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"I had heard good recommendations of the NRC, but was still hesitant to join. That was, until I saw DX NEWS. That made up my mind to join!" (Bob Hartman, Pa.)

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MORE NEW NRC MEMBERS THIS WEEK...

*Bruce Heimbürger, Port Huron, Mi.
*Glenn Hauser, Kelly AFB, Texas (rejoins)
*Lowell Pankake, Litchfield, Minn.
*Ronald Meland, Hartford, S. D.

Welcome to the NRC, gentlemen, we hope to read your contributions often here in DX NEWS. We're temporarily out of new member kits; a new batch is being prepared and you'll be receiving yours as soon as possible. Why not write into Ernie Cooper and introduce yourselves in Musings?

RENEWALS THIS ISSUE...

Wilson... Zimmerman... Moore... Retzlaff... Parkinson.
Jacobs... Hoffman (R)... Reno... Wilkins... Skinner...
Duggan... Kane... Bowab... McIntosh... Alisauskas...
Schulte... Edmunds... Evans (R)... Beckett... Neal...
Godwin... Kelley (R)... Evans (J)...

NEXT ISSUE IN FOUR WEEKS!

We missed having our new computerized addresses for last issue by about 12 hours because of a hardware problem. This new system is the brainchild of our Secretary, Chuck Rossier, and is the result of many hours of programming and testing. **The very tedious job of typing the entire membership list** into the computer was taken care of by Jackie Rossier who devoted several of her Saturdays to the task; proofreading and corrections required several hours of effort by Mark Katz, Ruth Nelson, George Kelley, and Hank Slade. **We've** straightened out a number of minor typographical errors inherited from Addressograph-Multigraph on the plates (it's no longer "Chuch Hutton" and Schulte has been moved from Maine to Maryland...). **But we're bound** to have missed some errors; please check your mailing label carefully and notify us of any problems. **The traditional 25¢ address-change fee will not be required** as long as we're using the computer-based system. For the computer-types: the master file is on mag tape controlled by a PDP-8/L (8K); output is on an A.B. Dick Videojet non-impact printer (which modulates an electrically-charged stream of ink droplets with an electric field). **The entire mailing list (about 550 labels at the present time)** is run off in about 20 minutes. Our thanks to the Boston area members who made this system possible.

WOULD YOU BELIEVE AN ANTENNA PATTERN BOOK?

"Dear BPC:

The NRC LATIN AMERICAN LOG is fantastic and has no comparable equal, unless the NRC DOMESTIC LOG were to be considered. **All** the needed info is at hand without having to thumb through several pages (e. g. , WRTVH) to find the info needed & in order of freq. **It's just fantastic.** They say the 3rd time's the charm, but after the Domestic and LA Logs, what can be next? Keep up the good work!

Mike "DOC" Hardester

We've released the reserved copies of the LA Log and are now mailing it out on a first-come, first-served basis, within 12 hours of the time the order is received and via First Class mail only (the only time you're likely to see a Susan B. Anthony stamp, hi). **We've got one fair sized box of LA Logs left; why hesitate and run the risk of losing out?** Only \$2.50 from HQ. In reply to Mike's query, we expect the next big projects to be a book containing the antenna patterns of all U.S. and Canadian stations for each channel, and a comprehensive Handbook of Broadcast Band DX'ing. Anybody else have any bright ideas on similar-type projects?

NEW LIFE FOR DEAD MECHANICAL FILTERS!

Several members have written or called HQ in the past few months to report (somewhat sheepishly) that they'd blown mechanical filters by carelessly drawing too much current through the coupling transformers. We repeat our warning that this may indeed happen if you omit the coupling capacitors on the plate side. **We have written to Japan and ordered a dozen extra coupling transformers** so that we can provide immediate replacements if you come to grief - should come to about a buck apiece; write HQ if you need any!

NRC CONVENTION MOVED EASTWARD (SLIGHTLY)

Big George Kelley has just returned from a quick trip to the West Coast. After a series of discussions with the San Francisco convention bidders it was decided to move the Convention to West Sacramento in order to overcome the organizational problems and very high Convention expenses associated with a metropolitan San Francisco site. The Convention will be held at the El Rancho Hotel in West Sacramento, an hour and some odd minutes drive from **San Francisco. Those familiar with the West Coast DX'ing Establishment** have probably been to the El Rancho already - managed by long-time NRC member Don Kaskey, the El Rancho has often been the site of the world-famous "ERBA" DX get-togethers. **In addition to significantly reduced Convention costs**, the El Rancho boasts of a staff well-conditioned to the idiosyncracies of DX'ers en mass, a sunny climate, tolerant local police (this may be the first Convention in 5 years without a nocturnal visitation by the fuzz - who knows?), and waterproof lamps... **There are convenient airline connections** between San Francisco International Airport and Sacramento; Don also says that the Bay Area members can arrange to pick up people at the airport. **We'll** have full details including prices, maps, and directions in the next issue... With a tame management this ought to be the wildest NRC Convention yet! See you in West Sacramento!

DEATH AND TAXES AND ...

Rising costs are unfortunately beyond the control of the Publishing Committee. Since we raised our dues last in 1968 in response to the last postal rate increases, much has changed. **DX NEWS has changed from mimeograph to offset and grown from 700 pages a year to over 1000 pages during the last volume.** The NRC itself has grown from about 330 to a present level of about 535 members since the last dues increase, and has greatly expanded all **phases of club activity.** Major club projects such as the Domestic and Latin American Logs, reprints, and mechanical filters require very major capital investments from the Treasury and, while the projects are designed to break even or show a slight profit, they tend to tie up considerable amounts of club funds in the form of inventory such as Logs, reprints, etc. Since we went to offset production of DX NEWS, printing costs have risen by almost 80%, postage has gone up 33%, and Special Delivery rates (necessary for the Editors each week to guarantee that their sections will reach HQ in time for the printing deadline) have doubled. **Here at HQ we have done everything possible** to avoid raising dues during the past three years, in spite of the fact that the cost of almost everything in America has gone up substantially during this period (a nickel candy bar now costs 7¢ in most places; that's a 40% increase, eh?!); **Here at HQ we have all contributed substantial amounts of time and effort on projects such as the NRC Logs in order to offset (no pun intended) the increased costs of bringing you DX NEWS.** **But the trend of the times has** finally caught up with us and, unless there's an unexpected development in the next few weeks, we expect to announce a new set of dues rates in the next issue. If you've read this far you're prepared for the shock; if you've had to raise a family, run a business, or go to college during the past year, you've likely been expecting this announcement. Surprise. Barring a very unlikely development in the next few weeks, we will be lowering dues in the NRC. **That's** right, lowering. While increasing the size and quality of DX NEWS. Trust to the Publishing Committee to operate contrary to the rest of the national

economic trend! But it's not magic - it's just the most important development since DX NEWS went offset. After two years of negotiations with the Office, we have finally convinced the Boston Postmaster to give a Second mailing permit to the NRC. Second Class is the postal service used by magazines such as TIME and NEWSWEEK and, as you know, this postage class is as good if not better than ordinary First Class in terms of delivery time - but costs only a small fraction of ordinary rates. Our permit has been passed by the Boston Postmaster (the breakthrough is the result of very recent clarifications in the fine print of the Postal Regulations); until the final red tape is taken care of in Washington, we'll probably be operating under a temporary permit. **Because of the postal reorganization currently in progress in Washington, we have no idea whether our final permit will be passed by the time the next issue of DX NEWS is mailed; in the meantime we will hold dues as they are at present. When the final permit is approved (and the Postmaster assures us that Washington has okayed every single one of the past few hundred permits passed in Boston) we will reconfigure the dues accordingly. At the present time we expect to reduce dues by at least 50¢ and substantially increase the number of pages of DX NEWS to appear annually. DX NEWS will arrive in an envelope and our former 20/40 page limits will probably be changed. We still have not sorted out all of the implications of this development but will be keeping you posted here in DX NEWS. Current plans call for probable retention of Airmail delivery for those members who wish it and elimination of First and Third Classes...**

STATIONERY AND REPORT FORMS

Because of the heavy demand in past months, we've once again run out of stationery and report forms. More is being printed now and we'll fill outstanding orders as soon as it's ready. Updated prices (increased postage rates again) will appear in the next issue.

WWV TO TRANSMIT A-INDEX OF AURORA

Several times during the past year we have received letters and questionnaires from ESSA (which is now NOAA) asking for our thoughts about what would be included in WWV transmissions which have been up for revision for some time. We have urged the membership to write to ESSA/NOAA to suggest that WWV transmit the A index of geomagnetic/auroral activity so that we MW DX'ers might have immediate information on auroral activity. Several of our members did so and sent along copies of their letters to HQ. In addition I've been pushing for this new service through several government research agencies and departments with which I'm professionally associated. A recent personal letter from NOAA indicates that our efforts have not gone unrewarded; beginning July 1st WWV and WWVH will transmit hourly geophysical data including the A index. The index transmitted will be the Boulder (Colorado) A index; since Boulder and Fredericksburg are located on almost identical geomagnetic latitude, the values may be used interchangeably for our purposes - the actual values track very closely. **New members should refer to the several articles on auroral MW effects available as reprints from HQ for further information on the significance of the A index; we hope to produce some additional material to permit DX'ers to best take advantage of these new broadcasts soon.**

*Gordon Nelson

BROADCASTS OF SOLAR AND GEOPHYSICAL INFORMATION ON WWV AND WWVH

RADIO STATIONS WWV AND WWVH

Effective July 1, 1971 the information broadcast on WWV and WWVH will be modified and expanded. NBS Radio Station WWVH will be relocated at Kauai, Hawaii, U.S.A. (21°59'31"N, 159°46'04"W). It will transmit five frequencies 2.5, 5, 10, 15 and 20 MHz. NBS Radio Station WWV will continue to transmit on six frequencies 2.5, 5, 10, 15, 20 and 25 MHz from Ft. Collins, Colorado, U.S.A. (40°40'49"N, 105°02'27"W).

VOICE MESSAGE FOR WWV AND WWVH (effective 1 July 1971)

A. Solar terrestrial conditions for _____ follow:
(month - day(s))

(Always includes first two)

- (1) Solar flux _____
- (2) A-index _____
- (3) Solar activity was (very low) (low) (moderate) (high) (very high)
- (4) Geomagnetic field was (quiet) (unsettled) (active)
or A (minor) (major) geomagnetic storm (began at _____ UT)
(day - hour)
(is in progress)
(ended at _____ UT)
(day - hour)
- (5) Major solar flare at _____ UT
(coordinates)
- (6) Proton flare at _____ UT
(coordinates)
- (7) Proton event on satellite (began at _____ UT)
(day - hour)
(is in progress)
(ended at _____ UT)
(day - hour)
- (8) Polar cap absorption event (began at _____ UT)
(day - hour)
(is in progress)
(ended at _____ UT)
(day - hour)

B. The forecast for _____ follows:
(month - day)

(Includes any of the following that pertain)

- (1) Solar activity will be (very low) (low) (moderate) (high) (very high)
- (2) Geomagnetic field will be (quiet) (unsettled) (active)
or Geomagnetic storm expected _____
(date(s))
- (3) Proton flare expected _____
(coordinates)

The new solar and geophysical information broadcast will be by voice in the English language. The Appendix gives the general format to be followed so that those less familiar with the English language will be able to interpret the messages more readily. These voice announcements will appear in the space available for special announcements as shown on the format wheel (Figure 1). For WWV this will be at 18 minutes after the hour, and for WWVH at 45 minutes after the hour. The information will be changed daily immediately after 0400 UT, but since this is a more flexible system, outstanding events, as soon as they are identified, will be added to the next hourly announcement. This means that experimenters using these broadcasts may wish to check the announcements more frequently than once a day to keep informed of the latest developments.

Sources and Definitions for Preceding Statements

Solar Flux = Ottawa (Canada) 2800 MHz flux near local noon (1700 UT), value not adjusted to 1 AU.

