church, York Rd., Hatboro, PA. Nets: WA3DFUR info. Net Wed. 8:30 147.09/147.69.

VIRGINIA

Southern Peninsula Amateur Radio Klub (SPARK). Meets: 1st and 3rd Tuesdays, Salvation Army Community Bldg., Hampton, VA. Operates 148/13 146.7/13 Rptr., VEC Information (804) 851-5573.

WEST VIRGINIA

Jackson County Amateur Radio Club. D. Geneal Bailey, NK8P, Sec.-Treas. 113 Winters Dr., Ripley, WV 25271. First National Bank of Ripley. Meets: 1st Thursday/monthly, 7:30 p.m.

WASHINGTON

Mike & Key ARC K7LED. Good Neighbor Center, 305 So. 43rd Street, Renton, WA 98055. Meets monthly on 3rd St., 10 a.m.

North Seattle Amateur Radio Club

(NSARC). Meets: 3rd Tuesday, 7:30 p.m., (except Jul. & Aug.) at the First Interstate Bank, 30th Ave. NE and NE 125th St. (Lake City) in basement. Info: Mike Jr., W7WHT, (206) 282-1438 or P.O. Box 20279, Seattle, WA 98102.

WYOMING

University ARC. 146.01/61 Meets: 1st Tues., 7:30 p.m. Sept.-May. U.W. Physical Plant Bldg., 15th & Lewis St., P.O. Box 3625, Laramie, WY 82070. June-Aug: Bernie Club picnics Wednesdays.

WEST GERMANY

Wiesbaden Amateur Radio Club (WIESARC), DA1WA. Meets 2nd Tuesday/monthly at Stadion Restaurant, Wiesbaden. Steve Hutchins, DA2HS, Box 4205, APO NY 09633. PH: (011) (49)-6725-3462. American and German members.

For information on how to get your club listed in "Visit Your Radio Club," plus receive many other benefits, write to Club Liaison, Worldradio, 2120-28th Street, Sacramento, CA 95818.



QCWA/OOTC hospitality booth at Friedrichshafen's 1988 Ham Radio Exhibition, which was attended by 15,000 European amateurs, one third of whom were from outside Germany. Calls listed included G, EA, HB, OE, HA, Y22, I, SM, OZ, LX, ON, F, PA, W2 and W6. Gerd Jacoby, DL3ME, former QCWA Director, reports over 100 QCWA members stopped by the booth and another 1000 wanted information on QCWA.

The chapter presented the QCWA Meritorious Award to Klaus Schittelm, DL7JK, for his outstanding service to the Foederverein Amateurfunk Museum in Grafing. The DNAT (Dutch German Border Meeting) at Bad Bentheim and the Interradio Hamvention in Hannover are events Chapter 106 members will also be attending this year.

Atlanta Chapter 49, with help from some QCWA officers and board members, presented the QCWA story from a booth at the recent Atlanta Hamfest. In addition to new national members recruited, they enlisted 15 new chapter members. The booth's display included the chapter's banner and several posters.

Members distributed flyers containing an application and had an ad in the Hamfest bulletin and an announcement on seven metro computer bulletin boards.

Paul Stumpf, W3AQN, was recently honored at a special ceremony conducted at the Bethlehem United Methodist Church in Dallastown, PA,

commemorating 60 years as a licensed amateur. The QCWA Golden (50 year) Certificate with two five year endorsements and an ARRL 60 year membership plaque were presented to him.

He has held his original call continuously since 1928. Paul's accomplishments as an amateur include Emergency Communications and Emergency Management in York County, PA, ORS, OES, active traffic handling and work with Boy Scout Troup 40.

This columnist has just been advised that Chris Wilson, KA6TAL, Editor of WorldRadio News has chosen to follow a new professional path. In addition to joining in congratulations and well-wishing, we'd like to voice our appreciation of the outstanding cooperation and excellent rapport we have enjoyed while working with her over the past five years. Good luck and 33 Chris!

The Quarter Century Wireless Association's annual board meeting, held prior to the convention on Oct. 22 and 23 in McLean, VA, was attended by all 14 officers and directors. The agenda included annual reports of officers, committee chairmen and the general manager; action on old and new business topics and appointment of committee personnel for the coming year.

Board action included: the announcement of Oct. 20-22 as the date when Baton Rouge Chapter 109 will host QCWA's 1989 convention and acceptance of the convention bid of Kansas City Chapter 35 for the fall of 1990; a vote to award seven \$750 scholarships in 1989; the establishment of a committee to work on developing a Building Fund Program in preparation for future needs; adoption of a new policy concerning the International dues structure, to become effective March 1, 1989 and the establishment of an Ad Hoc committee on Education and another on Long Range Planning.

All reports indicated that QCWA is growing in both individual membership and chapter activity, is constantly upgrading its capabilities and is providing constructive input concerning matters of importance to the amateur community.

QCWA Chapter 106 in West Germany reports several meetings in 1988. Their spring meeting was held in Heidelberg and was attended by 70 members and guests. Visits to Heidelberg Castle and a boat cruise on the Neckar river were added attractions.

In June Chapter 106 manned a

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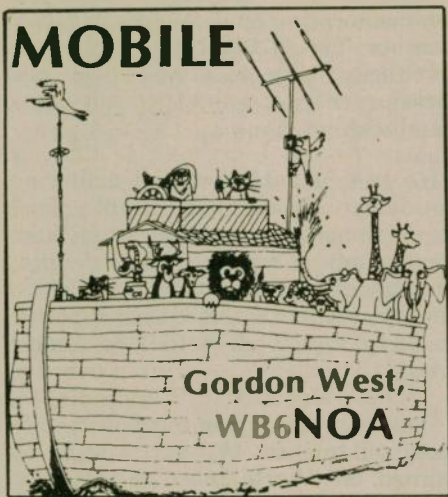
Letter style on shirt is "Ivy Open" and on cap is "Sportswear."

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Matching cap printed with your call and name has foam front and mesh back, is adjustable for size, and costs \$5.50. High quality golf shirts available, printed one side \$14, both sides \$15.

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Gordo's own gadgets

Last year I acquired some mobile and mobile-marine products and gadgets that have been personally put to the Gordo test, and I wouldn't leave home or port without them. Here are some of my favorites I won't part with:

Ireland Antennas, 5101-B NW 36th Ave., Miami, FL 33142; 305/633-8185. Ed Ireland is a fiberglass antenna experimenter at the best. He goes down to the Everglades with his 2M antennas, 220 poles and 450 sticks, and improves upon a low radiation angle,

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high gain and phenomenal antenna bandwidth. His two-piece, 11' white fiberglass, 2M antenna is a personal favorite because it covers from 140 to 160 MHz with extremely low SWR.

All his hand-held telescopic antennas, for any VHF or UHF band, have an adjustable reactance cancelling sleeve for maximum HT performance. His latest entry is a new UHF 450 MHz antenna with exceptional high gain, wide bandsread for ham and commercial, which sucks in and puts out signal strengths you wouldn't believe.

Write or call Ed today for his individual catalog sheets. Drop him an SASE for some incredible, "Gordon-proven" antenna facts.

I love my new ICOM IC-32AT dual-band hand-held (ICOM, 2380 - 116th Ave., NE, Bellevue, WA 98004; 206/454-7619). Of course, the first thing I did was modify it for out-of-band reception and emergency transmit. It now goes from 140 to 168 MHz, plus 440 through 468 MHz. TXRX.

ICOM doesn't want me talking about the mod, but if you're going to invest in a full-fledged dual-band hand-held and plan to use it for reception of other services, this is the way to go! See this set in operation at your local ICOM dealer.

A good guy for mods that knows his stuff and takes good care of your equipment is Trionyx (6775 N. 550 E., Brownsberg, IN 46112; 317/852-5544). Don't call him for free mod info - he has a dandy service of modifying your sets for around \$65 apiece.

What sets do I consistently use at my QTH and in my own private car? For scanning, I run the Realistic Radio Shack Pro 2004 receiver, modified for cellular phone pickup plus 400 channels. You can get a chan-

nel push-button overlay that properly designates your new added channels by writing to Mark Saran, 1234 - 54th St., Port Townsend, WA 98368. Send in about \$5 and you'll get a dandy, self-sticking overlay.

I also run the Yaesu FRG-9600 communications receiver in my car. It's more like a receiver than a scanner, but it's a sensitive set indeed. I use Yaesu equipment at home, the FT-726R, for satellite transmission and reception, plus 2M, 450, and I'll soon get the 736R for an added module for 1200 MHz.

I also run the Yaesu 2311, 1200 MHz, 10W set in my mobile to stay in touch with my Novice friends on 1200 MHz, courtesy of a donated ICOM RP-1210 repeater up on a hill at my folk's house. The ICOM repeater has been continuously on the air for one-and-a-half years, and I have made only one adjustment to it.

My big HF base station is a Kenwood 940, along with a Kenwood 180 that I take to my evening Amateur Radio classes. That's tied into several MFJ products that read out RTTY, packet, and also to my AEA PK-232 that gives me exquisite quality weather facsimile pictures - plus packet and everything else under the sun!

ICOM, Kenwood, Yaesu and Heath are all helping the Amateur Radio Service grow by each donating \$20 and \$25 gift certificates for new Novices passing their test. Kenwood and ICOM also provide certified Amateur Radio instructors with quantities of their colorful frequency charts and band limits charts, plus laminated world maps and foldout world maps. Kenwood, Yaesu and ICOM should really be saluted for their tireless efforts to stimulate the Amateur Radio ranks.

Isn't the ARRL coming around nicely? While they're not a Gordo gadget, the products they have been producing over the last few years have really

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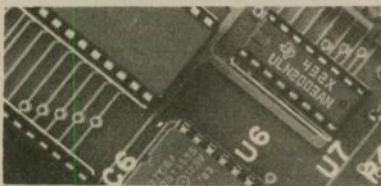
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been keyed into the continued growth of Amateur Radio. I think the old-time Board of Directors is finally beginning to see that all us kids giving them suggestions about the future of Amateur Radio really have some good ideas.

I sure like the flexible fiberglass mobile Mark antennas for HF operation. The Valor fiberglass and stainless steel tip antenna (one per band) is also a great performer if they could just tighten up on their thread quality control. Fred with his Spider antenna also gives the HF mobiler great relief from having to stop the car and change whips — with his, everything is on the mast, for 4-band super performance.

I love COAX SEAL (Reynoldsberg, OH). The stuff goes on like goo, and seals out moisture at the feedpoint. Just don't ever try to put it on the connector on a hot day — it's worse than chewing gum. Do it in the cool, and you'll have a weathertight connection forever.

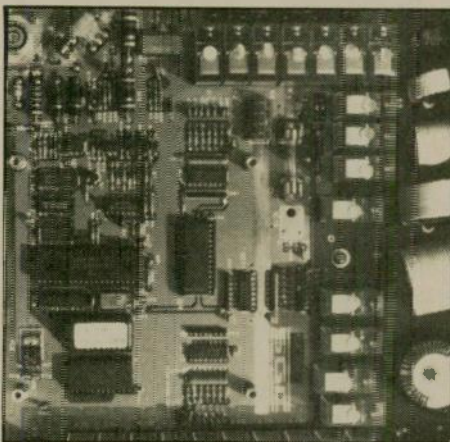
Metz Antennas, Laconia, NH, sold by Ham Radio Outlet stores, are also great performers for 2M, 220 and 450. They are half-wave and DC shunt-fed, so their stainless steel coils need no groundplanes beneath. Great for my fiberglass dune buggy. Of course, Larsen Antennas (WA) are also terrific performers and dominate the VHF, UHF antenna selection market.

PC Electronics (Arcadia, CA) certainly gets my vote for ATV equipment. Perfect for the Novice, it just plugs in and starts working. Tom O'Hara, W6ORG, has done a nice job with the ATV line-up, so if you're interested, write for more ATV information to PC Electronics, 2522 Paxson Ln., Arcadia, CA 91006-8537. Don't forget those double-stamped envelopes when you write for free product information.

My Cushcraft beam antennas that reign majestically above my house, continue to perform without maintenance. This is amazing in the salt air

so close to the ocean.

I run pairs of VHF and UHF arrays for long-haul VHF and UHF tropoducting, and my main HF antenna is the Cushcraft A-3 with a 40M add-on kit. When I crank it all the way up with my Aluma tower, it puts out a signal almost as good as any other beam with an 18' boom.



An inside look at the SGC automatic end-fed antenna tower.

Remember, beam gain is directly proportional to boom length, no matter what anyone tells you. The longer the boom, the better the gain.

My prized possession is the correspondence I receive from you readers. I enjoy your letters of upgrade, and I'm always happy to send out our free parchment certificates. I will continue to update our ever-changing line of Radio School cassette and book courses. As you read this, our Radio School product

line will soon be distributed by a major name in the Amateur Radio marketplace — and this will give me even *more* time to write articles and develop new code and theory training products.

My marine electronics/mobile marine guide book is still available for hams wishing to select electronics for their boats or motorhomes. I have several chapters specifically devoted to installing ham sets aboard or abroad. Also included are approximately 15 reprints of my most popular mobile hints printed over the last few years here in *Worldradio*. I'll even give you my autograph, too — just tell me to whom it should be signed. My book, plus all the handouts, is available for \$19.95 plus \$2.50 postage and handling, c/o Gordon West, 2414 College Dr., Costa Mesa, CA 92626.

Finally, I appreciate all the support from the 25 Amateur Radio manufacturers and product suppliers that allow us to include their literature in our beginner Amateur Radio courses and classes. Full-color literature is expensive, but I know the new students will appreciate all of the information they will receive. I've been told we have more product literature than most ham stores put together!

Here's to a prosperous 1989! Keep those cards and letters coming so we can all explore the fascinating world of mobile and maritime mobile operating on HF and VHF. You may catch me daily on 14.342 MHz at 1800Z; or, if you're in the local Orange County, CA area, give me a holler simplex on 144.330 MHz. □

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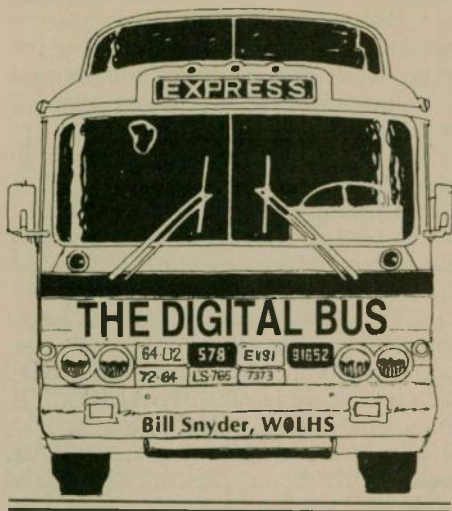
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One of the problems with writing a column in a magazine like this is the amount of time between my sitting down to punch my words of wisdom into the computer and their publication. This lapse can sometimes cause mild embarrassment, especially when I expound my North Dakota theories on a subject, mail the copy to the publisher and then discover that everything has changed before the column appears.

This has happened to me a number of times. The latest dealt with my

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small-voiced campaign for zip code addressing over the packet network.

I had just mailed in my column pleading for zip code addressing, when, lo and behold, new software arrived from my usual distribution source. I plugged it in the computer and promptly discovered that the zip code idea is being pushed to the rear in favor of a new system devised by Hank Oredson, W0RLI, with the help of a few other learned programmers.

The new BBS program does not take zip codes into consideration, but aims its traffic by states, nations, networks and continents. I guess it is a step ahead from just call signs alone, so I won't condemn it at this point.

New System

My packet address, using the new hierarchical protocol, is W0LHS @ W0LHS.ND.USA.NA. The NA stands for the North American continent, the USA is obvious, and the ND is for North Dakota. Because I run a full-time BBS, W0LHS is my home QTH BBS.

The post office's state abbreviations are the two-letter variety with which most every American is familiar, so that's easy to figure out. The foreign country designation is three letters, and you might be able to find a listing on your local BBS that handles traffic. The whole subject of addressing packet mail takes on an international flavor, so two-letter designators for continents have been added to help in reaching certain countries. The dots (periods) are used as delimiters to parse the address in the computer.

There are some other goodies in Hank's new handiwork. It reads the headings on incoming messages and puts some of the data in a file that will help in routing answers to messages coming in from afar. I'm not sure it works too well at this time, so I won't

comment until I have had more experience with that feature.

After I studied the docs that came with the software, I loaded all the state abbreviations into my forwarding file, which now is about 27 feet long when printed out. I assumed the abbreviations would be needed to forward messages out of my BBS. Apparently it helps because mail goes out without too much trouble when I add the appropriate state abbreviation to an outbound message.

The problem, I am told, is that BBS running other than W0RLI software (version 8.xx or greater) strip off the hierarchical routing data, and of course, that blows the whole thing. But as more BBS switch to the W0RLI program, it should improve.

The other thing that comes to mind about the system is this: merely directing it to a state is not enough. Here in North Dakota we do not have complete geographical coverage on 2M. We have some very long hops and many times sun spot changes separate the east and the western part of the state. So, if a hunk of mail arrives in my box for the western part of the state, I have to peel off the state designation and try to figure out how to send the message back out into the nation-wide system and have it arrive in the other end of the state without it ping-ponging back to me.

If our entire American system was built on zip codes, the message would probably not have arrived in my mailbox at all; it would have been routed directly to the western part of the state.

Because of the simplicity of the zip code system, I am sure it would be a good cure for the problem of the "wandering message" that our packet system suffers from every day. Study the following example and I'll show you what I mean.

Around The World In 24 Days

A recent message to a packet station that uses the WA0LRE BBS (Grafton, ND) as home base, took a real Odyssey in its 24 day trip from Manila in the Philippines to North Dakota. It started in the Asia net and bounced over to Bandung, Indonesia, and then in succession to Semarang, Jakarta, and Java island, all in Indonesia.

Next it hopped to Perth and Brisbane in Australia before it made the trans-Pacific trip to N6VV's Gateway to the USA. That part of the junket took about eight days.

If that message had been routed by zip codes, it would have taken two more hops, one by HF and one by VHF, to hit the WA0LRE message file. If it had been addressed with the



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ND designator it probably would have gone the same route, but alas, it was addressed to a BBS that does not handle very much traffic from around the world, and so its call sign was not listed in the various forwarding files.

At this point the message really began to wander around the country. From N6VV it went to Gulfport, MS; Siver Spring, MD; Fiarfax, VA; Richmond, VA; Tidewater, VA; Valatie, NY; Blanchester, OH; Park Hills, KY; Brookville, IN; Yellow Springs, OH; Jackson, OH; South Charleston, WV; Portage, Manitoba; Devils Lake, ND and finally to Grafton. It seemed that no BBS operator knew where WAØLRE was located, so they just booted it along to the next guy for day after day after day.

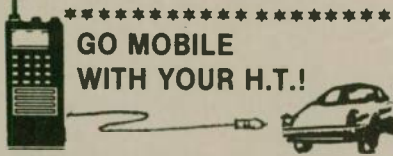
Now, I think the people who are developing the BBS hardware are doing a very fine job, and I commend them, but what Amateur Radio needs is a coordinating agency, like the ARRL, to take the leadership and iron out these problems and develop a standard system. The National Traffic System (NTS) has one system based on zip codes, while the BBS ops have another based on call signs and states. It just doesn't make sense to me, but I live in North Dakota, out of the mainstream of hi-tech stuff, so I gotta go along.

KB6ZV as judge

Rod Stafford, KB6ZV, ARRL Pacific Division Director, donned a great honor May 12th when he assumed the robes and titles of Traffic Judge in San Jose Municipal Court.

Very active in Amateur Radio circles, Rod richly deserves this new honor. As an authority on 'Antenna Law,' Hon. Rod has been a pro-tem judge for some time. Never one to shirk a job, we KNOW he will do well. —Santa Clara ARA, San Jose, CA □

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ICOM - Order Model I for all Icom (2AT/02AT). Slides on bottom of radio.

TEMPO, SANTEC - Order Model T (Simple mod). Write for spec sheet/info on other radios.

HANDI-TEK
P.O. BOX 357 • PINON HILLS, CA 92372

My forwarding files are starting to look like the call book, there are so many call signs in it. If it were all zips I'm sure it would be about three pages long instead of 30. I don't dare erase any of those call signs, I just keep adding, that's all.

Note: In my last appeal for messages via the system, I heard from a lot of you, and you all should have heard from me in return. If you haven't, drop me another.

EAVESDROPPINGS

YOUR SIGNAL SEEMS TO BE MOLDING ... I'LL BE ATTENDING THE INAUGURATION BY WATCHING TV IN ARIZONA ... I THINK I HAVE 3,199 COUNTRIES, BUT I'M NOT SURE ... I'M TRYING TO W.A.S. ON PACKET VHF, BUT I'M NOT HAVING TOO MUCH LUCK ... I LIVE NEAR A POWER LINE THAT HAS A POWER LEAK WHICH DAMPENS MY SPIRITS — IT SOUNDS LIKE TWO DOZEN EGGS AND A POUND OF BACON FRYING BY EACH EAR ... THEY CALL ME RRONG-KEY CORRIGAN ... RTTY IS SURE FUN WHEN YOU KNOW HOW TO TYPE ... PLEZZ EXCUSE FOR MY BROKEN ENGLISH I WAS LAZZY AT SCHOOL IN ENGLISH ... THE RIG HERE IS RICE BOX WITH A HILL-BILLY BOX FOR AN AMP ... REMEMBER WHEN HAM RADIO CONSISTED OF ONLY CW AND AM SPLATTER? ..SATELLITE OPERATION IS EITHER UP-LINK, DOWN-LINK OR NO LINK ... I'M TRYING DECK TOP PUBLISHING

FOR OUR SAILBOAT CLUB ... THERE'S AN OLD SAYING THAT SEX IS THE POOR MAN'S POLO ... I HAVE SPACE HERE FOR A VERTICAL ANTENNA AT LEAST FIVE MILES HIGH ...

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GOT A CALL FROM THE YF, SHE NEEDS HELP ... (When was the last time you quit the radio to help the wife?)

I HAVE THE COFFEE BREWED AND THE XYL IS FINALLY UP FOR ALL DAY ... (He'd better QRT before she finds him playing with his radios)

I MUST RUN. THE XYL WANTS ME TO TAKE THE DOG TO HIS THERAPIST ... (n'uff said?)