A-index = value based upon K-index observations from 0000-2100 UT by NOAA's geomagnetic observatory at Boulder, Colorado and based upon K-index from 2100-2400 UT from visual magnetometer at the NOAA Space Environment Services Center.

Solar Activity:

Very Low = usually only quiet regions on the solar disk and no more than five of these; fewer than ten class C subflares without centimetric radio bursts or SID observed or expected.

Low = usually more than five but less than ten quiet regions on the solar disk; only class C subflares without centimetric radio bursts or SID observed or expected.

Moderate = eruptive regions on the solar disk; fewer than five class M x-ray events with centimetric radio bursts and SID observed or expected.

High = active regions on solar disk; several class M x-ray events with centimetric radio bursts and strong SID; and/or one to two importance 2 chromospheric flares or class X x-ray events observed or expected.

Very High = region capable of producing protons on the sun; one or more chromospheric flares of importance 2 or greater with outstanding centimetric radio bursts (500 flux units or greater), class X x-ray bursts, and major SID observed or expected.

Geomagnetic Field:

Quiet = $A \leq 7$, usually no K-indices > 2 .

Unsettled = $7 < A < 15$, usually no K-indices > 3 .

Active = $15 \leq A < 30$, a few K-indices of 4.

Geomagnetic Storm:

Minor = $30 \leq A < 50$, K-indices mostly 4 and 5.

Major = $A \geq 50$, some K-indices 6 or greater.

Sudden commencement indicated by beginning time given to nearest minute. Gradual commencements indicated by beginning time to nearest hour.

Major Solar Flare = a flare of optical importance $\geq 2B$ with a centimetric radio outburst of 500 flux units or more; or an x-ray event of class X intensity of duration ≥ 180 min. regardless of optical flare importance.

Proton Flare = protons by satellite detectors (or polar cap absorption by riometer) have been observed in time association with the H_x flare.

Satellite-level Proton Event = a proton enhancement detected by earth-orbiting satellites with particle flux ≥ 10 MeV at least ten times background.

Polar Cap Absorption = proton-induced absorption ≥ 2 dB as measured by a 30 MHz riometer located within the polar cap.

MUSINGS



Ernest R. Cooper
438 East 21st Brooklyn, N.Y. 11226

STEWART DRAKE - 2108 South Simpson Street - Philadelphia, Pennsylvania - 19142
Time again for another Musing. On 3/30 HILR-860 D.R. on RS 1:12 pm w/a very good signal. 4/2 saw WREN-1600 Ga. on their r/c @ 3:16am. 4/8- While sitting on 1050 I heard WCEF Ky. s/off @ 7pm in the clear. 5/7 saw WCNW-1560 O. testing their antennas after they were hit directly by lightning. They sounded OK to me, hi. This was @ lam. The first three were EST; the rest, EDT. 5/9- I heard a station signing off on 1420 @ 12:02 and clear @ 12:05. The call sounded like WBEC & they mentioned 1,000w power. The only other sounds-like is WCED which is a 5kw outlet so I sent a tentative to WBEC. 5/15- I logged WWDJ-970 for a call change @ 5:03am. I noted they have changed format & no more (sob, sob) ERC mx. I also noted the past two nights that WEEZ is still on past midnight; I guess they got another AN DJ. Veries in lately from WCNW WCEF WREN & WPDE. The 1410 North Platte, Neb. station is now KAHL per a negative reply from the CE. Totals here read 2,559/2,417. I hope all the members have a large Summer. 73.

ERIC DIRICCO - 540 Gallion Avenue - Pittsburgh, Pennsylvania - 15226
DX around here has really been SUPER-bad! CX are noisy such that even the nighttime regulars are down. I have had a notable QSL or two of late, though. On 4/12 I veried my first station on two frequencies, WFAA-570 Dallas. (WFAA-820 was my first back in 1/70). Also, on 4/14 I bagged WTRH after many tries, a pre-prepared card, PP/c isn't it? (Yep - ERC) A PP/c is necessary; an SASE is not. State #39 veried came in the form of KSOO on 4/29. I logged them for TWO minutes on a test & dent a word-for-word report. Finally, after four months, & even after having resorted to a PP/c, WCKY verified w/a standard v/q; new one, too. (You were expecting a USED one? -ERC) (Hi.) Now for a bit of importance. Blake Lawrence & I are thinking of starting a new column for DX NEWS. If HQ likes it, of course). It would be an entirely separate column for unIDed stations of both international and domestic types, & have space for novice DXers in our Club to write in questions. The reasons are pretty good if you ask me. First off, many unIDs are skimmed over because of the extensive listings in IDXD & DDXD. Any unIDs we could ID, and they would probably be limited (even with John Shannon's help). Others would be published for possible IDing by the Club. Also there has been much fuss about helping novices. Here would be a forum for their questions. We would like to run it once a month during the regular season. Please write me if you have any thoughts on it. It'll need your backing. Sorry if I'm slightly over, ERC, please excuse. 73s & CPYN - Convention - Pittsburgh - Youngstown - Next Year! A fine idea; please go ahead! HQ

BRUCE BENNETT - 82 Norman Lane - Levittown, New York - 11756

Ohla, you SS whizzes. Recent DX: 5/12- WATR-1320, Conn. 5:40pm well, WALK-1370, N.Y. 6:33pm in very clear, WSYB-1380, for second Vt. station @ 7 pm w/WAWZ muffled out, WNTN-1550, Mass/ @ 8pm w/s/off, WXVA-1550 W.Va. 7:57pm w/WQXR splash. 5/14- CHOO-1390, Ont. 9:22pm o/WFBL who was having Syracuse Chiefs BB, VAAB-1440, Mass. 9:36pm in well w/rr. Totals now 287/114, 32/24, 4/4, 6/4. Recent veries: WRCP, verie written on the top of a CM, WIBC, v/f. WVOX v/q and bumper sticker. I have been in NRC for just about one year so here is a re-introduction: I am 16 and in teneth grade at WT. Clarke H.S. I have been DXing since 11/69 and DX only on CCB. I am also a member of IRCA. My receivers are a Guardian 5000 and a Realistic TRF. I also use a Russell CCB Antenna Booster. Monitor registration calls are WDX2RMJ and C.B. radio calls, KQD-7684. Recent reports sent to: WFBL WAAB WIMR WALK & WATR. Guess what! Lee Bogart is TRYING to build a GR-64 Ha Ha! 73s. AM SCers, please write.

AS THEY SAY IN CLINCHCO (and Clintwood) VIRGINIA: WDC! Ding-Ding !! California! YES, THAT TIME IS ALMOST HERE! NRC's CONVENTION, SEPT. 3-4-5-6!

8		MINNESOTA TWINS' BASEBALL NETWORK	
570	W N A X	1230 K T R F	1340 K D L M
600	K S J B	K W N O	K G P C
610	K D A L	1240 K D L R	K V B R
870	W C C O	K P R M	1350 K B M R
920	K W A D	W M F G	1380 K F C B
1040	W H O	1250 K B R F	1390 K L P M
1070	K I L R	1260 K R O X	1400 K E Y L
1140	K S O O	1280 K V O X	W B I Z
1230	K G H S	1300 K G L O	W H L B
	K M R S	1320 K N I A	1410 K R W B

(some, like KWNO-1230, night games only. Some, like KNIA-1320, day games only. Others, all games.)
Submitted by Mike Wilson, Winona, Minnesota.)

MARC DeLORENZO - 35 Sylvan Drive - Hyannis, Massachusetts - 02601
 CX wrre generally pretty poor in May but a few loggings: 5/1-WSGW-790 Mich. noted on late w/Tigers BB 1:25-2:30 s/off o/u CHIC & well over past WFUN. WSHN-1550 Mich. announcing ET during r/c spot 1:55; used mx. WIRV-1550 Ky. ET/rr 2:40; SS-1500 IDing as R. Tricolor 2:51, XERH? (Yep -ERC) MM 5/3-WBCM-1440 & WPON-1460 both noted @ 1 s/off as Michigan remains on EST; also WPLB-1380 Mich. r/c-TT in the clear 1-1:10 t neout mixing w/another TTer. 5/5- HJ??-1202 "La Voz de Cucuta" very strong 10-10:30pm, I assume this is HJBC (ex-1090), eh, RFS? 5/6- HCEW2-995 "R. Succeso" good during mild Aurora 11:16pm. They have a jingle to the tune of BS&T's "Spinning Wheel". MM 5/10- If you heard a strange ET on 1230 1-k:15 & on, it was WERI R.I. w/lkw, consisted of rr, NX, & an announcer who seemed stoned. XEW-900 noted UNDER that strong AN OC, I had thought it was XEW's OC, but apparently not. Anyone know who it is? New WJUM-1550 Harrisburg, Pa. ET-f/c L&C 1:30-2, announced 500w, was running a TT & mx at the same time, which was weird. (Did you get an address on this one, Marc? My letter was returned 'unknown' -ERC) WOKO-1460 was off for the first time in ages (left OC on) - WPNX Ala. only station there. 5/21- WKYE-1550 Tenn. ET/TT 1:25-2:23 s/ off, announcer gave one ID as "WKYE, Bristol, VIRGINIA". I think the guy had something on his mind (or in it). (Bristol Tenn. & Bristol Va. are virtually one city, Marc - maybe he lives on the other side of the street, hi -ERC) SM 5/23-WWDJ-970 (ex-WJURZ) noted w/new rr format AN, great signal up here which is more than I can say for the mx (I heard two Osmond Bros. songs in ten minutes, grok). WEAW-1330 Ill. strong on ET/OC/mx 3:22-3:31 & on. MM 5/24- WJOY-1230 Vt. f/c-TT 1-1:10 & on, strong at times. WBAZ-1550 N.Y. PoP-TT-OC 1:22-2 & on. Last Friday BGK & I drove down to Matawan, picked up Waldron at 2am & made it to Watertown just in time to mail out the LA Logs.

JIM CRITCHETT - 1504 Glenwood Drive - San Diego, California - 92103
 Between 4/7 & 5/16 reception reports were sent to KVSL-1450, Show Low, Ariz. for an ET from 3:26 to 3:27 on Sat. 4/17, and to KBGH-1130, Memphis, Tex. heard 5/7 & 5/8 between 7:45 & 8am EST. (The last page of DX NEWS says to use EST). Verifications have been received from KOAC-590, Corvallis, Ore., KETR-710 Denver; KJST-1420, Joshua Tree, Cal., KVSL-1450, KSQM-1510, Ontario, Cal. on prepared form; KMPG-1520 Hollister, Cal. same form; and KRG0-1550 Salt Lake City also my PP/form; last three, f/ups. KRG0 was verie #1,500, 1,496 of them from Cal. reception. My report to Stewart Drake for the NRC Domestic DX Contest was sent on 4/18. It was a good contest, with no entries on only three frequencies: 730, 900, & 1050. Since that time, with the excellent aid of the Ralph Sansorino Loop, stations have been heard on all three kilocycles. I have purchased from John Arb, friend of Father Jack Pejza, a rebuilt 1942 six-tube Navy Surplus ARB RX, working quite well for me. Combined with the loop, a new log has been started, with 28 new stations not heard since the 10/28/70 log was started; 38 new ones since last 6/4. Other DX news is that XETRA-690 is off MMs occasionally; KOG0-600 was off for the first time in several months MM 5/10, & CJBR-600 Henderson, heard at 3:30am EST. KLIB-1470, Liberal, Kans. was heard @ 6:10 w/KDM, Bramlett, Tex. KSPI-780 Stillwater, Okla. came through @ 6:36 MM 5/3; SM 5/16 brought on KBWD-1380 @ 6:18 & KSWO @ 6:33. KCHV-790 had NBC NX, not MBS, @ 11am same date.

The L.A. BCB Log was ordered 9/30/70; I hope it arrives soon. 5/17- KPIN-1260 in the clear after KGIL s/off @ 3; no KYA heard. Best DX.