I welcome your comments and ideas, so please communicate. Thanks to WØHAH, W7VFR, WAØZOK, K7JD, KT7H, N6RKA, KA2OQB, N0DST and a raft of others whom I watched on RTTY, AMTOR and packet. You can reach me via packet radio: WØLHS @ WØLHS.-ND.USA.NA or WØLHS @ 58103. My mail address is Bill Snyder, WØLHS, 1514 12th Street, Fargo, ND 58103. 73 and DIT DIT. □

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Smirk To Sponsor New 6M Award(s) Of Merit

At the Board of Directors meeting on Nov. 4, 1988, SMIRK directed that I, as Secretary/Treasurer, place a call for recommendations concerning the establishment of an annual award(s) to recognize outstanding international 6M operators. Such an award(s) would be open to any 6M operator, even those who are not members of SMIRK.

We would like some direction as to how the award(s) should be formulated. Your comments regarding this subject, along with fully justified nominations for the award(s), can be directed to me in writing through your Regional Coordinator (Africa, Hal Lund, ZS6WB; Europe, Ted Collins, G4UPS; North/South America, Ray Clark, K5ZMS; the Central Pacific, Al Pacheco, KH6IAA; Far East/North Pacific, Kazu Ogasawaru, JA1RJU; South Pacific, Gil Sones, VK3AUI; New Zealand area, Dave Horne, ZL1AKW). Deadline for comments will be March 1, 1989.

DX info

The Dutch stations were recently given SSB privileges. The OZ and SM stations are very close to gaining 6M privileges. F9LT says there were 417 requests for 6M permits in France! 80 have been issued so far. 45 were denied.

The TF3SIX 50.057 beacon is back on the air. The KJ6BZ Johnston Island beacon is on 50.090, 24 hours a day, running 10 watts to a 6 element yagi at 40 feet.

In September, ZS's continue to hear the 5B4CY, 9H1SIX and CT0WW beacons while working G's; DL9, OZ1, 4X11F work crossband; 9H1's; 9H3's; SZ2; PA0 and F stations.

JA1VOK donated a rig to 5B4AZ, who promptly QSO'd ZS6's. 9J2CR, KH6HSS/5N9, J52US, and 9Q5NW are either now on or awaiting arrival of donated gear.

FT5ZB, Amsterdam Island, has gone QRT and returned home, but is being replaced by another operator who will have higher power. 3DAO-Swaziland was to be on for a few days in October. Did anyone work him on 6M?

Zimbabwe has 6M permission. European countries now on include 9H1, CT, EI, F, G, GD, GI, GJ, GM, GU, GW, LA, OH, OH0, OJ0, OY, PA, SV, TF and ZB2.

ZS4TX has applied for a 7P8 license. It is said that TR8DX returned to France. SV0FE will move to VS6 next year. VS6BL reports both 10 and 6M beacons are temporarily off the air. YB3CN has a new IC575 and is waiting his yagi from VK. FR5DN (Reunion Island) has operating permission but no gear. Can anyone help?

FR5EL is supposed to be active on 6M now. 5H1HK QSO'd 9H1's, Sept. 25. He QSO'd ZS3E Sept. 27. ZS5AV was heard in Israel by 4X11F on CW and SSB Sept. 4. G3GJQ/5N28 reported recently working G's.

JA1VOK reports that on Sept. 27, JR6HJ in Okinawa had F2 QSOs with Africa (5H1HK, 27/1634UTC) and

South America (PY2BBL, 28/0211-UTC), both probably firsts for Cycle 22. The contact with Africa was after midnight JA time!

On Oct. 4, 1988, at 1700-1747UTC, KA0NNO, CO heard the GB3SIX beacon in and out of the noise 4/1-4/8. TV video buzz covered all the band from 50-54 MHz. 8th — the FY7AZ beacon was into Greece, 5/9+20! 9th — LU's, PY's and CX's QSO'd Malta. CX8BE got a JA contact. The 50.029 CT0WW beacon was into Florida. Nigeria QSO'd Malta. KH6's QSO'd KG6, VK, FK. 10th — 2145-2345UTC, JA's to 9H1, long path over South America! KP2EOR says the HC8's heard European stations.

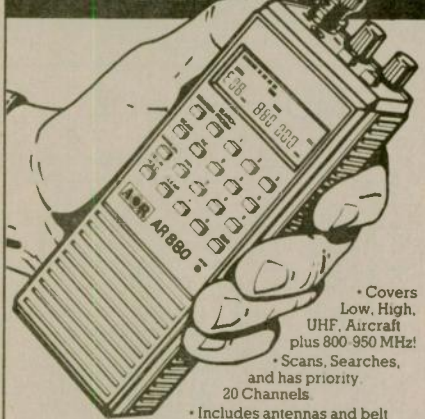
11th — HC2FG and HC5K QSO'd W2's and W4's. CE3BFZ QSO'd 29 JA's during October. 12th — 0030-0330UTC, KG6JDX/W6 reports working VK4DDG and other VK4's, HC2FG, CX8BE, LU's in. KH6IAA was in QSO'ing JA's. WA7EPU/5, NM got 2 VK4's and 2 HC8's. W5FF and N5JHV, NM also QSO'd VK4's! 1530UTC-HC's into PA. KH6IAA QSO'd VK9NS. 14th — 0300UTC, VK4's into W6's (San Diego) again.

A new chapter in 6M history was written on Oct. 16 when Fred Simpson, VK8PTG; worked his first contacts with the SMIRK/WB4OSN loaner SWAN 250 rig. At 2220UTC he had his first QSO, with KP4EOR, #2-2230UTC — PT9FH, #3-2235UTC — K1FJM/4, #4-2244UTC — W400. On the 17th at 1635UTC he QSO'd 9H1CG followed at 2142UTC by K1FJM/4, W400, N4EJW, N4EJV and WB4OSN, the rig donor. At 2225UTC W5UMB, south of me in Kingsville, TX, worked him. I think that PY5ZBU also QSO'd him.

Oct. 19, 1950UTC, LU8YYO, LU7DZ, LU7VB and LU8WAT in here. 22nd — 1400UTC, OH5NQ was heard by WB8ZTV, WVA. 24th — 1958UTC, LU8YYO QSO'd VE1's, W6's and was heard by the G's. 25th — 0100UTC, K6QXY QSO'd two ZL's. ZL's QSO San Diego W6's, 2209 — 2250UTC. W6's have the KH3 beacon in for a long time. Rhett - N7DGL/KH3 will replace Bob - WY5L/KH3 as the operator. Bob left the island Nov. 14.

26th — HC1BI QSO'd ZX0F-Fernando Nograna Island, 0000UTC! HC2FG often QSO's ZD8MB, and has QSO'd V31IV, P40V and a P43. 27th — N5JHV had five JA QSO's and was heard by JA1RJU. JA's QSO San Diego W6's. KL7NO was into NM 2230-0000Z. N5JHV QSO'd him for 6M WAS! W6UXN says it was the strongest JA opening he has ever heard. He also heard two HL9's, DU1GF and a JD1.

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V85BI-Brunei, is also on 6M, I am told. 28th — 48.250 TV video is in here and NM from somewhere. 28th — 9H1CG heard KH6IAA working LU7FA at 2020UTC. The HC8SIX beacon was into JA8RC at 2258UTC. There was a big Pacific F2 event to KH6, as many VK's were worked. 30th — FK8's, VK2's, 4's and ZL's into W6's.

31st — VK2XJ QSO'd VE 5LY apparently on an F2 to Es link early in the radio day. There was considerable Es around the West Coast. I confirmed this with VK2XJ on 28.885 the same day. FT5ZB worked 55 JA's 1000-1200UTC.

John-W5UWB, Kingsville, TX, has one of the best locations for working DX. He is about 135 miles south of us and seems to get South American and New Zealand openings when we don't. Sept. 8th found him working HC5K, LU9AEA, HC2FG, LU8YYO, LU7DZ and F2 backscatter to the surrounding W5's.

9th — HC2CG/HC8. 11th — HC5K, LU4VBY. 12th — HC5K, HC2FG, backscatter to W's. 13th — HC2FG, HC8GR, HC5K, LU4VBY. Oct. 16th — LU8YYO. 17th — LU8YYO, LU1VD and VP8PTG for country #55! 25th — from 2209-2246UTC, ZL2's AGI, KT, QS, CD, TJY and ZL2KT at 52.050 to check the MUF!

FH5EF and FH5EG are now active on 6M. D44BC should have 6M gear by Nov. 20. Marshall, VP8PU, is said to be on from The Falklands with 10 watts and five elements. The ZF2KZ beacon should be on 50.091 when it goes operational. The GB3NGI beacon is on 50.0635 from Northern Ireland.

On Nov. 2, the KJ6BZ Johnston Island beacon was into So. California from 2200UTC for several hours, but Bob, the operator, was at work. W6's and N7DB in Oregon also had ZL TV audio, while CE3BFZ reported working JA's at 2340UTC. On Nov. 3, W5OZI in Junction, TX worked CX8BE at 2327UTC, followed by a Sporadic Es opening into W6's, CO, SD at 2226-0303 UTC.

Nov. 3 brought a major WY5L/KH3 opening to the West Coast and into New Mexico for several hours, with many reportedly working Bob for a new country. On Nov. 4, HC2FG works into FL, as ZF2MU runs a temporary beacon on 50.090.

GM's and GI0EIC/A QSO'd TK5-BF, Corsica, on Nov. 2, 1988. TK5-BF is running 10 watts to a two element antenna. This is the first known contact between these two countries.

Lionel Curling, VK3NM, reports he worked a lot of DX from far North Queensland using 10 watts and a 1/4 wave whip. He sent me a list of JA's

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worked that would choke a horse. He also heard Joe, KG6DX, but lost him to the JA's. The VK6RPR beacon should be on 50.066 with 10 watts and an omni antenna now.

By the time you read this, J52US and 9Q5NW should both be on the air, courtesy of SMIRK, its members and N4EJW. The next time you talk with W6XJ, K7VAY, VE1YX, WB8OGS and WD8ISK, thank them for helping get J52US on. They all had a hand in it one way or another. Also, thank N4EJW for providing the rig for 9Q5NW. FY7AZ (now FY5AZ) says he is not returning to France, so the beacon will stay on. Because of his heavy work schedule, he has turned his 6M equipment over to FY5YR.

Jimmy Treybig-V31IV October DXpedition Results

Last I heard Jimmy (W6JKV) had worked CE, CX, LU, OA, PY, TI2, and V31. I believe he worked some W4's in FL. He worked ND2X/5, W5OZI, WA5IYX, WB5QBV and K5ALX here. W6JKV had very few U.S. contacts. He said he worked Wayne - V31AB, who is on with 10 watts and a vertical.

Worked all 324 grid fields on 6M

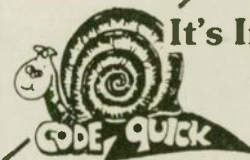
SMIRK member Folk Rosvall, SM5AGV, sent me an updated list recently: #1-47 Fields - WA1OUB; #2-41-NOLL; tied by W1JR; #4-40-K O T L M : # 5 - 3 8 - K 2 Y O F ; #6-33-W3WFM; #7-32-W7HAH; #8-16-KA9MGR; #9-15-W6RXQna; tied by KI3W; #11-12-N9FDS;

#12-10-KB6BKN; #13-7-KC9RG; & #14-5-JQ1GTC.