(No name) - P.O.B. 322 - Creswell, Orygun - 97426 (Andy Kerr - BPC)
 Greetings. First of all, congratulations to ERC for receiving the ANARC Merit Award. Well deserved. I received the NRC Latin Log. Superb. One minor complaint. I wish it would have been in GMT. Good news dep't.: The State Senate killed a bill that would have put Oregon on all-year DST. My new RX is full of bugs. Main problem is obtaining replacement transistors for the duds they sent me. CX on BCB has been nil, as of late. One significant catch; in fact, my all-time best catch for any band. On 5/23 I was up at 3 PDT DXing SW. After a couple of hours of that, I junked it and went to bed. I couldn't sleep, so I turned on the G.E. 17 transistor portable with no antenna, located near my bed. I wasn't paying attention to frequencies, just seeing what was on. Pretty soon, I tuned in a station with Japanese programming. I noted the approximate frequency and quickly hooked up the loop to another G.E. eight transistor portable. Then one of the connectors on a loop wire broke off. After much profanity, I connected the G.E. to my 15 meter interior logwire. I then copied 30 minutes of reception of JOLB-860 or 870 (WRTH lists both) with a power of 100kw. KTRB-860 Modesto was off. Which is best? To report to each separate station of NHK HQ? This is the sixth country I have heard on BCB. 73.

RONALD F. SCHATZ - 510 N.E. 158 Street - North Miami Beach, Florida - 33162
 Greetings from Florida, your Host in '72! It's no big thing - maybe, but I'm starting my tenth year w/NRC this month. I could nostalgise on that, but I won't. I haven't had much chance to DX, but I did notice what seems to be 4VUE, "R. Lumiere" w/EE religious programming on 662.5k evenings. I am willing to speculate that CMHQ-630 is directional with a figure-8 pattern. I base this assumption on what seems to be a null in their signal in the area of Golden Beach, just a few miles NE of here. It has a local-like signal here, but WSAV takes over N of WPB. CMHQ protecting WSAV? I might mention also that ZNS1-1540 puts in an afternoon Soul show that tops anything WMBM has to offer. This is the station that introduced "Nassau's Got Soul" to the U.S. market. No, I'm not a soul mx fan, sri. The het against CMQ-640 in Florida days is HJBJ, believe it or not. If that San Andres RNC station ever hits 870 - look out! Can you imagine logging your 100th+plus country in broad daylight? LA Log is a good effort, even if slightly outdated. Excellent articles by Objio & Gleason - mine were terrible - sri.* Well, the problem with my chassed LSCA was solved with a soldering job. I'd report more DX with it, but the DX was heard previously when the nulled stations were off the air. Reports from an LSCA user of being able to hear stations behind the stations being nulled in the same direction is being investigated. This seems to be a polarization rather than a phase-differentiation effect, which would widen the possibilities of the LSCA if the phenomenon be easily controlled. My response to GPN's comments of two issues ago & a schematic of a simple LSCA should appear in this issue. Come to Florida in '72, and see Disney's World, Cypress Gardens, girls, porpoises, chicks, fabulous fishing, dames, fine beaches, girls, tropical beauty - some in human form, Cesar Objio, girls, luxury hotels at low prices, dames, the Seaquarium, chicks, fabulous nightlife, girls, no steel factories, etc. If you must travel over 2,000 miles to attend next year's Convention, go somewhere wirthwhile. Only the best for NRC; Florida & U in '72! Say, are my Musings banned in Boston? 73. (And I was looking forward to seeing some exciting steel factories! -ERC) *Nonsense, they're great! BPC

BOB DUGGAN - W4MIA - 1112 Mason Woods Drive - Atlanta, Georgia - 30329
 We returned yesterday from our visit to U.S.S.R. in the IEEE delegation to their Popov Society & various research institutes in Moscow, Novosibirsk, Vilnius & Leningrad. In Novosibirsk we saw the local jammer which handles VOA BBC etc. The Chinese on 1525 pounds in late at night there with the "Govorit Pekin" word for the USSR. We noted numerous navoids between 600 & 700k in the USSR. Although we met Ernst Krenkel (RAEM) in Moscow, permission was never granted for ham operations in the USSR. 73.
 THIS IS IT FOR MUSINGS AS WE CLOSE OUT ON JUNE 3. NEXT DEADLINE DATE IS JULY 1!

MORRIS SORENSEN - Box 93 - Emsdale, Ontario

DX during my last term at North Bay Teachers' College has been minimal, but I have made the following loggings from my Emsdale location since my last report: 3/6- WRNL-910 Richmond, on top briefly @ 6:04pm. 3/19- CKCH-970, Hull, Que. @ 9:08pm w/ID as "Ici CKCH Ottawa". 4/9- WNUH-1580 Hammond, N.J. r/c @ 12:01-12:15am tuneout (somewhat earlier than in list) w/many IDs. 4/10- TT on 1580 during listed WCCR r/c time, but no IDs. All in all, the 1970-71 BCBC season was the worst ever for me with only 16 new loggings between 9/1 and 4/30, mainly due to lack of time. Verifications have been as follows: v/1- WEEP-1080 Pittsburgh (said mine was furthest North report they'd ever received), WDXR-1560 Paducah, Ky., WNUH-1580 w/CM. v/f- WRYT-950 for 1969 TEST. Totals now 607/394.

DAVE WHATMOUGH - 284 Main Street west - Hamilton 12, Ontario

Things look rather discouraging as far as veries go with only two in the past month. v/1 from WISE for TEST & a v/q from KCBS. Holdouts from past season include WMNC-1430 WJDM-1530 WSTP-1490 WBLJ-1230 Specials, plus about 15 others. My closest unheard hrs changed for the third time this year since logging WELW-1330 Willeoughby, O. in early April, and WBKC-1560 Chardon, O. 5/25. I now have WWCH-1300 Clarion Pa. to chase after (150 miles). I haven't been doing too much dial-twisting lately, in fact, I have missed the last four MMs. Too busy collecting Cms to DX. Local CHWO-1250 are still playing around w/their 10kw. XR. They sent me the new CM this week and it's all going N w/minor lobe S over Hamilton and Brantford. Totals to date: 1,655/844; 49 states, ten provinces. Ex-actly 100 holdouts in last six years. I will be spending two weeks in Newfoundland in August. Maybe I'll string up a Beverage antenna in some campground down there. Maybe I'll hear something distant for a change. 73s for now.

DAN K. PHILLIPS - X-2 Seminary Village - Louisville, Kentucky - 40207

F. Scott Fitzgerald once wrote: "The test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time, and still retain the ability to function." In view of this statement one can easily see that to test his intelligence all he has to do is to be able to figure out the Nelson vs. Schatz debate. Isn't the question "I'm looped more than you are looped?" Or is the question, "When I'm looped I can go not only in two different directions at the same time but four or more." I have also noted in this debate that the question is in some way related to sin. From all indications sin is not only the opposite of cosine (co-sin: when two are looped together) but it is also the opposite of righteousness. By righteousness I mean that the vertical effect of the loop sensor can be brought into the picture by turning the radio on its right side thus making the inside loop vertical. If one sits beside the radio with a que-tip in one ear the listener gets a very effective nulling effect. To add to this effect drink a Dr. Pepper and put the bottle next to the other ear. One should hear a sound similar to a sea shell at this point. Add a one turn loop of wire around the nose ~~and~~ the ultimate in space magnets is found. After doing this a new question is raised, "Who is looped the most, Nelson, Schatz, or me?" Veries, HCJB & WHIP. In case you are wondering what I'm doing, I am practicing my writing. The experts say that to become an effective writer a person should pick out a friend and write at least 250 words a day for a month. 250 words, times 30 days equals 7500 words per month per friend. On the other hand, if this is read by 500 friends then 250 words times 500 friends times one day equals 125,000 words per month per friend, right? Which is better? 73. (Well written, Dan - you'll get a Straight-A in writing, methinks -ERC)

JERRY STARR - WHOT - 401 North Blaine Avenue - Youngstown, Ohio - 44505

Just a note to all those who heard KRKO-1380 recently with 1380 being clear, they evidently do verify, but it takes a while. A v/q was received here 5/25 for a report of tape of 12/7/70 without a f/up, so don't give up.

*Next issue we'll have actual illustrations of sin, co-sin, skewing, polarization and other electric topics plus a special feature on the shapeliness of DX signals. Who says DX'ing has to be dull? GPN

RICHARD M. BARTOS - 692 Moore Avenue - Campbell, Ohio - 44405

Hi gang! DX is beginning to taper off now with only a few catches since my last Muse. Some of them are: WBBK-1260 KXEN-1010 WYDE-850 WKOP-1360 WKRK-1320 WIHE-1520 KMMJ-750 w/ET and WLKW-990. I received only one verie since my last report, WBRC-960 Birmingham, v/1. A few weeks ago my cousin spent the weekend over at my house and we had a great time rapping about happenings. We did pretty much DXing all three days he was over. My cousin is an electronics genius and we worked on one of his new inventions, which we built through his own plans. It is a new type of DXing antenna. We are just about finished with it & are planning to test it this weekend when he comes over again. This could be an antenna to master above all antennas, hi. We have thought of a name for it. We will call it the "Gonkulator Super DX Special". What do you think of that name? Grok. I will let everybody know how the testing turns out through the pages of this fantastic DX Bulletin. When my cousin said "This antenna is only one of a kind" believe me, he was right, hi. That's all the boring news I have for now, so 73s and Peace.

GEORGE B. SHERMAN - 104 Pinewood Circle - Rosemount, Minnesota - 55068

DX is poor, but I've heard a few new ones. 3/27- KBAD-740 N. M. f/c ending w/good signal o/slight QRM @ 2:30. SM 3/28- WARU-1600 Ind.s/on @ 6, good o/QRM; KBUY-1540 Tex. good o/ZNS w/KXEL off @ 6:03; CKLG-730 B.C. good w/rr & no QRM @ 6:38. MM 3/29- WISE-1310 DX in good briefly w/rr o/WIFE/WRR & an unID TT; XESM-1470 good w/R. Fiesta ID o/CFRW @ 3:15. 4/2- WFCO-1450 Ky. f/c fair o/QRM @ 3:40. 4/6- WJEM-1480 Ill. w/TT/OC @ 6-6:10, announced as r/c; WRIN-1560 Ind. s/on @ 6:15 s/SSB very good o/QRM. 6:15 was their local sunrise & they're in the CST zone. KBEW & KRCC don't s/on till 7 like most other daytimers. 4/9- WNSL-1260 Miss. @ 2:40 & WBLO-1470 Ala. @ 2:50, both f/c, w/fair signals. MM 4/12 - KRZY-1450 N.M. stop mess for SID as "Crazy Radio" @ 6am; KLEN-1270 Mo. s/off w/ KWEB @ 8:03pm. 4/14- WFOB-1430 O. good o/WIL w/s/on w/SSB @ 5:30. 4/18- KEGG-1560 Tex. ET o/KPMC @ 3:52. MM 4/19- WPJD-1550 Tenn. r/c @ 2:45; WORV-1580 Miss. r/c @ 3 o/WCIS; WNOO-1260 Tenn. r/c u/o WDDR @ 3:48; CJMS-1280 Que. w/FF o/KTLK/CHAM @ 4; MoR local WWTC off MMs now. WPON-1460 Mich. s/on @ 5 w/SSB good w/no. QRM after months of trying, & I heard it by accident as I thought I was tuned to 1450! Then, to top off the morning came ZDK-1100 fair w/WKYC OC & KFAB-1110 @ 5; 10, country #28. MM 5/3- WADR-1480 N.Y. strong w/c/w o/WHBC @ 5:40, no sign of pest WISM; r/cs of KBAN-1410 & KNIT-1280, Tex. @ 6:15; KTCB-1590 Neb. most-wanted, good w/s/on @ 7. KQAD-800 Luverne w/500w with D-3 & WWJC-850 Duluth 10kw. D-1, both Mim., are on. 73 & good DX.