South Africa worked Eastern Canada and U.S. 12 Nov., 1420 Z. This was the first Africa-US F2 propagation for cycle 22. The ZS3 worked a VE2, 2 K1's and a K8. Details next month.

See you on The Magic Band all of a sudden! □

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10-10 INTERNATIONAL News

Chuck Imsande, W6YLJ
10-10 19636

Winter Phone QSO Party

Hold the weekend of Feb. 4-5 open for one of the big events of the 10-10 1989 year. Harry Syring, WB1FTQ, 10-10 Contest Manager, has scheduled the 1989 Winter QSO Party for that weekend. With the band conditions getting better on a daily basis, the Party promises to be the best in several years. With over 50,000 10-10 members world-wide and good band conditions, the prospect of large scores seems like a sure thing.

With so many new 10-10 members coming aboard since the opening of the 10M band to the Novice and Technician class, it seems appropriate to review and discuss the overall

operation and procedure for a 10-10 QSO Party.

For 10-10's new members, many of whom have never participated in one of our QSO Parties, here is the information that you need to be successful and have a good time.

Don't let the words QSO Party fool you, it is just another name for a contest limited to 10M to enable 10-10 members to collect hundreds of new 10-10 numbers for their collection.

It operates just like any other contest. You must exchange the following information for a complete contact: Call sign, Name, State or Country (City is not required) and 10-10 number. A log must be kept and all contacts must be listed in UTC time. All contacts must take place on the 10M band during the 48 hour contest period, which is from 0000Z UTC on Feb. 4th through 2400Z UTC on Feb. 5th. Only SSB, AM or FM modes are acceptable. Only single operator stations are permitted.

A Dupe sheet is required. If you have never made one out, I suggest you send me a #10 (business size) SASE, a sample Dupe Sheet and Instructions. These sheets allow the contest scorers to speed up their process of checking logs. If you belong to a 10-10 Chapter, you can assign your score to your chapter only if you are a paid member, and you can work that chapter net via groundwave from the location of the station working the contest. This may sound a little confusing, but all it means is if you belong to a chapter across the country, you cannot contact that chapter on groundwave, therefore you cannot assign your score to that chapter.

To make contacts in the QSO Party, first get yourself either several pencils, or better yet an automatic pencil with lots of lead. Next a good eraser, like a "pink pearl," a lot of scratch paper to keep next to your log book for jotting down calls, 10-10 numbers, etc.

If you hear the other stations clearly the first time around put the contact right in your log. Start out the contest at the top of a new log sheet. There are 25 lines on the ARRL log book sheet, and counting full sheets lets you know how you are doing as far as total contacts are concerned. At exactly 0000Z the first day of the contest, call "CQ CONTEST" and see what happens.

There are two ways to operate in a contest like this. One is to find a clear frequency and plant yourself there, making as many contacts as possible without moving frequency. As each contact is complete, just call either "QRZ" or "QRZ CONTEST, and your CALL."

The other method is to roam the band looking for other stations calling "QRZ CONTEST," and give them a call. For those new to contesting, it is not necessary to call the other station by his call and then give your call, etc. If you are roaming the band and hear a QRZ, just transmit your call. Remember, the other station wants to work you just as bad as you want to work him, and if he hears you he will come back to you. If conditions are good you can make contacts as fast as you can enter them in the log.

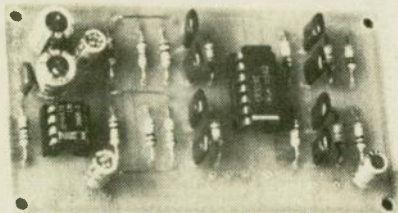
Looking back 11 years to the contest results of the Winter 1978 QSO Party, which occurred during a period of good band conditions, we find the overall winner was W7ZR. The winning score was 1391 contacts for a total of 2497 points. A little math shows us that 48 hours had 2880 minutes and by dividing W7ZR's total contacts into the 2880 minutes we find that he made a contact on the average of each 2.07 minutes.

Most of us will not stay up all night and operate during the entire 48 hour contest period, and band conditions will drop out sometime during the nighttime hours. Therefore, you must delete some contest time to catch a few "zzz's."

When the contest is over and you have had time to recover, it is time to score your results. First get out your Dupe Sheet and list each 10-10 number in accordance with the instructions. Each time you come across a duplicate contact in your log, either mark it "dupe" or line it out. Count all of your contacts that have a 10-10 number and list the number on the back of the latest issue of your *10-10 International News* in the space provided. Next count all of the contacts without a 10-10 number and list that number in the space provided. The number of 10-10 contacts x 2 and the number of contacts made with stations without a 10-10 number x 1 give your total point score.

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10-10 QSO Parties are fun and a great way to increase your Bar count, get new states for your 10-10 WAS, and contact new countries or continents for your 10-10 Countries Award or 10-10 WAC. Above all enjoy the contest and remember to keep your contacts short with just the required information. This is not the time for rag-chewing.

10-10 Roster Update

The 10-10 Roster was last published in 1987 and included numbers and calls complete through 10-10 number 41999. In addition there were calls listed for numbers up to 44045, but a lot of gaps where District Managers had yet to issue numbers in various blocks in the 42000 through 44045 series.

In the interim, until a new complete 10-10 Roster can be issued, Corky

Cochran, W3FQN, has put together a Roster Update with all numbers issued from 40000 up, including blank spaces for ou to fill in calls in the high number groups as you work them. Corky has done a fine job in organizing this roster up-date. He used large type which is very readable. For a copy send \$2 for the cost of printing and postage to: Corky Cochran, W3FQN, 3221 Harcourt Road, Baltimore, MD 21214.

If you have changed your call sign by up-grading or moving, 10-10 should have your new call for the records. Send your information, including your old and new call, to your District Manager.

Finally

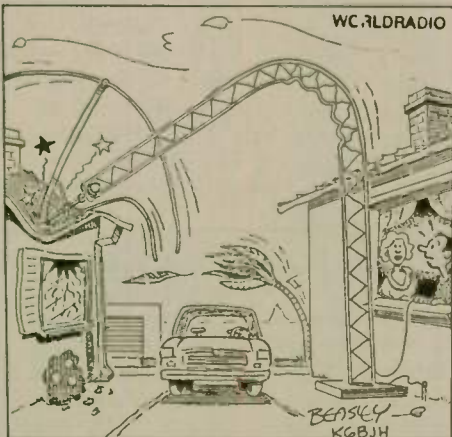
If you would like information about 10-10 and are interested in joining and receiving your very own 10-10 number, send a green stamp (\$1) to me at 18130 Bromley Street, Tarzana, CA 91356-1701. I will send you an information package, including the latest issue of the *10-10 International News*, the official 10-10 quarterly magazine. It would be appreciated if you would include an address label along with your request.

If you have forgotten your 10-10 number or who your District Manager is, I can supply you that information also. Just send an SASE.

73 es cu next month. □



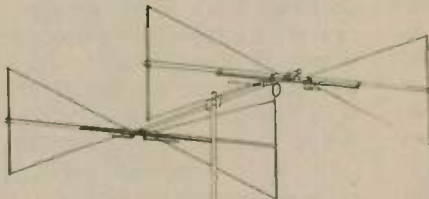
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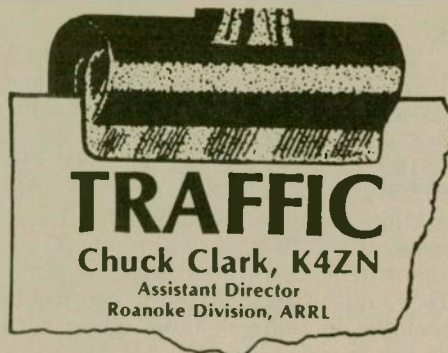
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Curtain call?

Our former editor, Chris Wilson, KA6TAL, wrote me, just before turning her job over to Marra McElroy. She asked if I could provide copy for a January Traffic column, as they haven't yet come across anyone to continue it. And so I'm adding to my remarks about the rewriting of the FCC's Part 97 to say a few words about emergency communication. A kind of curtain call, I suppose, and I hope it's not "curtains" for me!

Emergency Communications

Proposed Sections 97.101 to 97.105 cover emergency communications and are a complete rewriting of the rules. They do not change much, however, but rather make explicit what has been a tacit understanding between amateurs and the FCC. In fact, between amateurs and the Federal Radio Commission, and even the Department of Commerce, in the years before there was any FCC.

Section 97.101 (b) covers emergency communication in natural disasters occurring in areas not regulated by the FCC. It says we must observe ITU regulation 640 (Geneva, 1979) and restricts us to the 80, 75, 40, 30, 20, 15, 12 and 2 meter bands.

ITU regulation 640, after saying how qualified amateurs are to render community service, and discussing their work in the past, goes on to enumerate the limited conditions under which amateurs may give this assistance.

Amateurs may only be involved with the consent of the country in which the disaster has occurred. Perhaps the FCC might add that where there is a third-party traffic agreement between the United States and the other country, that agreement also governs such assistance, in some cases allowing us more latitude than does ITU 640.

Sections 97.103 and 97.105, it appears, represent the first explicit mention in the amateur rules of what has been the policy since the beginning of Amateur Radio. In an emergency it is permissible to bend the rules if necessary in order to save lives and property.

97.103 Safety of life and protection of property

"No provision of these rules prevents the use by an amateur station of any means of radiocommunication at its disposal to provide essential communication needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.

97.105 Stations in distress

"(a) No provision of these rules prevents the use by an amateur station in distress of any means at its disposal to attract attention, make known its condition and location, and obtain assistance.

"(b) No provision of these rules

prevents the use by an amateur station, in the exceptional circumstances described in paragraph (a), of any means of radiocommunications at its disposal to assist a station in distress."

What more could we ask? The Commission recognizes that saving lives and property can be more important than strictly observing all the rules. Of course, even in these exceptional circumstances, one should observe the rules whenever possible. An amateur aboard a boat in distress, for example, could send an SOS on 500 kHz if there were no way to get help within the rules, but it would be better to use amateur frequencies if possible, once communication is established.

On the other hand, if the material you have on hand will make only a spark transmitter, you could even use that in such an emergency. And I'll guarantee you that somebody will hear it if anywhere within range. And they will take action, if only to get that racket off the air!

You may be interested in the following similar regulations of the FCC governing the Maritime Mobile Service.

80.311 Authority for distress transmission

"A mobile station in distress may use any means at its disposal to attract attention, make known its position, and obtain help. A distress call and message, however, must be transmitted only on the authority of the master or person responsible for the mobile station. No person shall knowingly transmit, or cause to be transmitted, any false or fraudulent signal of distress or related communication.

80.312 Priority of distress transmissions

"The distress call has absolute priority over all other transmissions. All stations which hear it must immediately cease any transmission capable of interfering with the distress traffic and must continue to listen on the frequency used for the emission of the distress call. This call must not be addressed to a particular station. Acknowledgement of receipt must not be given before the distress message which follows it is sent."