GEORGE KELLEY - 118 White Street - Belmont, Massachusetts - 02179

Not too much has been heard here recently, despite my obtaining an Altazimuth Loop from a Boston U. student in exchange for my strobe light. Before it gets too stale: 3/22- KTOK-1000 Okla. strong @ 1:55am w/c/w & MoR. WCFL OC came on at exactly 1:59, off again @ 2, then KTOK back into NX. ZFB-960 Bermuda strong o/CHNS w/VOA Breakfast Show relay @ 2:10am. HJFF-1210 Colombia alone and strong @ 3:15 w/La Voz Amiga. 4/4- WGER-1550 Md. w/ET ID @ 2:30am, great signal. Totals now: 668 stations heard, 61 countries heard. New countries heard this past season were: Ukraine, Malta, Honduras, St. Vincent, and Antigua. A Fox on DeLorenzo in Hyannis who now has 62 countries! There still are some fairly easy (CX permitting) countries to be had for me, such as: Brazil, Bulgaria, Peru, Poland, Romania, Vatican State, American V.I., Yugoslavia, Guiana, Sweden & Scotland, and an outside chance for New Zealand, Australia, and Tonga. Wait, one more: Anguilla-1506! Hopefully next year will bring most of these countries in for me. Well, this Musing is beginning to take on an insipid tone, so, this is the end.



Gordon Nelson, 19 Irma Ave., Watertown, Mass. 02172

REPORTEDLY IN OPERATION...

ALBANIA. A new super-powered Albanian relay for Radio Peking has just come on the air on 1457 kHz; this was the "mystery" station recently noted running tests along with the BBC on the same channel. Bengt Ericsson in Sweden reports that the new station is so powerful that it is audible in the daytime there and estimates that it is probably a 1,000 kw unit at least. The station schedule still varies from day-to-day and programming so far consists of East European Radio Peking off-the-air relays, with Russian from 2100 on. Russian language ID is the standard "Goverit Pekin" a la 1525 kHz.

CYPRUS. Radio Monte Carlo's new Cyprus relay station on 1232 kHz was first logged in Sweden on 4/7; power is 20 kw and the slogan is Radio Mediterranee. Station personnel are still experimenting with the antennas to provide the best coverage of the target area which consists of Lebanon, Syria, Israel, Iraq, Jordan, Egypt, and perhaps Iran. By November they hope to operating with regular Arabic programming using the new 600 kw transmitter being installed by SOMERA of Paris. This one should be a cinch come next fall if the final antenna pattern is not nulled in this direction. (ARC; Editor)

MOROCCO. The Kinitra AFRTS station was recently heard on 1484 by an ARCTIC member visiting Portugal; he reports they ID as "C-N-L Radio, Kenitra 1484 on your swinging dial". While 1484 is pretty clear during the evenings in North America, this one has not been heard here to the best of our knowledge.

USSR. The well-known powerhouse on 1475, located somewhere in the Khabarovsk-Vladivostok area, has been of the air since early May, perhaps because of Japanese complaints of QRM to 1470 and 1480. The services carried over this channel are now heard on 1250 kHz but not as well; 1475 must have been very powerful with a directional pattern or very close to Japan. Weather reports in Russian, read by a female announcer, have been noted on 530 kHz around 1800. A Soviet station has been noted on 810 kHz, taking over the channel from FEN-Tokyo on the car radio when driving SW of Tokyo around 1300. (Lars Ryden, Japan)

TAHITI. The new 740 kHz transmitter is running 20 kw; the old 1400 kHz channel is now only 4 kw. (ARC)

GERMANY. AFN's operation on 935, often heard in North America during previous years, is now reportedly using only 2 kw. (EDXB)

INDONESIA. RRI's new 1335 kHz operation, the first Government station on MW, is announcing the MW frequency over the air according to DU sources.

LESOTHO. The Voice of Lesotho, Maseru, is operating with 10 kw on 899 kHz from Lancers Gap; a rather remote possibility at s/on 0400 during the summer. So far unheard in North America. (SCDX)

RHODESIA. According to an announcement over the station, Gwelo on 611 kHz has substantially increased its power (on 4/30); another remote chance but still possible. (Editor)

ESTONIA. Tallinn is now using 200 kw on 1214 according to EBU.

MALTA. "I just got the issue that told about BBC Malta, and want to compliment you on the article. Regrettably we can't be in Malta any more. Used to drop in regularly, but we're wearing out the welcome mat (too many incidents involving Americans and locals - the new government doesn't like us). A bit more on the subject: last time I was there (March 31) I visited the Malta Broadcasting Authority (their FCC) and the TV station; neither knew much about Delimara because its out of jurisdiction and lack of sources for info. You know of course the isle was a British colony until 1964, and the Limeys still hold on to some installations - mostly military; Delimara is one. The guy I talked to at MBA was a native; he apologized sincerely for not being able to tell me anything, and told me he had no objections to my taking pictures (I was decent enough to ask). Apparently no one knows much about the station or cares. As you might guess it's not too strong on the rest of the island, DA probably pretty effective, and although Maltese is closer to Arabic than any other language (really a language of its own - basically Semitic with some Italian and to a lesser degree, Italian) the locals do not savvy Arabic enough to listen to the station, and that so-called music is pretty far from Maltese tastes." (J. Alex Bowab, with the Mediterranean Fleet)

AUSTRALIA. 3YB, Warrnambool is now on 880 kHz from the old channel of 1210; might make it to the West Coast? (NZDXRL)

PIRATES, CLANDESTINES, AND BOOTLEGS

NORDSEE/VERONICA. Full war is now underway between the different pirate stations in the English Channel. MEBO II, which houses Radio Nordsee, was back in operation on Sunday 5/16 after being bombed from a passing boat the previous night. The attack happened around 2100 on Saturday; 13 people were onboard when the incendiary bomb hit the ship; Nordsee carried a live account of the attack until the fire got too bad. (ARC) RNI has been broadcasting with 28 kw on the MW channel of 1367 kHz since the fire-bombing, according to an announcement over the station; one of the directors of Radio Veronica (the other Dutch offshore pirate ship moored near Nordsee) supposedly admitted paying 10,000 guilders for the arson job. (SCDX) I have finally done it! I have managed to extract a QSL from Radio Nordsee International! The 6" x 4" card has a beautiful colored aerial photo of the MEBO II on the front but no specific verification details are filled in on the ack side, unfortunately. The MW transmitter is a 105 kw RCA rig and the antenna mast is 52 meters. The address given on the card is somewhat different from previously listed versions: RNI, QSL DEPARTMENT, P. O. Box 113, CH 8047, Zurich, Switzerland. I should suggest that anyone trying to get one of these QSL's should enclose a self-addressed envelope for the card since it is printed on very thin stock and gets beat up quite a bit in the mail. Get those reception reports and follow-ups in fast; it's dead certain that the pirate stations will be outlawed following the recent fire-bombing! I have heard it mentioned on TV that Veronica will be given a land-based station and be allowed to join the Nederlandse Omroep Stichting (NOS). (Greenhill, U.K.)

PLANS, RUMORS, AND GOSSIP

TURKEY. The new Antalya station under construction will be 600 kw and will operate on 881. (WRTVH)

IRAQ. The new Kirkuk station has been completed and regular transmissions are expected to begin in August. A team of French experts arrived on 4/29 to begin tests. The installation consists of two 120 kw MW transmitters and a 118 meter tower; frequency not announced but that tower implies a high band operation. (Editor)

POLAND. A new 1,500 kw MW transmitter is to be installed in Katowice by 1975. (Vice-Minister K. Kozlowski, speaking at a Conference in Warsaw)

NORWAY. Radio Norway expects to have a 500-1000 kw station in operation by 1974. (EDXB)

SPAIN. RNE's new 350 kw transmitters in Toledo province should be ready in time for good TA conditions in October. (SCDX)

CZECHOSLOVAKIA. From June 14th onward the Ukrainian language programs formerly carried on the low-powered 1232 outlet will be carried over the much more powerful 953 channel. Let's see how many European DX'ers report a new Ukrainian station on 953 next fall... (Editor)

PORTUGUESE GUINEA. The antenna tower for the new high powered Guinea (Bissau) Official Radio station arrived in Bissau on board the Alfredo da Silva on June 4th; installation began immediately. This one will supposedly be for E.N.'s 100 kw transmitter, formerly operating in Portugal on 1412 kHz. If this one goes on Bissau's present channel of 1034 kHz there is a very good chance of reception here in North America. (Editor)

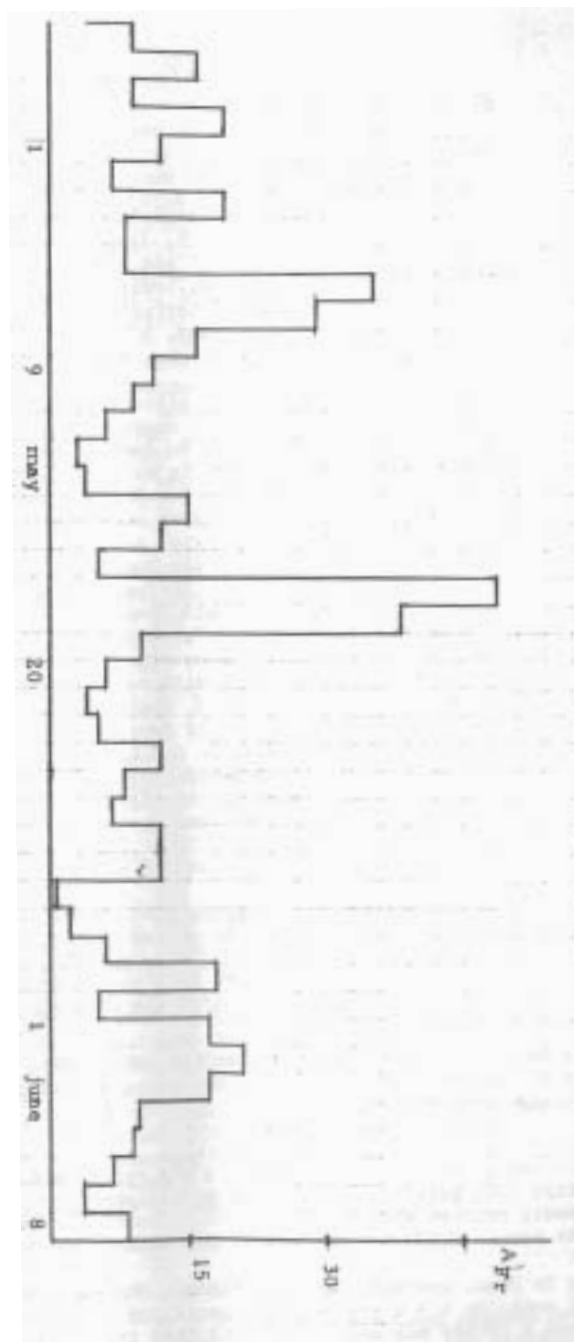
MALTA. Deutsche Welle is announcing that their proposed 600 kw relay station on Malta is now under construction. (DW News, via Sullivan) But according to Alex Bowah who just visited the Malta Broadcasting Authority "the proposed West German station is way off...".



LA LOG!

\$ 2.50 RELIABLE

1st class ONLY



This graph shows the daily values of Afr, the Fredericksburg index of geomagnetic/auroral disturbance in the Earth's magnetic field. High values of Afr occur during a heavy influx of electrically charged particles into the upper atmosphere as the result of certain types of solar disturbances. The medium-wave signal absorption produced by one of these events is strongest in high latitudes and persists for some days following the initial particle influx. Values of Afr above about 20 are inevitably associated with high levels of absorption along high-latitude TA and TP signal paths. Very high values (above about 40) are usually accompanied by E layer blanketing over North America and Europe; on such a night stations from the South will appear to dominate most channels. Long periods of low geomagnetic/auroral activity are necessary but not sufficient to guarantee excellent high latitude TA and TP reception - other ionospheric effects such as the "Midwinter Anomaly" may effectively mask what would otherwise be periods of excellent reception on high latitude paths during periods of continued low geomagnetic/auroral activity.



ROBERT L. FOXWORTH
GPO BOX 2111
NEW YORK, NY 10001

Receptions: (All times are GMT in IDX)

- 570 Mexico. XEJB, Monterey, N.L. all by itself and semi-local quality, incredible for listed nighttime 250 watts, 0520 4/26. Jingle "XEJB" was segued into voice "la primera en musica regional" and promos for competition between every disc. Erratic TC's. (Wood, Louisiana)
- 670 Honduras. HRN in 0045-0115 4/27 with mostly uninterrupted mx with some rock sung in Eng. Looped a v/ strong WMAQ. (Alster, NJ)
- 890 Dom. Rep. HIPJ logged 0030-0100 4/26 with local pops, ads and international news. Looped WLS. (Alster, NJ)
- 780 unID. (Sorry out of sequence-ed.) Trying for 4YA without luck. Something was fighting a SS stn around 1000 on 5/2. All at once, in the clear, there was a clear, unmistakable Radio Moscow IS. No doubt at all. After 90 seconds of pure ecstasy, I realized (a) there is no Russian on this freq, (b) there was nothing but Spanish hrd here for 2 hours previous and (c) after 15 seconds of dead air all I could hear was more Spanish. The only thing I can figure is that it was CMJN with non-stop news and talk but the question still unanswered is - why the Moscow IS at all? It was not a rebroadcast, so- if not Cuba, who? (Hoffman, Ocean City NJ) (Likely Cuba running a tape from R.Moscow of their Spanish svce?-ed)
- 1034 South Africa. Re Hoffman's tentative in IDX 4/17, SW parallel 5955 is in use with the SABC domestic service from 0358 onwards; frequent listening indicates Eng is exclusively used there, with no Afrikaans. If 1034 really carries this service, checking 5955 // might aid ID. (Wood, La)
- 1125 Costa Rica. Unusual reception 0515-0600 on 4/26 of rarely-hrd TISRHB. They were pouring in while many of the regular SA and CA splits were nonexistent. They were s-5 on the loop and s-9-plus on the Beverage. Played many American album cuts without anmt. ID at 0530 and 0552 as "Radio Capital". Weren't they "Popular" before? Pgm just ended without any anmt or anything at 0600; open carrier until 0606. (Starr, Ohio)
- 1206 Guatemala. TGED, Radio 1210 here with pgm "el Alma del Bolero" 0245 on 4/21. (Wood, La.)
- 1240 Guatemala. TKG, Radio Sensacion, Guatemala topping 1240 on the loop with s/off at 0500 4/26, stated returning at 1200. No anthem. (Wood, La) (Reminds me of Sheldon Miller's reception of YNK, also on 1240, at midnight, a couple of years ago. Those GY's must be good in the South-ed)
- 1280 Mexico. XEAW, Monterey, N.L. Carnaval mx 0505 4/26 and with spots for Distribuidores Canada. (Wood, La.)

Richard Wood annexes his report, "I have almost beaten the local noise situation by going completely DC (battery operation) and installing a good ground. Richard is using a SPR-4 and Space Magnet.

Verifications

- 655 Ecuador. Radio Carrousel, Guayaquil sent nice v/q via report and tape sent to Gleason, says 3000 watts on "frecuencia provisional de 655" typed in, card evidently printed while still on 660. Ecuador #7. Card has no call letters but assume HCLG2 are correct as per WRTVH. Thx Dave. (Starr, Ohio)
- 700 Japan.NHK EXPO v/q in 2 mo. overall. for JOKD Kitami. Stn was hrd 2/15 and a taped report sent. On 4/3 a v/q arrived specifying JOAB-690 instead of 700 kHz and a letter was sent requesting that they fill in the proper freq on the card. On 4/16 I rcvd a v/q specifying "Home Service-Kitami station (JOKD) 700 kcs. Am somewhat surprised that NHK specified (cont'd)

- one station as I had expected to receive only a card marked 700 kc with no mention of the station. JOFB Hiroshima is also here; map shows JOKD to be on Hokkaido and therefore the closest to me. NHK must apparently use the "closest station" theory in verifying synchros. (Kamp, Ca.) (Re your question about similar cases with TA's, BBC has been known to do this. I think CBC does this "closest" business with LPRT's. Technically I do not think the "closest station" theory is consistently valid. -ed)
- 750 Japan. JOIB Sapporo NHK expo QSL in 5 mo, returned IRCs. Sent a form letter stating that 2 gifts would be sent. Already received here; were 2 books. (Kamp)
- 780 Puerto Rico. AFCN Ramey AFB. Letter from Sgt. Tom Fitzpatrick, Asst. chief of Radio and TV production. For 3/22 report. He says "your location is the farthest we have received a report from". (Since he was assigned there, obviously -ed) and further states that the pgm was their Niteside show with a rock format midnight to 6am local.(Bartels)
- 840 St. Lucia. Letter and sta info from John H. Whitmarsh, Manager. He says "you received our morning devotion programme, The Sacred Heart (in Eng) at 0545-0600 local time followed by our 6.00 French Transmission." For 3/1 report and back in 12 days. (Bartels, Wisc.)
- 1380 Mexico. XECO v/1 from Martin Martinez Rios, Gerente for tape and report of 10/23/70. As is the case with XEOY-1000 Martin sent this v/1 as a favor as we are friends; reports to any of this group of stations (XEPH, XEOY, XEUR, XEBS and XECO) are normally not answered as they get a great number of them and have a common secretarial staff for all 5 AM + FM and TV stations. (Starr, Ohio)
- 1597 Dom. Rep. HIFA sent card and pennant in 2 months via surface for 3/15 report. Date space on card was left blank and does not specify which of the (listed) freqs the card is for, 1330, 1600 or 4825. Shows no signer. Also sent copy of "Bohio Dominicano" a tourist magazine.(Mohr,NY)
- @ Rather vague v/q, lists all stations with the 1600 freq underlined. Lists Moca on 1330 with 5 kw. Also pennant and "Bohio Dominicano" sent for a Feb. 1971 report. (Starr, Ohio) (I recall we ran info on that 1330 2 issues back, can't check now as am at work, hi)

Report from Alaska.

- 570 JOIK with NHK ID several times 3/7 at 0905 with folk-type guitar music // 640 and 660.
- 690 JOAB with Eng lessons around 0530 4/4 // 700 and 750.
- 750 JOIB with Eng lessons 3/7 at 0702 anncg "this is NHK signing off" then into Japanese-Spanish lessons.
- 770 JOUB beginning an English lesson at 0425 MM 4/5.
- 1140 VoA ID from Poro at 0300 4/6.
- 1178 VoA Okinawa s/off at 0900 3/22. IDed as "VOA Ryukyu Islands" and logged Petropavlovsk-1178 after Okinawa s/off.
- 1280 JOHW // JOHR-1290 at 1130 4/7. Both owned by the same bdcg co.
- 1580 VoA Thailand s/off 3/14 at 1200. IDed as "coming to you from the United States of America, This is the VoA..the Voice of Free Asia concluding today's xmsn. Has been hrd around 0900.
- 1600 DZCH Bulacan, P.I. hrd 4/6 at 0530. IDed in English as "DZCH, Bulacan, Philippines".

--we are 6 time zones west of EST here.

--Dave Doswell
Nav Fac Box 71
FPO Seattle 98791

(Reception from Adak, Alaska)

Changes

- 750 Akaska. KFQD Anchorage authorized program operation on 750 kHz, 10 kw night, 50 kw day. Action 3/31. (de Broadcasting 5/3)

May 15, 1971

Greetings!

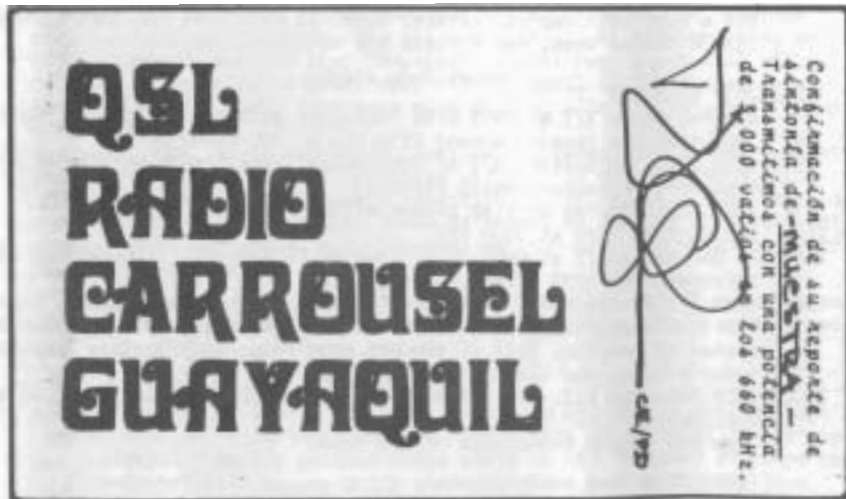
I am enclosing a sample of the Radio Carrousel QSL card. They are available to the first 500 people correctly reporting reception of the station.

Reports, either new or follow-ups, should be sent to me at P.O. Box Q, Hato Rey, P.R. 00919. RP would be appreciated in US stamps. Should anyone wish to have the verie mailed from Ecuador, this will be done if HC RP is enclosed.

I know that many members have sent reports to Guayaquil, but they will not be answered from there for reasons explained in the NRC D~~x~~ News recently.

Sincerely,

David P. Gleason
p. RADIOFONICA CIA. LTDA - Radio Carrousel



West Germany Rebuffs Poland on the Future of Radio Free Europe, Hints Station Will Stay in Munich

THE NEW YORK TIMES, THURSDAY, JUNE 3, 1971

By JAMES FERON
Special to The New York Times

WARSAW, June 2—West Germany has told Poland that Radio Free Europe's broadcasting license has been renewed automatically until July, 1972. In Bonn's first public response to a three-month campaign by Poland to force Radio Free Europe from its Munich site, and perhaps off the air altogether, a West German spokesman said yesterday that

Polish complaints about the station's broadcasts would be examined.

But he added that the West German Constitution insured freedom of expression, indicating that a major Polish complaint—that the station's activities were becoming an obstacle to improved relations between East and West Europe—would be rejected.

Radio Free Europe, which broadcasts news and commentary to Eastern Europe, is supported largely by the Central Intelligence Agency and Washington has traditionally been the major target for East European criticism.

The Polish Government aimed its new campaign, not at Washington, but at the Bonn Government, with which it recently concluded a treaty. The treaty remains unratified.

Warsaw's argument has been that the station continues to be engaged in subversion and espionage, an act defined by the Poles in the diplomatic note as "a remnant of the cold war that cannot be squared with the new atmosphere of détente."

The campaign began in early March with the unveiling by Polish authorities of an alleged master spy, Capt. Andrzej Czechowicz, who worked in Radio Free Europe's Polish-language section.

Captain Czechowicz's accounts of intrigue and subversion appeared daily on television, radio and in the news-

papers. The campaign seemed to have reached its peak last week, however, with the dispatch of diplomatic notes to Bonn and Washington.

The Poles have suggested that the station's activities are incompatible with the treaty between Warsaw and Bonn and have hinted that ratification could hinge on the issue. The treaty calls for normal relations between Bonn and Warsaw.

The Polish campaign also coincides with the organizing of

the 1972 Olympic Games in Munich. Polish officials have sought to emphasize the contradiction between what they call Radio Free Europe's cold war activities and the peaceful nature of the games.

Radio Free Europe and a sister station, Radio Liberty, which broadcasts to the Soviet Union, say they have a wide audience. Eastern European governments tend to minimize their effect, however.

Radio Free Europe has been jammed in Czechoslovakia since the invasion by Warsaw Pact nations in 1968, ended Alexander Dubcek's liberal rule. It has been jammed in Poland on an intermittent basis since December.

The Hungarian Government, however, tends to ignore it; when Janos Kadar, the Hungarian Communist party leader, was asked about it, he said that the station provided good pop music.

Polish listeners appear to use Radio Free Europe selectively, ignoring the more strident commentaries and gloomy predictions, but depending on it heavily to supplement their own news sources.