It might perhaps be good for the

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73, WD9IIX

FCC to include some of the above rules from Part 80, Stations in the Maritime Services, in the forthcoming restructuring of Part 97. In particular the last paragraph about giving absolute priority to distress traffic would be beneficial. Amateurs have given a hard time to stations passing emergency traffic on their frequencies, saying "That's not what Amateur Radio is for."

Actually these rules, both those in Part 80 and Part 97, to a great extent merely repeat or apply rules from the International Radio Regulations. All

radio stations, for example, are obliged to refrain from interfering with distress communication, and further are obliged to handle such communication when they are in a position to do so, and to render any assistance they can.

The first section of Part 97 gives as the number one purpose of Amateur Radio "service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications." Some amateurs may not think this is what Amateur Radio is for, but

the FCC certainly does.

We had better be careful. If Amateur Radio becomes merely a hobby, it may not be long before other services will nibble away at our frequencies and maybe take some big bites too. The FCC is charged by the Communications Act to license stations on the basis of "public interest, convenience, and necessity." Once someone convinces the Commissioners that to turn our frequencies over to other users is more in the public interest, to other users they will go. Let's not forget 220-222 MHz! □

ARRM reunion

Leona Wallace, WA6OHB

Brent Bogdanski, XE2VJD, net manager of the Maritime Chabasco Net, and Bill Rose, XE2VKB/ WA6VZH, net manager of the Sonrisa 80M Maritime Net, were among the 11 associates of the Guaymas ARC in attendance at the first annual reunion of the Asociacion de Radioaficionados de la Republica Mexicana (ARRM) held March 19-20 in Hermosillo, Sonora, Mexico. They are shown here with Jesus Alberto Ibarra, Delegado Regional de Hermosillo, Sonora — Secretaria de Comunicaciones y Transportes.

navigator, managed to find our hotel again.

Also in attendance were Carl Wallace, (WD6B) XE2VIY; Leona Wallace, (WA6OHB) XE2VIX; Ann Rose; Benjamin Moran, XE2TMB; Luis Villegas, XE2ES; Esteban Terrazas Aquirre, XE2XTD; Jim Gallarti, XE2VKT; Armando Bonilla, XE2-TNT; and Guadalupe Angulo, XE2-TGA.

Eladio Alvarez, Director General of ARRM, presented the goals of the group. They hope to establish an emergency 2M net throughout the country with the cooperation of all the ham clubs. Most repeaters in Mexico

are club repeaters.

To encourage new members of the ham community, the group plans to offer technical advice and information as an aid to teaching prospective hams. The exam at present is essay-type and very difficult, calling for verbatim recall of all the various regulations by number. □

Let Worldradio know what you do in Amateur Radio; many others will be interested in your experiences.



Among those attending the first annual reunion of the Asociacion de Radioaficionados de la Republica Mexicana in Sonora, Mexico last March were (left to right): Bill Rose, XE2VKB/WA6VZH, Jesus Alberto Ibarra, and Brent Bogdanski, XE2VJD. (Photo by Leona Wallace, WA6OHB)

After the first session of speeches Saturday night in a municipal auditorium near the airport, we piled into cars again to follow some of the members to the club house belonging to Club de Radio Ayuda Hermosillense, A.C.

On the long table on the covered patio were huge platters of spicy fish, sausage cubes, cheese and crackers. The members were very friendly and interesting to talk to. Everyone had such a good time, and it was hours past our usual bedtime before we piled into the car. Carl, with Brent as

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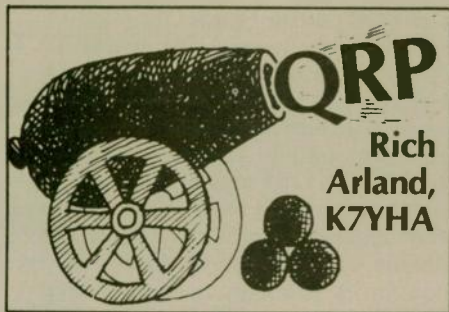


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I'd like to title this column "Secret Weapons of the QRPer," cuz this month, gang, we're gonna take a close look at those little things that can make life a whole lot easier for the low-power operator. You can also use this list as a Christmas shopping list for the XYL, in hopes you can find one or more of these little goodies in your Christmas stocking.

Probably the biggest secret weapon(s) that I have in my personal arsenal are my computers. That's right, computers. I currently have five of them in use at K7YHA. My Tandy Model 102 laptop is in constant use, not only in the shack (portable packet), but also when I do my QRP columns for Worldradio! I also use it constantly at work. I honestly cannot imagine life without my little workhorse.

Of the two Radio Shack CoCo II's I have, one is used full time on my packet digi and the other is my "hacker machine" that I use for experiments. The Atari 600XL is dedicated to CW operation using the Steve Stuntz CW program (Feb. '85 QST) on a plug-in cart.

Machine-sent CW is a must for good copy on a weak QRP signal. Hand keys and bugs just don't make it when the noise is up and the receive signal level is down. Perfectly sent CW

characters will greatly enhance the other operator's ability to copy your signals.

Finally, the Commodore 64-C is my "other" machine. It does a lot of correspondence, FRENDEX (SWL) loggings and QSL reports and several other radio-related programs (beam headings, Gray Line prediction, etc). All in all, if I had to go through my Amateur Radio life without computers, I think I'd take up stamp collecting or bowling.

Keyers and paddles

A good contest keyer and good paddles are a must for those CW fans who don't touch type or have a CW keyboard. My MSC Smart Keyer and Bencher BY-2 deluxe paddles are a great combination for serious CW. The Smart Keyer is a full-featured contest keyer at a modest price and the BY-2 paddles make sending CW very enjoyable. The whole package is easily transportable for Field Day or portable operation.

If I had only one active audio filter to use for the rest of my life, it would be the Datong FL-3, available through Gilfer Shortwave, 52 Park Ave., Park Ridge, NJ 07656. This UK-manufactured filter is absolutely the best active device I have ever used. It features a five-pole lowpass filter, a 5-pole highpass filter and a 30dB tunable notch/peak filter, which all work together to provide 12 poles of active audio filtration. Add to this an auto-notch filter that automatically sweeps the audio passband and locks onto interfering heterodynes, and you have a tremendously flexible filter that works on CW, AM, SSB, RTTY and HF Packet.

Since I do a lot of SW DXing in the Tropical Bands, the FL-3 pulls double duty on both the ham and SW broad-

cast bands.

I have a whole collection of secret weapons in the shop. Good test equipment is essential in keeping the QRP gear running, building and de-bugging, getting the max out of your equipment and making the most out of your operating time.

A good digital multimeter and an ANALOG VOM are two pieces of test equipment that are indispensable. I have two DDM's — both Radio Shack specials, but they are quality products, very accurate and relatively inexpensive.

A quality frequency counter (up into the 1 GHz range) is also quite handy, as is a RLC bridge and RF generator. My Opto Electronics 1300HA counter is a great value for the money. The built-in preamp yields good sensitivity in the 1 GHz region, and the external probe assembly makes sniffing around inside a rig easy as pie. The whole counter and accessory pack fits into a carrying case and is easily transported anywhere, even the Field Day or VHF contest site.

My RLC bridge is the one offered by Heathkit, as is my analog VOM. Last year at the Virginia Beach Hamfest, I managed to pick up two EICO RF generators. These are both about 15 to 20 years old, but in sound condition and quite accurate.

The EICO's have metal cases which greatly reduce unwanted radiation from the oscillator. A good selection of test gear will keep your rigs on the air so you can enjoy the QRP hobby.

More handy equipment

The DX Edge is another secret weapon in my QRP arsenal. This slide rule-type device has a set of moveable, clear plastic overlays that show the day/night transition for all 12 months. The instruction sheet provides de-

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tailed info on how to use this handy device. It is especially useful in predicting Gray Line propagation paths for rare DX. MFJ Enterprises (Box 494, Mississippi State, MS 39762) also offers a computerized version of the DX Edge that will run on MS/DOS machines. In either case, this DX tool is well worth the investment.

The Palomar R-X Noise Bridge (Palomar Engineers, Box 455, Escondido, CA 92025) is one of those little things that you just don't know how you ever lived without. Not only is the noise bridge compact and easily transportable, but it will tell you more about how your antenna system is (or isn't) functioning than any other single piece of test gear available. Use the noise bridge to trim antenna elements, make phasing lines, pre-adjust antenna tuners, check whether your antenna is cut for the proper resonant frequency, ad infinitum. Lemme tell ya, the Palomar R-X Noise Bridge is one versatile little piece of gear!

So far, we've dwelt pretty much on the hardware aspect of the QRPer's supply of weapons. Books make a tremendous difference in the overall outcome of QRP operation. Ade Weiss, WØRSP (he writes the QRP column in that other magazine . . . CQ),

and I are of the same school of thought when it comes to books . . . you can't have too many!

The well-read QRPer is much better armed to enter the QRP arena than someone who has the necessary gear but not the "book learnin'."

Helpful literature

Books that are an absolute necessity in the QRP library are: *The Joy of QRP: Strategy for Success* and *The History of QRP* by Ade Weiss; *The Communications Handbook* (4th ed.), by Robert L. Shrader; *The Radio Amateur's Handbook* and *The Antenna Handbook* by the ARRL staff, *QRP Projects* and *W1FB's Antenna Notebook*, by Doug DeMaw; *HF Antennas for All Locations* by G6XN; all of the *Hints & Kinks* books by the ARRL that you can lay your hands on; *The Propagation Handbook* by George Jacobs (absolutely *THE BEST* book on propagation fundamentals anywhere, ever, ever, ever!); all the antenna books written by Bill Orr, W6SAI and *The Complete DXer* by Bob Locher, W9KNI.

For those hard-to-find utility stations, like the Hurricane Hunter's aeronautical frequencies and much more, buy *The Shortwave Directory* (4th ed.) by Bob Grove of Grove Enter-

prises, P.O. Box 98, Brasstown, NC 28902.

Many of these books can be found at hamfests or through the ARRL, *Ham Radio*, *73* or *CQ* magazines. Bob Locher's book is from Idiom Press, Box 583, Deerfield, IL 60015. Ade Weiss' books are available from Milliwatt Books, 833 Duke St., #83, Vermillion, SD 57069. The Shrader book can be special ordered from any Walden's or B. Dalton bookstore.

Questions/comments: SASE to Rich Arland, K7YHA, 25 Amherst Ave., Wilkes-Barre, PA 18702. □

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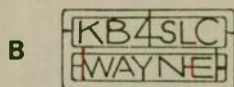
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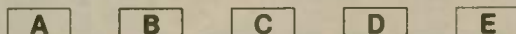
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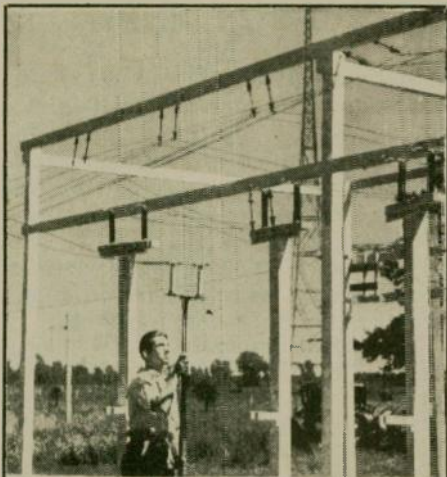


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AERIALS

KURT N. STERBA

On the weekend of October 29-30, what was the most uttered phrase on the face of the Earth? For a few days, it even replaced the dreadful, "Have a nice day!"

Answer: 59-25. Yes, it was *CQ Magazine's* World-Wide DX Contest and the signal report from Zone 25 (Japan) was stated at least a Giga times.

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Many who would like to enter contests don't because they feel that without a giant antenna, they would suffer a crushing fate. This article hopes to dispel that notion.

It also attacks the problem of *NO* antenna at all! Funny, the ban on antennas encompasses the ultra swanky neighborhoods and the mobile home parks. So now we present a real "disguise" antenna — a patio umbrella!

Oh, I know some of you are laughing up your sleeves already. But hear my tale first.

Those with antenna restrictions could put up the patio umbrella (actually, this is to prove that if it's made of metal and you can get RF into it, it will radiate), run a few radials and enjoy yourself.

Making all this possible was the MFJ Model 949C Versa Tuner II — ideal for the antenna experimenter because:

1) It reads forward and reverse at the same time. 2) The dummy load is built right in, saving another piece of coax to . . . and where am I going to put this? 3) You can instantly switch from using the tuner to seeing what it's like with no tuner as a flick of the switch bypasses the tuner. Plus, you can run a comparison antenna to the tuner and do A-B with another antenna. With this tuner you can also use random-wire or balanced-line antennas.

More about the tuner later. Testing antennas (or patio umbrellas) in a contest makes sense because as opposed to casual ragchewing, operation in a contest, if you aren't somewhat competitive the big bullies will take away your lunch.

As I give an account of the results, remember that my approach to con-

testing is a lot more casual today than it was many years ago, whence I have some nice wallpaper.

We went out to dinner both nights, read a book, etc. One of the transmitters used reads 60W into a dummy load, and the other transmitter reads 100.

0000 GMT. I light up a good cigar. I know it's a good one because I paid a whole quarter for it. I have a big jar of peanuts to sustain me during the ordeal.

So, what are the capabilities of this silly antenna?

Quite early in the contest, there's the big DXpedition P40A. Everybody is calling and lo and behold — they come back to me. Even I'm surprised! Two minutes later an EA. Then a JA. Another JA. Now, I could work lots of JA's, but for me and you to see what this absurd antenna can do, it's best to look for zones and countries.

TI2, then back to back, Alaska and Hawaii and down to the Caribbean. That was on 10 and 15.

I knew you'd say something like "Even a wet noodle will work when 10 is open." (Hmmm, that's an idea, use a *real* wet noodle.) And while that's true in casual hamming, in a contest, vs. a transmitter with 20 times the power I'm using, a 100' up-in-the-air big Texas quad, speech processor, 10M can be a real pile-up battleground.

OK, let's slug it out on 20. Estonia, Canada, Finland. The UR2 was on second call. Change bands.

Brazil, Portugal, Chile, USSR. Some close-in stuff — England, France and Italy on first call.

I figured that if I worked a country once I wouldn't work it again as I didn't want to muscle my way past those who take contesting seriously. (hihi)

Switzerland, Mexico, Bermuda, Argentina, Colombia, Czechoslovakia, Sweden, Venezuela, Germany, Netherlands.

* **KAGIL** *

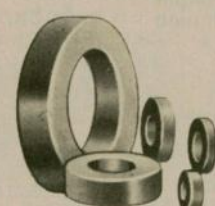
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Alright, what is the input impedance of a patio umbrella?

In a three-minute stretch: Estonia, Hungary, Yugoslavia. That's moving and looking for the contacts.

Belgium, Wales, Cayman, Labrador, Honduras, Uruguay, Polynesia.

Forty-three countries in 21 zones, and along the way worked VE's 1 through 7 and JA's 1 through 0. All with a ground-mounted patio umbrella... a moral victory!

Of course, I must admit there was some "just barking into the wind." Never heard me, and sometimes I had to repeat my call two or three times.

Some outstanding operators heard were PJ2FR and VO2GD; the best of all was HC5J!

Maybe the next disguise antenna will be window screens on a house. They'll load up!

Back to the tuner. You've all heard the "It just fools the transmitter," which I have wailed against for many years.

Well, it's very interesting to have a tuner that one can compare with and without (bypassed).

Have you ever had the antenna for one band be attached to your receiver when it's tuned to another band?

"Where did everybody go? Dead band?" OK, same situation. But now you run the wrong antenna through the tuner and up come the signals!

Unless they repeal the laws of reciprocity, the same effect is on transmit as on receive!

Nobody can go around, "All it does is fool the receiver." It's no illusion that the signals got louder through the use of the tuner! Did we "fool" the S-meter, too?

Remember the old plug-in coils that once were in transmitters? The side with many turns went to the tube's plate; the smaller turn side went to the antenna. No one ever said, "It's just fooling the plate." It truly matched the tube's impedance (high) to the antenna's (lower).

During the contest, while tuning around, I stumbled upon a stentorian voice telling the ham on the other end that "Tuners swamp out the reactance, be it capacitive or inductive if the antenna is too short or too long, but it can't match the 'R.'"

Friends, that is totally untrue! The tuner does indeed match the R. (Assuming, of course, that such is within the range of the tuner.)

It almost brings one to tears to think that so many "voices of authori-

ty" can pass misinformation along, and it is accepted.

How can such a botch have been made on something so simple? What can be done to erase this out of the memory bank of so many amateurs? Any suggestions?

(Kurt N. Sterba is a nom de plume. He does this so he can peacefully sit at his ham club meeting and not be harped at by those who had a "Moonraker" for their first antenna and who still believe it has 23dB gain.)

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The changing face of Amateur Radio

R.E. Beasley, K6BJH

Amateur Radio has changed enormously in my short 34 years in the hobby. My first rig was a 6L6 single-tube, crystal-controlled RF oscillator on 80 CW. My receiver was an old deguttied Zenith All-wave household radio with a homebrew BFO to generate an audio tone for the incoming CW signal.

As was fairly typical in those days, the transmitter was homebrew, and I had soldered it together with my very own hands (with the aid of a soldering iron, of course!). How well I remember loading it up for my very first call (I used an NE51 neon lamp to indicate maximum RF). Summoning all my courage, I tapped out a few CQ's and signed my call.

I was much surprised to hear my call coming back to me from that mass of QRM. I missed the call prefix but copied the QTH as Ontario. At that

time I lived in Redondo Beach in Southern California, and the city of Ontario was about 60 miles from my QTH. Not bad, I thought; 60 miles for my puny little 6L6.

A clarification on the call and QTH, however, disclosed that the Ontario in question was in Canada! That shocked the H.E. double toothpicks out of this op. To think that my signal was getting out *THAT* far! I wondered how many other guys were listening out there at this lid and his obviously inexperienced key work.

In those days I was operating on a severely limited budget, as were many other hams. I could afford no switching relays, so my long-wire antenna was switched over by means of a porcelain knife switch. The procedure was as follows:

You decide to call a CQ; try to find a spot on the band that has the least QRM near a crystal you have (if you're rich enough to have more than one!). Turn standby SW on rcvr to off. Switch antenna knife SW over to xmtr. Load xmtr, (osc, buffer, plate tank, and pi network, as applicable), and call CQ. (The aforementioned loading procedure was usually repeated every time you QSY as there was very little broadbanded stuff in those days.) You then flipped the knife switch back to rcvr, turned standby rcvr SW on and tuned for a possible call.

Unless the other guy was richer than you and had a VFO, he probably was not on the same frequency — especially if he was a Novice and you had to tune for him. The procedure for phone operation wasn't much different except that you had to take the B+ off the xmtr after transmitting.

A term seldom if ever heard on the bands these days is homebrew. We have all become appliance operators in this day of synthesized circuitry, integrated circuits and microchips containing half a ham shack full of complex capabilities crammed into a little black plastic container called an IC,

appearing for all the world like an elongated black beetle.

Where is the fun of designing and/or building your own transmitting gear and actually getting it on the air? How many of you remember building up a phone rig and using "eliminative analysis" on it? That is to say that you had to keep replacing components with different values until you got the thing to actually produce a clean, crisp signal that would leave the antenna with impunity.

You learned the hard way that when you soldered a resistor, capacitor or other component into the circuit, you didn't wrap the lead around the terminal, because there was a very strong possibility you'd have to replace that component with one of a different value. You probably learned the hard way that it was quite a task to unsolder and unwrap a lead at the same time. It was also quite different to continually solder unwrapped leads to a terminal without having the previously soldered leads melt loose!

Most of us don't even know how to trouble-shoot our own equipment any longer. The trouble might lie within one of those elongated black beetles, and who knows what the heck goes on in one of those? There are no glowing filaments to examine and see if they're burned out. Most of the technology of Amateur Radio is now concentrated in the minds of a few lab technicians and engineers — most of them in an Oriental country halfway around the world.

The whole problem is, I don't really miss building my own equipment nowadays. The gear on the market today is so totally fascinating, not only because of its compact size and awesome efficiency, but because of the technological features involved. Why, you can even buy a complete 2M station that utilizes a highly stable synthesized frequency-determining circuit that covers virtually any frequency across the entire band.

A memory circuit remembers which particular group of frequencies you prefer to use, 32 subaudible tones are built in and certain peculiar offsets may be memorized for *private* access of certain repeaters. (Whatever happened to equal access of all frequencies to which your FCC license entitles you?)

(please turn to page 59)

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YL-ISSB QSO Party — CW

The CW portion of the 1989 YL-ISSB QSO Party will be held from 0001Z, January 28 to 2359Z, January 29. Categories will include Single Operators, DX/U.S. Partners and YL/OM Teams.

Exchange: Call, report, QTH, name, ISSB number, YL/OM teammate, DX/U.S. partner.

Frequencies: CW — 40-60 kHz up from bottom of 10, 15, 20, 40 and 80M bands; *Phone* — 75M (3873-3888; DX transmit 3690, 3740, 3790 and listen up); 40M (7273-7288; DX transmit 7060-7080 and listen up); 20M (14273-14300; DX transceive these frequencies plus 14300-14310); 15M (21373-21388; DX transceive these frequencies plus 21365-21373); 10M (28573-28588; DX transceive these frequencies plus 28565-28573).

Scoring: Contact with non-member regardless of QTH = 1 pt.; Contact with member on your own IARU continent = 3 pts.; Contact with member on another IARU continent = 6 pts.

Multippliers (only member-to-member contacts qualify as multipliers): 1 for each of the following that are QSO'd with a member: DX-CC country, state, Canadian province, Australian call district, New Zealand call district. 1 for each YL/OM Team when BOTH teammates QSO'd; 1 for each set of DX/U.S. Partners when BOTH partners QSO'd; 2 for each partner in a Partners QSO, when they QSO each other.

Multi-band operation — 1 for contacting any 15 or more members on a second band; 2 for contacting any 15 or more members on a third band. Limited power operation — 5 for maintaining 250W or less input throughout the contest.

Notes: 1) Contacts should be one-to-one and unassisted; contacts made on nets should not be submitted for point or multiplier credits. 2) 14.332 is reserved for emergencies, system business and informal contacts; QSO party credit should not be claimed for 14.332 contacts. 3) VHF and UHF may be used simplex only. 4) Check 40 and 80M on the hour; more often after dark.