The station's audience expands considerably during times of stress, such as the Gdansk or Szczecin riots last December or during secret trials, when published accounts here are meager, misleading or nonexistent.

South Korea Okay¹⁹ New Radio Station

SEOUL (AP)—The South Korean Government has authorized the Far East Broadcasting Co., an interdenominational and noncommercial network, to build a medium wave broadcasting station in South Korea, it was announced.

The station will beam religious, educational, cultural, entertainment and news broadcasts, primarily to Communist China and North Korea, FEBC reported.

FRIDAY, MAY 14, 1971

Radio Wave 'War' Brews on Okinawa

UPI NAHA, May 14—The U.S. Armed Forces Radio and Television Service came under fire today when an Okinawan-owned English-language radio station charged AFRT with violating Department of Defense regulations.

The protest was sparked by the recently revealed plan to add a third radio station to the AFRT system on Okinawa.

The Ryukyu Broadcasting Corporation, owner of radio station KSBK—a rock and roll station aimed at the young generation—charged that the new AFRT station would reduce the size of the KSBK audience.

"Any reduction of the size of our audience directly affects our profit and loss statement," a KSBK spokesman said.

Although the new AM station is to be strictly an information station, the spokesman said AFRT's remaining AM station would be free to compete directly with KSBK in the rock and roll field.

Referring to an Air Force regulation which covers AFRT operations on Okinawa, the spokesman said "the outlet is not supposed to compete with other broadcasting station for listeners."

An official AFRT spokesman had no comment on the charges.

AFRT is to place the new station into operation Saturday.

The Ryukyu broadcasting station has filed a formal protest with U.S. High Commissioner James B. Lampert and is planning to send similar protests to Washington.

1420 KHZ!

THE SPACE MAGNET, HOW GOOD IS IT?

Autnor's note. This article appeared originally in the January 23rd issue of DX Monitor. Some additional comments have been added at the end of the article

Recently two articles have appeared in the BCB club bulletins reviewing a ferrite core loop antenna known as the Space Magnet. One by Percy Kesteven (DX Monitor, Dec. 19th, 1970 was highly complimentary. The other by Gordon Nelson (DX News, Dec. 19th, 1970, Page 11) was much less so. What's the real story?

I've had the opportunity to test a Space Magnet which was kindly lent to me by Dick Nelson. Testing included comparison with a 30 inch balanced loop using a push-pull FET pre-amp, as well as with a 14" long ferrite core loop. All of the tests run by Gordon Nelson were either run independently or re-run, albeit with rather limited test equipment.

Those who bore easily should now skip directly to the section entitled CONCLUSIONS.

WHAT IS THE SPACE MAGNET?

The Space Magnet is a 12 inch ferrite core loop antenna. It comes in a 3"x3" x12" aluminum shield which is mounted on a wooden base. It has vernier tuning dial and includes a bipolar transistor amplifier powered by an easily accessible (and inexpensive) 9 volt transistor radio battery. It sells for \$29.95. A deluxe version wound with litz wire and including a local/distant switch is available for \$34.95. The version tested was a hybrid -- it was wound with litz, but did not include the local/distant switch. The source for these antennas is Worcester Electronics Laboratory, R.D.1, Frankfort, New York, 13340.

DOES IT WORK?

Yes. About the second thing I heard when I turned it on, on the evening of Nov. 4th was a TA carrier on 1034. Despite the dismal conditions during the late Fall and early Winter, a considerable number of foreign stations were noted. The one extended DX session I tried with it produced loggings from 14 countries prior to midnight PST. As far as the capability to pull in remote stations at night and to loop out interference, the performance seemed very close to that of the air core loop.

DOES IT HAVE ADVANTAGES OVER AN AIR WOUND LOOP?

Yes. It is portable. It is attractive. It is already assembled. If you travel a lot, or are in the military, or are married (women and loops do not seem to be very compatible), this may be the answer to your problems. This antenna will (or can be simply modified to) fit into a suitcase. Furthermore, even though the wife, girl friend, or platoon sargent may not like it, they will like it about six orders of magnitude more than they like an air core loop.

The fact that the loop is already assembled should appeal to those lacking in either the ability or the desire to build things as well as to those lacking the tools. The cost is comperable to the cost of an air core loop of comperable performance, with the construction labor figured at about 10¢ an hour. For an air core loop of superior performance, such as the NRC alt-azimuth loop, figure \$15-25 for the parts and about 50-100 hours construction and debugging time.

DOES THE SPACE MAGNET HAVE DEFECTS?

Yes. Quite a number, in fact. Most of them appear to be fairly minor under most conditions. Part I of Nelson's article discussed some of them. [Note only part I is discussed since this was written prior to the appearance of. Part 2 in the Jan 23, 1971 issue of DX News.]

In discussing these faults, it must be remembered that Nelson is discussing the deficiencies of the Space Magnet relative to the theoretical "ideal" loop antenna. The NRC alt-azimuth loop would appear to approach this "ideal" loop very closely. The Space Magnet is not as close an approach to the "ideal" loop, but then neither are the miscellany of DCL, box, spiral, etc. loops in general use.

Nelson noted a number of defects. I'll discuss these in the order in which he brought them up:

1. The aluminum case is RF hot and causes a change in loop tuning when one touches it, or brings one's hand near it. The concept certainly makes sense, but no such effect could be observed here with either the HQ-160 or Heath GR-78 so long as the Space Magnet ground lead was connected to receiver ground. [Note: See additional comments at end of article.]
2. Sensitivity is inadequate. Tests here simply do not bear that out. Using a Heath GR-78 with a 2.1kc mechanical filter, it is possible to listen to barely audible external mixing products fade up to readability as atmospheric noise levels drop at dawn. This would not be possible if transistor noise levels were comperable to nighttime atmospheric noise levels. Possibly, the unit tested by Nelson may have had a noisier transistor. [Note: the unit tested by GPN was also wound with litz]
3. The Space Magnet Q is high enough to cause "distortion". [Note. As GPN has correctly pointed out to me, this is the wrong word. The actual effect is that caused by any sharply tuned circuit such as a Q-multiplier, a roll-off of the higher audio frequencies. "Distortion" is something else entirely, but I can't think of a word that adequately describes the actual effect, so "distortion" will be used incorrectly for the remainder of this paragraph.] My rather primitive Q measurements agree with Nelson's. However, I personally do not find the audio passband distortion to be objectionable. Some DXers may. The "distortion" can be minimized by tuning the Space Magnet 1 kc or so above or below the signal being tuned. Perhaps if enough DXers complain, Mr. Worcester might incorporate a Q-control on future models. Those with inexpensive receivers may appreciate the extra selectivity available from the Space Magnet because of the high Q.

4. Nulls from the Space Magnet are skewed and are of unequal depth. This test was repeated on several local stations. Some skewing and blunting of nulls was observed. It was evident that much of this was due to signal pickup on the feedline from the antenna to the receiver. Skews of 5° on KHJ and KFI were cut to 1° when the test set-up was cleaned up to minimize lead lengths. It is important that the lead connecting the Space Magnet to the receiver be as short as possible.

Although the Space Magnet was not designed to be tilted, it can (just barely) be done. This was done with KFI to get a null depth measurement. I have little faith in my test equipment when it comes to measuring attenuations of over 20db. The comparison of results would have been simplified if Nelson had published null depth figures for an untilted NRC loop.

STATION	NULL DEPTHS	SKEW	TILTED NULL-DEPTH
KLAC-570	12db 13db	1°	
KFI-640	18db 17db	1°	Estimated at least 40-50db
KHJ-930	24db 24db	1°	
KFAC-1330	12db 13db	less than 1°	
KDAY-]580	13db 13db	unknown	

The skewing on KDAY would have required many more measurements as the null was shifting rapidly over about 10°:

This data indicates that the Space Magnet is not as good an approximation to the ideal loop as is the NRC loop, but that its performance is quite good.

The Space Magnet would be more useful if it included a provision for tilting the antenna.

5. Another defect is the fact that the bipolar transistors used in the amplifier will cross-modulate on strong signals. Thus when the loop is tuned through a strong signal, the station's signal will turn up superimposed upon whatever signal the receiver is tuned to. The Q of the Space Magnet is high enough so that this is not a problem at my Santa Monica location, but it could be a problem for those who live close to a transmitter. Close to a transmitter, the signal may get strong enough to impress itself upon adjacent channels. Thus at some distance from KNX-1070 (for example), KNX will become so strong that it cross modulates onto signals on 1060 and 1080 even though the antenna is tuned to 1060 or 1080. Even closer, 1050 and 1090 (what loss?) will be taken out, etc. The deluxe version of the Space Magnet handles this by means of a local/distant switch which is intended to sacrifice some amplifier gain to get better cross-modulation performance. If you've had past problems with strong signal overload of your equipment at your location, I'd recommend purchase of the deluxe version.

A second problem with cross-modulation is that the DXer must be aware of it. It is fairly easy to imagine even an experienced DXer tuning to 720 on a Sunday evening, and inadvertently tuning the loop to semi-local (and very loud) XETRA-690. The result - a logging of a mystery Mexican on 720 with La Hora Nacional

6. Another problem is not so much a defect as a peculiarity. Signal levels from such nuisances as external mixing products and TV local oscillator signals tend to vary widely in a relatively small area. The Space Magnet is small enough so that its performance may vary widely when moved a small distance. I discovered this the hard way, by placing the antenna on a workbench which had a power line running along its bottom side. The result was almost intolerable TV oscillator harmonics every 15kc. Moving the antenna three feet cut the buzz level by 20 db.

CONCLUSIONS.

The Space Magnet is a compact, attractive antenna suitable for serious DXing under winter nighttime conditions. It will certainly outperform long-wire antenna (with the exception of the Beverage) and loops without pre-amps. It can probably be expected to perform on a par with many loops utilizing pre-amps. It can not be expected to outperform large balanced loops utilizing FET pre-amps.

It should have a strong appeal to those with limited mechanical ability or inclination, and to those who are looking for a compact loop for use when traveling. Those who have had difficulty with strong signals from locals overloading their equipment, or who are interested in very weak signal (daytime) reception should consider paying the extra \$5.00 for the deluxe version of the antenna.

RECOMMENDATIONS TO SPACE MAGNET OWNERS

1. Keep the lead from the antenna to the receiver short (6 inches would be a good goal to shoot for.)
2. Move it around some while trying it out. It may perform better in some parts of the room than in others.
3. Check the battery from time to time.

4. Make sure that the antenna ground wire (the outside of the shield) is connected to the receiver ground terminal.

5. Make sure that the antenna and the receiver are tuned to the same frequency.

ADDITIONAL COMMENTS:

GPN has made numerous perceptive and interesting marginal notes on the draft of this article. Originally, I had intended to include most of them as footnotes to this article, but it's obvious that I will not have time to do so. I have corrected a few obvious problems such as my misuse of the word "distortion." I will not attempt to summarize his views. I imagine that he will do so himself if he feels strongly enough about them.

The snift in tuning caused by the shield being RF-hot was finally observed, after GPN pointed out to me where to look. Indeed, when a ferrite core loop is tilted to obtain a very deep null, the null depth does vary when one touches the case. This is not an intolerable problem, and anybody who goes to the effort to arrange a mechanical setup which permits tilting of the ferrite core loop, can set it up such that azimuth and elevation can be altered without actually touching the metal of the case. The tuning shift is unnoticeably small under normal DXing conditions.

Another point of interest is that many of the "defects" in the Space Magnet are correctable if one is convinced (as I, for one, am not) that they are serious defects. The lack of alt-azimuth tilt capability can be corrected by a fairly simple mounting. The lack of sensitivity (if it exists) can almost certainly be corrected by the use of transistors selected for low noise figure. The problem of unbalanced pickup and feed can certainly be dealt with by the use of balanced pickup and feed using either push-pull amplifiers or baluns. The cross-modulation problem (if it is real and serious) can be dealt with by careful selection of semiconductors and circuitry. This means that a "near-ideal" antenna combining the compactness and portability of the Space Magnet and the (somewhat) superior qualities of the NRC alt-azimuth loop is probably feasible.