5) Only QSO's between members can count as multipliers and once a multiplier is claimed, it may not be claimed again on another band. 6) The same station may be worked on other bands for additional QSO points. 7) A member contact within your country counts as a DXCC multiplier. 8) KH6 and KL7 are U.S. states and DXCC countries. 9) IARU (WAC) criteria determines continent; DXCC list determines country status. PJ2-3-4-9, P4 and 9Y are South American.

Awards: Party results will be announced at the annual convention in June. Category and QTH winners will receive certificates of award.

Logs: Include same information as "Exchange" plus date, time and band; indicate two 6-hour rests. Deadline is before April 30. Submit logs, summary sheets and entry forms to Bill Early, WA9AEA, P.O. Box 401, McHenry, IL 60050-0401 USA. For more information or multiplier summary sheet, entry form, send SASE to WA9AEA at above address. □

Central Vermont ARC QSO Party

The Central Vermont ARC is sponsoring a QSO party to be held from 0001Z Saturday, Feb. 4, to 2400Z Feb. 5.

Rules: A station may be worked three times per band — once each on phone, CW or RTTY sub-bands. Duplicate and repeater contacts are invalid. W1BD may be worked on each different band for bonus points.

Suggested Frequencies: *Phone* 80-15 meters; the first 25 kHz up from the beginning of the General phone band edge; Novice 10 meter phone portion. 50.110, 144.2. CW — 3540, 3720, 7040, 7120, 14040, 21040, 21140 and 28040. *RTTY* — 3620 and 90 kHz from lower edge of other bands.

Exchange: VT stations send RS(T) and county (CW two-letter county designators — AN, BN, CA, CN, EX, FN, GI, LA, OG, OL, RU, WA, WM and WR. Other stations send RS(T) and state, province or ARRL country.

Scoring: VT Stations — 1 point per phone contact; 2 points per CW or RTTY contact. Multiply by number of VT counties, plus states, Canadian provinces and ARRL countries (non-W/VE). Add 20 bonus points to total score for working W1BD. *Other Stations* — 1 point per phone contact; 2 points per CW or RTTY contact. Multiply by number of VT counties. Add 20 bonus points to total score for working W1BD.

Awards: *Non-VT* — Certificate to highest-scoring station in each state, province and country (non-W/VE). *Vermont* — Certificate to each station submitting a log.

Plaque (annual) to highest scoring VT station. Special certificates for highest scoring stations in CW, RTTY, HF Packet, SSTV, etc. W/VT Award to stations working 13 of Vermont's 14 counties.

Send SASE now for official score and log sheets, and another for results. Send logs/facsimiles, name, address and county (Vermont) no later than March 1 to D. Loverin, WA1-PDN, 50 Liberty St., Montpelier, VT 05602. □

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MI QRP CW Contest

The ninth annual Michigan QRP CW Contest will be held from Jan. 21 1200Z to 2400Z Jan. 22 (36 hrs.). CW only, 160 through 10M (WARC bands excluded). The contest is open to all amateurs, and all are eligible for awards.

Classes: A — 250mW or less output. B — 1 watt to 250mW output. C — 5 watts to 1 watt output. D — Over 5 watts output.

Exchange: RST, QTH (state/province/country) and M-QRP Membership Number: (non-members send power-output).

Frequencies: 1810, 3560, 7040, 14060, 21060 and 28060 kHz. *Novice:* 3710, 7110, 21110 and 28110 kHz.

Scoring: Stations may be worked once per band for QSO points. Member contacts are 5 QSO points each. Non-member contacts are 1 QSO point each. Multiply total QSO points (all bands) by the number of states/provinces/countries worked per band. *Bonus Points* — Total points multiplied by 1.25 for 100 percent battery or by 1.5 for 100 percent natural power.

Awards: Certificates will be issued for the highest score in each state/province/country. A complete log is required for each band, as well as your name, call, address, equipment description and power output.

Logs must be received by Feb. 17. Please send a SASE for a copy of the results. Send these materials to L.T. Switzer, N8CQA, 654 GA. Marysville, MI 48040. A set of 1 log sheet and 1 entry form may also be obtained with a SASE from this address. □

North Dakota QSO Party

The North Dakota QSO Party, sponsored by the Red River Radio Amateurs, will be from 0000Z to 0800Z and 1600Z to 2400Z on Jan. 21 and 0800Z to 1600Z on Jan. 22.

Work stations once per band and mode.

Exchange: RS(T) and state/province/country (county for North Dakota stations).

Suggested frequencies: *Phone* — 3.905, 7.280, 14.295, 21.380 and 28.450. CW CW 35 kHz up from band edges; *Novice* 25 kHz up from band edges.

Scoring: Count 10 points per phone contact, 20 points per CW contact and 50 points per RTTY contact. North Dakota stations add 1000 bonus points for working five Novices and multiply QSO total by sum of states/provinces/countries. All others multiply QSO points by the number of North Dakota counties worked.

Certificates and plaques will be awarded. Mail logs by Feb. 28 (include SASE for results) to Mike Beaton, KD0A, 2267 Flickertail Dr., Fargo, ND 58103. □

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HAMFESTS



Florida

The FORT MYERS ARC will host the "City of Palms Hamfest" Saturday, January 21, at the Moose Hall Lodge in Fort Myers.

Doors will open at 9 a.m. and close at 4 p.m. Admission is \$3 and swap tables are \$10 each.

The festivities will include dealers, a flea market, technical forums, a traffic handlers luncheon and main and hourly prizes. Breakfast and lunch are available. Talk-in on 146.28/88.

For more information on dealer tickets and tables, contact Pint Cornwell, N4PSU, 4342 Tufts Ave., Fort Myers, FL 33901; or call 1/813-936-2000. □

The SKY HIGH ARC will sponsor the 9th Annual Citrus County Hamfest on January 28 at the National Guard Armory in Crystal River, FL. This new facility will provide expanded parking and an indoor flea market area for exhibitors. The talk-in frequency will be 146.355/955.

Hourly door prizes will be presented and the grand prize will be offered at 2 pm. A Packet Radio forum that concentrates on operating procedures is one attraction to look for. The Concession stand will be open all day for food and drink.

Self-contained RV parking is available and easy access to the building for dealer set-up is provided. Friday afternoon set-up hours are available by prearrangement.

Doors will be open at 7 am for exhibitor set up, and only admissions purchased with tables will be allowed entry at that time. Public entry begins at 9 am.

Admission tickets are \$3 until January 14th (send SASE for mail return) and \$4 thereafter. XYL's FREE with OM. Swap tables are \$5, not including admission.

For further info contact Bob Gordon, W1KUL, 904/628-5045; or write SHARC Hamfest, 5334 S. Forest Terr., Homosassa, FL 32646 for tickets or tables.

Illinois

The Wheaton Community Radio Amateurs will host the Wheaton Hamfest '89, Sunday, Jan. 29, from 8 a.m. until 3 p.m. in Villa Park.

The finale to the event will be a grand prize drawing for an ICOM IC-781. There will also be hourly drawings.

Tickets are \$4 in advance and \$5 at the door. For information phone: (312) 629-8006, and talk-in: 146.01/61. □

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DAYTON Hamvention

April 28, 29, 30, 1989

Early Reservation Information

• General Chairman, Bill McNabb, WD8SAY

• Asst. General Chairman, Ed Hillman, N8ALN

- Giant 3 day flea market • Exhibits
- License exams • Free bus service
- CW proficiency test • Door prizes

1989 Deadlines

- Award Nominations: March 15
- Lodging: April 7
- License Exams: March 26
- Advance Registration and banquet:
 - USA - April 4
 - Canada - March 31
- Flea Market Space:

Flea market tickets and grand banquet tickets are limited. Place your reservations early, please.

Flea Market Tickets

A maximum of 3 spaces per person (non-transferable). Tickets (valid all 3 days) will be sold IN ADVANCE ONLY. No spaces sold at gate. Vendors MUST order registration ticket when ordering flea market spaces.

Spaces will be allocated by the Hamvention committee from all orders recieved prior to February 1. Express Mail NOT be necessary! Notification of space assignment will be mailed by March 15, 1989.

Special Awards

Nominations are requested for 'Radio Amateur of the Year,' 'Special Achievement' and 'Technical Achievement' awards. Contact: Hamvention Awards Chairman, Box 964, Dayton, OH 45401.

Information

General Information: (513) 433-7720
 or, Box 2205, Dayton, OH 45401
 Lodging Information: (513) 223-2612
 (No Reservations By Phone)

License Exams

Novice thru Extra exams scheduled Saturday and Sunday by appointment only. Send FCC form 610 (Aug. 1985 or later) - with requested elements shown at top of form, copy of present license and check for prevailing ARRL rates (payable to ARRL/VEC) to: Exam Registration, 8830 Windbluff Point, Dayton, OH 45458

Lodging

Please write to Lodging, Dayton Hamvention, Chamber Plaza, 5th & Main Streets, Dayton, OH 45402 or refer to our 1988 Hamvention program for lodging information which includes a listing of hotel/motels located in the surrounding areas of Dayton. Reservations for the surrounding area will then become the responsibility of the individual.

HAMVENTION is sponsored by the Dayton Amateur Radio Association Inc.

Advance Registration Form

Dayton Hamvention 1989
 Reservation Deadline - USA-April 4, Canada-March 31
 Flea Market Reservation Deadline: February 1

Enclose check or money order for amount indicated and send a self addressed stamped envelope.

Please Type or Print your Name and Address clearly.

How Many

Admission	_____	@ \$10.00*	\$ _____
(valid all 3 days)			
Grand Banquet	_____	@ \$20.00**	\$ _____
Women's Luncheon			
(Saturday)	_____	@ \$7.00	\$ _____
(Sunday)	_____	@ \$7.00	\$ _____
Flea Market	_____	\$25/1 space	
(Max. 3 spaces)		\$50/2 adjacent	
Admission ticket must		\$150/3 adjacent	\$ _____
be ordered with flea market tickets		Total	\$ _____

* \$12.00 at door ** \$22.00 at door, if available

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 Box 2205
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NEW PRODUCTS

Information in "New Products" is supplied by the manufacturers to acquaint *Worldradio* readers with new products on the market.

New 'old' catalog

Yearly Communications believes that even in the age of high technology, there is still room for "basic radio." With the publishing of an old-style, fun-to-read catalog, now both young and old, first-timers and skilled technicians have a source of rare and hard-to-find basic radio parts as well as radio kits that haven't been available for many years.

Whether it's an authentic multi-plated air dielectric tuning condenser, a cat's whisker and galena crystal or old-style magnetic headphones, the new "old" catalog from Yearly Communications has everything needed to build a "free power" radio that uses no batteries and doesn't need to be plugged in.

For as little as \$6, you can buy a "World War II Fox Hole Radio" kit that has everything needed to build a radio that receives AM Broadcast Band stations utilizing a razor blade detector circuit. For only \$5, you can build a "Crystal Type" radio that's called the Yearly Communications "Battery-Free Emergency Radio." It's built inside a small plastic case you can carry anywhere. It even comes with antenna and ground wires, in case clipping it to the bed frame doesn't bring in stations like it did when you were a kid.

These "old-style" radios won't tune in yesterday's programming, but they will fill you with nostalgic memories and the excitement of listening to a radio you build yourself without soldering. All solder connections are made at their plant in California.

Don't wait until the lights go out! Drop a card in the mail today and ask for your FREE copy of this nifty, fun catalog. Send your request to: Yearly Communications, 12922 Harbor Blvd., #800X, Garden Grove, CA 92640.

'Super Wedge'

Brake problems on your ham rotor? Antenna turning even when it's not supposed to? C.A.T.S. announces the new "Super Wedge," an improved wedge for the Ham 3+4 series. At present, it can hold antennas with boom lengths up to 40'.

The "Super Wedge" is guaranteed unbreakable. It also fits the Ham "M" and 2 with housing change. Price class \$15. Available from C.A.T.S., 7368 S.R. 105, Pemberville, OH 43450; (419) 352-4465. □

The Packet Radio Handbook

by Jonathan L. Mayo, KR3T

The number of packet stations in the United States has grown at an average rate of 2000% a year for the past five years! In 1982 there were approximately 200 amateur packet stations, and by mid-1986 there were an estimated 16,000. It's no surprise to see this kind of growth — since packet radio is the most capable mode of digital communications available to radio amateurs.

For newcomers to packet, this book serves as the ideal introduction to the capabilities and limitations of packet radio. And for experienced packet radio operators, it provides a thorough review of basic techniques, along with information on how to expand their operations. After providing readers with the background they need to understand the basic concepts, the author moves on to more technical information on the inner workings and operational aspects of packet radio, and takes a look into the future of packet radio. Readers will learn everything they need to know for setting up and operating "on packet."

Jonathan Mayo, a new nationally-recognized packet radio operator, provides a mini-course on packet radio that includes: the development of packet radio; the people and organizations who introduced it to the world of amateurs; how to combine packet with

other areas of Amateur Radio for civil defense communications, traffic handling, public event communications and more; modulation methods and networking principles; the use of protocols such as the AX.25 and VADCG; an explanation of how the Terminal Node Controller (the "heart" of packet radio) works; a description of various TNC's currently available; and bulletin board operation.

Rounding out this exceptional guide is a look at the several areas of packet radio — such as modulation techniques, protocols, hardware development and networks — that are undergoing experimentation today and that will affect packet's future. Also included is a complete glossary of common packet radio terms, listing of available equipment, and names and addresses of packet manufacturers, clubs and newsletters.

The Packet Radio Handbook (218 pages, 95 illustrations; order #2722) is available for \$14.95 (paperback only), from TAB BOOKS, P.O. Box 40, Blue Ridge Summit, PA 17214; (717) 794-2191.

ABOUT THE AUTHOR: Jonathan L. Mayo, KR3T, is president of a computer consulting firm. He has been involved in Amateur Radio since the age of 13 and has had many articles published dealing with Amateur Radio. □

COMM-tests easier exams for VE's

The Amateur Radio Novice, General and Extra Class code tests administered by volunteer examination teams (or two Generals or higher for Novice) must be 5 minutes long, must contain every letter of the alphabet, and must also contain number 0 through 9, the break sign, slant bar, period, comma and two sign-off procedural signs. No code test is valid unless it meets these standards [FCC Part 97.21(b)].

Further recommendations from the FCC (FCC Bulletin dated June 22, 1982—specifications used by the FCC for Amateur Radio Morse code test tapes) precisely define the suggested tone of the code characters (1,000 Hz), duration of code elements, and the duration of spacing for 5, 13 and 20 wpm.

The 5 and 13 wpm exams are generated at

approximately 14 wpm character speed, with big spaces in between for the 5 wpm Novice test. At 20 wpm, the characters are generated at 14 wpm, not necessarily at 22 wpm character spacing found on some code test preparation tapes.

Only Gordon West's Radio School has code test preparation tapes that specifically meet these recommended code test specifications. The Gordon West test prep tapes are the closest thing to the real exams.

An independent test preparation group has now reworked examination tapes, meeting these specifications, for 5 wpm Novice, 13 wpm General and 20 wpm Extra Class. The exams are far easier than before.

"Our General and Extra Class tests use easy call signs to start the applicant off on the right foot," comments a "COMM-test" examination preparer. "We always use the slant bar between the weather conditions, and we always use the break between the repeated RST report. This eliminates the confusion of older test tapes that run the slant bar somewhere up in the call signs, and who knows where for the break sign. Our QSO's are logical, with no misspellings. We don't

use tricky town names, and all words make clear sense," adds the exam preparer.

For the Novice license, the exclusive COMM-tests start out with an easy 1½-minute format that every Novice can easily copy. This is followed by another sentence that uses up the majority of the letters of the alphabet, and then a run of numbers with logically placed procedural signs and punctuation marks.

COMM-tests will soon be available through leading volunteer exam coordinators for distribution to individual team members. The "COMM-tests" will not be made available to anyone other than the actual VEC, so individual VE members should write their VEC

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for a copy of these easier exams.

A unique computer program for examination preparation and documentation has been prepared by GGTE Systems, 21881 Summer Circle, Huntington Beach, CA 92646. This exclusive test preparation program allows you to prepare 5-minute QSO's while simultaneously displaying a letter count as well as the letters, numbers, and punctuation and procedural signs used up during the formation of the test.

A similar type program, called "Morse Tutor," is also available for examination takers to prepare for their code test. All inquiries should be directed to GGTE Systems in Huntington Beach.

Finally, Novice examination code tapes and written exams are available for any two hams — General Class and above, over 18 years of age — to give to Novice candidates. Using the

exclusive COMM-test format, this examination package has all the instructions on how to give the Novice entry-level exam, and all of the paperwork and tape recordings of that exam, plus the FCC Form 610. All you need is a tape recorder! Distribution of the Novice test package, containing an exclusive test just for kids, is through Gordon West's Radio School, 2414 College Dr., Costa Mesa, CA 92626; price \$9.95. This kit also includes the several hundred-page ARRL instructor's Novice teaching guide edited by Larry Wolfgang of the ARRL.

For more information, contact your local VE team or your local volunteer exam coordinator (VEC). The W5YI VEC is one of the first national VEC organizations to offer their members and test candidates the new, easier COMM-tests. □

User-friendly software

Electron Processing, Inc., manufacturer of the EZ-Speak programming tool for the popular Advanced Computer Controls' Model RC-850 microprocessor-based repeater controller, is now offering a version of the software package for owners of the RC-85 repeater controller.

EZ-Speak gives operators the ability to rapidly configure voice messages, courtesy tones and system timers by means of menu-driven commands. The program sidesteps the time-consuming and tedious procedures normally resorted to by control operators. Cumbersome, error-prone procedures are now a thing of the past, thanks to EZ-Speak.

EZ-Speak runs on either Commodore 64™ or MS-DOS™ personal computers, and consists of two specialized core software modules, each dedicated to a specific task. The "Composer" allows control operators to fully draw upon the vocabulary of the RC-85 to create exciting messages. The "Dialer" then commands the computer to generate the required tones. When used with the Commodore 64, this process takes place without the need for any additional hardware.

The Composer handles all RC-85 message

groups, including alarm messages, courtesy tones, ID messages and Digital Voice Recorder tracks. Messages you program are then stored on disk for retrieval at any time.

The Dialer module builds upon Composer-created files, and readies them for uploading to the controller via secure telephone links. In use, the Dialer automatically calls the RC-85 repeater controller, unlocks it and allows selection of the desired message group. It then uploads a specific file. Furthermore, the easy-to-use Dialer allows several commands to be sent to the RC-85's message editor, thus cleanly "finishing" an upload. The EZ-Speak Dialer also includes a unique manual dialer, which allows user-specific commands to be uploaded with ease.

EZ-Speak occupies a single 5 1/4" diskette and comes supplied from EPI with all required interface cables. The MS-DOS version requires a Hayes-compatible modem for DTMF generation. EZ-Speak is priced at \$39.95 Amateur Net. For details, contact the Sales Department, Electron Processing, Inc. at (516) 764-9798. □

Your HT — don't leave home without it

Nick, N3GDV

On May 6 (coincidentally a year and a day after I passed my Novice exam), I was going to visit friends in Bangor and took my HT along for company.

While listening to a conversation on the 147.045 repeater, my car was struck from behind, and pushed off the road into the brush.

The perpetrator continued up the road, and I broke in on the ensuing conversation and asked for a patch to the Bangor police.

Within minutes the officer found the vehicle and driver *AT A BODY SHOP!* Needless to say, Amateur Radio was responsible for a speedy apprehension. —*Delaware-Lehigh ARC, Nazareth, PA* □

Old-time Radio

(continued from page 54)

The dual-conversion, superheterodyne receiver is as sensitive and selective as any I've seen, and the whole station will fit in your shirt pocket!

When I think of the cost of a Gonset Communicator, or a Collins 75A3 receiver 30 years ago, the prices aren't really that bad, and the versatility of some of the new equipment is fantastic. (Remember when you needed a big PE103 dynamotor to go mobile on HF? And the headlights would dim when you punched the mike button, although you weren't running that much power?)

No, I don't really miss building my own equipment any longer, and I'm eagerly awaiting developments in Amateur Radio from halfway around the world. They can make a lot more exciting things than I ever could working from my junk box. I am hoping they will get busy and build for me a QRP ATV system, two-way, that will fit in a wristwatch, good for at least 100 miles, and Mickey Mouse will tell me the time.

Amateur Radio has really changed, and who can say whether it is for the better or worse? All I know is that it is still the greatest hobby in the world. □

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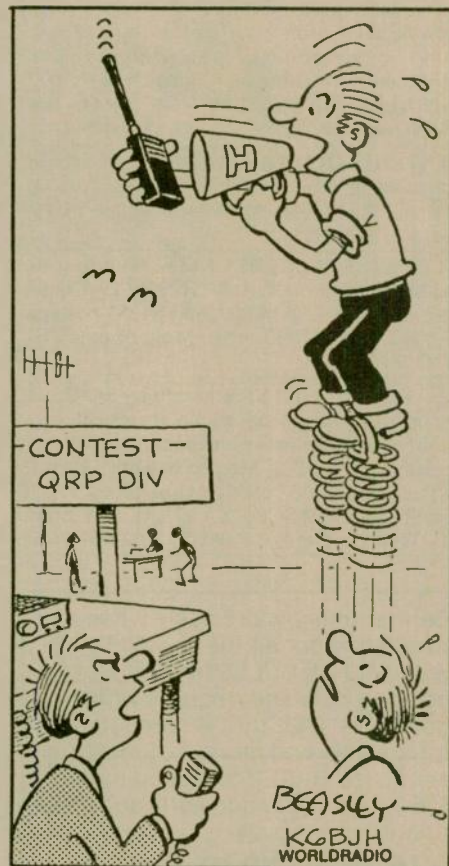
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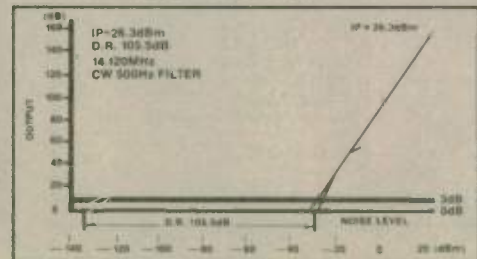
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