Finally, I can only say that I am convinced that the performance of the Space Magnet under everyday DXing conditions is so close to that of a large air loop, that no significant difference will be observed in the stations logged by two DXers of equal ability, interest, and luck using the two types of antennae. I, myself, have switched to the use of a ferrite core loop and never again expect to own an air core loop.

-- Don Kenney
Box 1668
Santa Monica, CA, 90406

"WHERE ROCKING HORSE PEOPLE EAT MARSHMALLOW PIES", OR:

BPC VISITS TOYLAND - BGK

Marc DeLorenzo and I recently had the good fortune to visit IRCA publishing HQ after attending a So. Calif. DX get-together in Sideriver. (Riverside?) The two day meeting was enjoyable; NRC'ers Don Erickson, Father Jack, Jay Murley, Bob Jacoby, Ben Veio and many others were in attendance. When the great DX ZEPPELIN had left (and was seen heading north) we all hopped on DEE's mighty motorcycle and soon arrived at Toyland. It is very difficult to describe what Toyland looks like; the closest comparison has got to be ground zero at Hiroshima on August 6, 1945! After a very enjoyable visit came the more enjoyable moment of departure! MD and I trucked up to the Bay Area to check out the convention progress and see how Frank B. Kennedy was doing in general. To our great shock and amazement, we found FBK! I spent several days with Frank on top of the mountains over looking San Jose; after eating, drinking and otherwise partaking of what Mother Nature has to offer in this spiritual climate, I had a great vision: MOVE THE CONVENTION TO SACRAMENTO QUICK!!! Look for details on this switch in this or upcoming issues of DX NEWS. A few days later I found myself in the mile high city: Denver. During my stay there I had the pleasure of meeting Larry Godwin and DX'ed from his place one evening. The whole event was a trip!

GOOD DX - Big George

Engineers interested in accurate frequency and/or time measurement will be glad to know there is a secondary standard of atomic time available in the Eastern U.S. Clear-channel radio station WSM in Nashville, which operates on 650 kHz with a carrier power of 50 kW, is now holding its frequency to an accuracy of better than 1×10^{-10} (SAT), according to station engineer L. H. Montgomery. The accuracy is traceable to the National Bureau of Standards by counting down the WSM 650 kHz carrier frequency to 60 kHz. The phase of the WSM 60 kHz is compared directly with the Bureau's station WWVB and recorded.

The fact that WWVB's signal loses some of its accuracy in transmission from Ft. Collins to Nashville because of changes in path length makes it necessary to average the phase information over several hours to restore WWVB's original accuracy. By making use of this information, it is possible to hold the WSM 60 kHz to within a few degrees of the averaged WWVB signal.

As a service to the general public, a time beep has recently been instituted on the WSM program. This is a 0.4 second burst of 1 kHz tone beginning on the hour and every 15 minutes thereafter. This is done by further counting down from the 60 kHz to 1 kHz for the tone, which gives it the same accuracy as the WSM carrier. Further counting to seconds and minutes brings us down to a 15-minute period with an accuracy of $\frac{1}{10,000}$ second.

QST 4/71

"VOA" Clause Agreed On

The United States and Japan have agreed that the "Voice of America" (VOA) broadcasting facilities in Okinawa be maintained provisionally for five years after the reversion of the islands to Japan. Foreign Ministry sources have revealed. The Japanese Government had insisted on restricting the contents of "VOA" broadcasts to such that they would not irritate People's China and the like but on account of U.S. objections to such restrictions the clause that will be inserted in this regard will be of an abstract nature: "such as would not prejudice the interests of the United States or of Japan." During the five-year period, the United States and Japan will discuss the matter of management of "VOA" after the period within two years after the reversion of Okinawa-Yomiuri. 3 June

DOMESTIC
X
IGEST



EDITOR:

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Greetings, folk. Again, summer ex dictate a rather small column this time, tho' lots of r/c's, with which we'll start, followed by the changes. All new checks will be listed in the check list supplement following DDXD. Next updater will appear in next issue, for which deadline is 6/30 or thereabouts. In the r/c listings, assume all checks listed are from April, unless noted w/ a "5" for May. Items hrd. both months listed w/ "4" and "5", hi. Now on to business.

R/C's

1st MM: WTLB-1310; WPLB-1380 1st TU: WIOS-1480; 1st FR: WSLT-1520 (5); WHBG-1360 (4&5); WWBZ-1360 (4&5); WGOE-1590 (4&5); KFVS-960 (5); 1st SU: WDAN-1490 (5); 2nd MM: WAGN-1340; WELI-960 (4&5); WCAZ-990 (4&5); 2nd FR: WNJH-1580 (4&5); KFJM-1370 (5); KOKX-1310 (5); 2nd SU: KALO-1250; 3rd MM: WDIC-1430 (4&5); WNOO-1260; WPJD-1550; WCRV-1580; WAAO-1530; WAMS-1380; WDXI-1240 (5); KXEO-1340 (5); WGAU-1340 (5); KWKY-1150 (5); KWLA-1530 (5); 3rd TU: WPED-810; WGAP-1400; 4th MM: WCMS-1050; WCBG-1590 (4&5); WLDY-1340; WGOE-1590 (4&5); WJDY-1470; WBIR-1240; WIRV-1550 (1 hr. early); 4th WED. WCFR-1480; 4th FR: KCHA-1580; 4th SU: KCKW-1480 (5).

Changes

+ 1000 WKBQ-NC CP: D1
1230 WCFV-VA FCC declined to renew license. Probably legal action to follow. (RJE)
+ 1240 WSEN-PA CP for 1000/250 is not yet on as per previous info.
+ KSON-CA CP: 1000/250 U1
+ KAVE-NM PWR is 1000/250 U1
+ CFEK-BC (Fernie) is on, // CKEK-570 & ADD: c/o same
+ 1340 WTAN-FL CP: 1000/250 U1
+ 1400 KVOU-TX CP: 1000/250 U1
+ 1490 KOKC-OK CP: 500/250 U1
+ 1500 WKXC-KY ex-WWSW (believed not yet on air)
+ 1550 WGRK-KY new call for Greensburg CP
+ 1570 KLOV-CO CP is on.

Sunset & evening

830 KBOA-MO Hrd 5/20 SSS s/off 2000 o/u WCCO & 4VE. One ID hrd, sounded like rr format (Page Taylor, Butler, N.J.)
900 WOTW-NH O/u WCME, WFLN w/ state ex 1902 5/4 (PT)
WCME-ME Hrd w/ rr 1902 5/4 u/WOTW, WFLN (PT) (PT)
920 WAVL-PA One of my most wanteds hrd w/ ID foll wing promo 1936 5/3
1260 WMM-CT Hrd w/ car ad, ex 1830 4/26 alone. (PT)
1280 WYVE-VA Hrd 5/6 s/off at 1810, that's very strange (PT)

***** stuff we missed up there, hi - r/c hrd 3rd SA: KALG-1230 (5) by Paul Hart, who notes they ID in Code, so change listing. Also, WWDJ-970 is now the rule, here - ex-WJRZ. Playing rr w/ special doings. Have still not gone NSP, but last word from stn. said they would soon, so will keep checking. - RJE

call applications

1410 WKBH-WI req. WIZM

1470 KPLC-LA req. KLGL

1970-71 FREQUENCY CHECK LIST SUPPLEMENT
6-1-71

midnight to sunrise

- 550 WKRC-OH Off most of AM 5/10 mostly w/ OC, some TT, naught else there (Wes Boyd, Youngstown, Ohio) - whoops, there I go again w/ the typos, hi -RjE
- * 830 K TSA-TX In o/WKRC & hi noise level 5/17 much of AM (BOYD)
- * 830 WCCO-MN S/off hrd 5/10 0107 due to anner. strike, annod. s/on 0600, but only static hrd when they left. (Bruce Winkelman, Lawrence, KS)
- 920 unID Fair to vy poor u/WMRI-WOKY-CKCY, etc. w/ Milwaukee BB 0015 -0035 5/13, KDHL maybe ?? (Boyd)
- WMEG-FL Atop the usual mess much of AM 5/17 (Boyd)
- 940 WGRP-PA ET-OC-TT 0145-0155+ 5/24 (Boyd)
- 950 KJR -QR Fair much of AM 5/17 (Boyd)
- 1170 KSTT-IA Hrd 0030 5/17 w/ hard rock o/u KV00 (PT)
- * 1260 WIXY-OH Seemingly NSP, but MM stuff has no nx, wx, etc., as RS, so may be AXR test where CE runs jingle-record-jingle-record w/ ID's otherwise as necessary. (Boyd)
- KPIN-AZ IRCA test 5/17 hrd vy wk ard 0400 u/WFBM OC TT & hvy XEL QRM (Paul K. Hart, Ft. Worth, Tx.)
- WFBM-IN Very strong w/ ET-OC-TT, ID's copied 0230 & 0410, gone by 0415 (PKH)
- 1380 WTVR-VA After many months of looking, hrd 5/13 0117-33 w/rr (Boyd)
- 1450 WMYA-VA Hrd w/off 0008 5/26. Been digging for 'em some 3 mos., uses "America" for s/off. Sch: 0500(0700)-0005(2315) per annct.
- 1460 CJOY-ON Another one much needed and finally hrd 5/16 w/MoR & top 40, fair copy 0038-0048. (Boyd) (as was above item)
- 1560 WCNW-OH ET-mx 5/7, copied ID 0105 (PT)
- 1570 WYTI-VA TT w/ many ID's 0049-55 for "equipment adjustments" 5/16 (boyd)
- 1580 WHEX-PA ET-mx w/rr 0225+ 5/ 2 w/ frequent ID's (PT)

NOTES, ETC.....

Dunno if I ran this elsewhere b4 or not, but KFFR in "Frisco has asked the FCC to okay the "establishment of a special class of non-commercial, experimental/educational low power AM stations". Good for the pirates & their sympathizers, but bad for DX'ers, so at least some of us will be kind of ambivalent about this one, hi.

Special thanks to an unheralded NRC'er who has supplied loads of graveyard skeds & addresses for updaters & correctors - David Lewis of Kansas City. A tip of the hat for a very welcome contribution.

Also thanks to Olle Alm of A.R.C. & W.R.T.V.H. for a huge list of update stuff which will appear w/ Dave's latest and others next time.

VOLUNTEERS, VOLUNTEERS: Aside from the usual pleas for calls to locals & semi-locals for test dates, r/c skeds, etc., we need some editorial-type help. I'd like to have someone take over the typing (and, natch, the putting-into-order-by-frequency) of updater materials when same come in in big bunches as like right now. I can currently handle this one, but I can foresee the need for a backup in the very near future. ALSO: if some enterprising soul could check back thru this past season's issues and cross-check listed but un-asterisked or +'ed s/ons & offs w/ the log for additional update materials & order it & type it..... 73's - RjE

ADD THE FOLLOWING CHECKS:

- 1st TUES.
 - 0000-0030 WHGR MI 1290
 - 0100-0115 *KCOG IA 1400
 - 0130-0145 WOMA MS 1230 T
- 1st WED.
 - 0120-0140 WWKE FL 1370 T
- 1st SAT.
 - 0200-0215 *KSDR SD 1480 T (Q2)
 - 0215-0230 KDOK TX 1490 T
 - 0445-0500 WMOV WV 1360 T
- 2nd MON.
 - 0130-0145 *KHUB NB 1340 T
- 2nd TUE.
 - 0000-0015 WSFC KY 1240 T
 - 0100-0115 *WMWB NJ 1440 T (@ 3rd Mon.)
- 2nd WED.
 - 0020-0035 WGHQ NY 920 O
- 2nd FRI.
 - 0045-0100 WWML PA 1470 T
 - 0215-0230 WLIQ MS 1360 D
 - 0230-0245 WNSL AL 1260 D
 - 0245-0300 WBLO AL 1470 D
- 2nd SAT.
 - 0030-0045 *WFPSR NY 1380 TC
- 3rd MON.
 - 0040-0050 *WTON VA 1240 T
 - 0045-0100 WHOL PA 1600 T
 - 0245-0300 *WPJD TN 1550 TM
 - 0630-0645 KTXJ TX 1350 T
- 3rd TUE.
 - 0330-0400 *XEX TAM. 960 M
- 3rd FRI.
 - 0010-0015 *WVOS NY 1240 TO
 - 0130-0145 WLET GA 1420 T
- 3rd SAT.
 - 0200-0215 KSRC NM 1290 T
- 4th MON.
 - 0115-0130 *WBUS SC 1380 T
 - 0230-0245 WMIS MS 1240 T
 - 0530-0545 *WHLW NJ 1170 T
- 4th FRI.
 - 0645-0700 *KWYR SD 1260 T
- LAST MON.
 - 0115-0130 K RNY NB 1460 T

CHANGE THE FOLLOWING CHECKS:
(po: in parentheses)

- 2nd FRI.
 - 0130-0135 *WKRG TN 710 T (2 TH)
- 3rd MON.
 - 0125-0140 *WGNB FL 1480 T (ch.time)
- 3rd SAT.
 - 0115-0130 *KRRB NB 1400 T (*)
- 4th MON.
 - 0130-0145 *WYNS PA 1150 T (Q3) (clar. time)
 - 0200-0215 *WBIR TN 1240 T (3rd MM)
- 4th THU.
 - 0245-0300 WHYY AL 1530 D (ex: "T")
- 4th FRI.
 - 0130-0135 *WKRG TN 710 T (4 THU)
 - 0215-0230 *KPOS TX 1370 T (Q3) (clar. months)

DELETE THE FOLLOWING CHECKS:

- 1st THU: WPTS-PA-1540
- 2nd TUE: KANQ-NM-1350
- 3rd MON. WTPR-TN- 710
- WDTM-TN-1130
- 4th SAT. KSTP-NM- 990
- 2nd FRI. WESL-MS-1440

ALL ITEMS APPEARING HERE HAVE BEEN PUBLISHED IN DDXD SINCE 2/1/71 SUPPLEMENT. PLEASE SEND ALL R/C CHANGE INFO TO JOE FELA, 150 Robert Pl., So. Plainfield, N.J., or to DDXD, from whence it will be forwarded. -RjE

Symbol "Q" denotes quarterly check, number following signifies sequence of mos., i.e., 2 denotes 2,5,8,11., etc.

560	*KVOK	Kodiak, Ak	11/10	1220	+CKDA	Victoria, B.C.	11/15
590	+CKRS	Jonquiere, Qu	(4/1)	1230	*	Port-aux-Basques, Nf.	(1/15)
	+KTHS	S. Lake Tahoe, Ca.	(5/20)		+KLAV	Las Vegas, Nv.	12/7
650	+KYAK	Anchorage, Ak.	12/15		+KDAC	Pt. Bragg, Ca.	12/16
680	+CHFI	Toronto, Ont.	6/1		+KRDG	Redding, Ca.	12/16
	*KWKA	Cloviss, N.M.	10/15		+KGR0	Pampa, Tx.	(5/1)
700	#KBVR	Anchorage, Ak.	3/5	1240	*	100 Mile House, B.C.	(4/1)
710	*	Blacksburg, Va.	2/3		+WSEW	Selinsgrove, Pa.	5/4
	*WEGG	Rose Hill, N.C.	8/19		+WTWA	Thomson, Ga.	10/14
	*WZOO	Asheville, N.C.	8/19		+KSOX	Raymondville, Tx	12/7
720	*KIQX	Las Vegas, Nv.	(7/3/9)		+KADS	Elk City, Ok.	12/7
730	*	Rutland, B.C.	9/1		+KLOA	Ridgecrest, Ca.	12/9
780	*KNOM	Nome, Ak.	7/15		+KOAD	Lemoore, Ca.	11/10
800	*WBRV	Rockville, Ct.	(7/20/9)		*	Globe, Az.	11/25
	#CJJC	Langley, B.C.	unk.		+KSUN	Bisbee, Az.	2/12
810	+WKVM	San Juan, P.R.	11/1	1310	*	White Sulphur Spgs., WV	12/23
850	*KGOE	Thousand Oaks, Ca.	9/1		*WPRJ	Parsippany, N.J.	(7/18)
	+WMAG	Forest, Ms.	9/15	1320	+KXLW	Clayton, Mo.	5/10
	*WCUG	Cuthbert, Ga.	12/21	1340	*	Chapais, Qu.	6/14
	#WJJC	Dulath, Mo.	7/29		+KQIL	Grand Jctn., Co.	12/7
860	*WUCR	Sparta, Tn.	12/16		+KWXY	Cathedral City, Ca.	1/13
870	+KIEV	Glendale, Ca.	4/14		+KYLT	Missoula, Mt.	12/16
880	#KRVN	Lexington, Nb.	10/25		+KIHN	Hugo, Ok.	3/3
890	*WSST	Largo, Fl.	8/26		+KPST	Preston, Id.	4/21
900	#KVEL	Vernal, Utah	7/29		+KTEO	San Angelo, Tx.	4/20
940	*WNAL	Nelsonville, Oh	(1/3)		+KSET	El Paso, Tx.	4/21
	+WFNC	Fayetteville, N.C.	9/1	1350	*WEGA	Vega Baja, P.R.	(4/7)
	*	Lebanon, Pa.	unk.	1360	#KRRR	Ruidoso, N.M.	12/4
950	*WXLN	Cabin John, Md.	7/30	1380	+WYNK	Baton Rouge, La.	(2/27)
970	*WOZN	Jacksonville, Fl.	(12/29/9)		#KATO	Safford, Az.	12/16
	+WATH	Athens, Oh.	7/1	1390	+KFRA	Franklin, La.	7/19
	*KIAK	Fairbanks, Ak.	1/13	1400	+KDRG	Deer Lodge, Mt.	12/15
1030	*	San Juan, P.R.	unk.		+CJFP	Riviere du Loup, Qu.	5/10
1060	+CJRP	Quebec, Que.	(5/10)		+WBMA	Beaufort, N.C.	12/7
	*	Ozark, Ark.	8/5		+KNOR	Norman, Ok.	12/9
1070	+KENR	Houston, Tx.	12/16		+KIXX	Provo, Utah	2/2
1080	#WECP	Carthage, Ms.	11/4		+KPMC	McAlester, Ok.	1/28
	*WPNS	Hurricane, WVa.	(2/1)		+WCYN	Cynthiana, Ky.	12/16
1090	*WISS	Berlin, Wis.	9/15		+KXGN	Glenview, Mt.	12/16
1110	*WIOM	Pittsfield, Ma.	(12/26)		+KVOU	Uvalde, Tx.	5/14
	*WHYT	Noblesville, In.	9/1		+KTUC	Tucson, Az.	4/21
	*KCIA	Humble City, N.M.	11/10	1430	+CKPH	Toronto, Ont.	(1/1)
1130	*	Eaton, Ohio	unk.	1440-	*	Calgary, Alta.	7/7
	+WDGY	Minneapolis, Mn.	7/8		+KEYS	Corpus Christi, Tx.	11/6
	+KSDO	San Diego, Ca.	10/14	1450	+KBPS	Portland, Ore.	7/15
	*KWBY	Edna, Tx.	8/15		+CHEF	Granby, Qu.	7/1
	+WISN	Milwaukee, Wi	7/17		+WSTU	Stuart, Fl.	12/2
1140	*	Warsaw, N.Y.	4/7		+K0BE	Las Cruces, N.M.	1/28
	*	Lexington, N.C.	(1/8)		+WSMG	Greeneville, Tn.	10/28
1150	*	Kelowna, B.C.	(5/10)	1460	+WPFV	Painesville, Ohio	2/18
	+CJRC	Ottawa, Ont.	6/14		*WCID	Juncos, P.R.	6/17
	+CKK	Brandon, Mb	1/15	1470	+WTKO	Ithaca, N.Y.	(1/3)
	+WYFE	Rockford, Il/	2/3	1480	+WISM	Madison, Wi.	6/3
1170	*WVVI	Mechanicville, N.Y.	3/10	1490	+KNEL	Brady, Tx	12/7
	*WBRW	Somerville, N.J.	(5/6)		+WCOF	Immolakee, Fl.	12/2
	#CFML	Cornwall, On.	6/14		+KGUC	Gunnison, Co.	1/8
1190	*KAYQ	Kansas City, Mo.	7/15		+WANA	Anniston, Ala.	12/9
	+KNBA	Vallejo, Ca.	(1/18)		+WVIM	Vicksburg, Ms.	12/9

1490	+KWMC	Del Rio, Tx.	12/16
1500	*WKXO	Berea, Ky.	5/7
1510	+WINU	Highland, Ill.	8/4
	*WATY	Wabash, In.	10/7
1530	*WDJZ	Bridgeport, Ct.	(6/24/9)
	#KCGO	Cheyenne, Wyo.	11/1
	*WTNW	Chapel Hill, N.C.	(12/15)
	*WTHO	Thomson, Ga.	(4/1)
	*WYAZ	Yazoo City, Ms.	1/25
1540	*	Honolulu, Ha.	12/9
1550	*WGRK	Greensburg, Ky.	2/18
1560	*KAJN	Crowley, La.	(1/12)
	*WSHY	Shelbyville, Ill.	10/21
1570	+WSSA	Morrow, Ga.	(5/18)
	*WOBL	Oberlin, Ohio	(4/1)
	*WHII	Bay Springs, Ms.	8/26
	*	Galion, Ohio	1/27
1580	*WYYZ	Jasper, Ga.	unk.
1590	*KXEM	McFarland, Ca.	8/1
	+WCSL	Cherryvale, N.C.	unk.
1600	+WAAM	Ann Arbor, Mi.	10/5

1410	+WOTT	Watertown, N.Y.	unk.
1490	+KCUZ	Clifton, Az.	unk.
1000	+WKBQ	Hemingway, S.C.	5/12
1340	+WTAN	Clearwater, Fl.	5/12
1490	+KOKC	Guthrie, Okla.	5/6
1240	+KSON	San Diego, Ca.	5/6

NOTES: Please excuse the out of order items above, and any graphic mis-alignment. I have updated the list from 5/1 to 6/1, as it was typed a few weeks b4 presstime. % Also, any CP's herein appearing but not in recent updater will appear in next updater in next issue. % Dates in parentheses are permits which have expired, or been renewed without publication of date. % Any and all corrections or clarifications of this data will be greatly appreciated and is most definitely solicited. - RJE 6/2/71

A few of the above CP's are actually only initial decisions, but are included because they appeared in the original log copy and no up-to-date info is available on them. The recently-issued 12/31/70 issue of the NARBA allocations list also lists several other such questionable CP's, many of which are either still in hearing or only initial decisions. It also includes one for a full-time permit for WEOK-1390 about which the station's CE & SM know nothing at all, so, although the following are of dubious integrity & accuracy, the permits noted by the NARBA list appear below:

940	new	Smithfield, Va.	10000 D1	1400	KPTN	Central Point, Or.	(see note)
	new	Lebanon, Pa.	1000 D1	1390	WEOK	Poughkeepsie, NY	5000/1000U4
1010	new	Klamath Falls, Or.	1000 D1	1500	new	Ellijay, Ga.	1000 D1
1060	new	Springfield, Mo.	500 D1	1530	new	Elmhurst, Il.	250 D3
	WGTR	Natick, Ma.	1000 D1				
1070	WKMB	Stirling, N.J.	250 D1	(see note)			
1220	new	Midwest City, Ok.	1000 D3				
1270	new	Charlevoix, Mi.	5000 D1				

NOTE 1 : WKMB's owner tells me that the permit is granted, but cannot, by virtue of a clerical error at FCC at time of filing and/or approval, be initiated until the AM freeze is lifted. (Informed sources close to the FCC now speculate mid-summer for this unhappy event.)

NOTE 2 : KPTN was at one point officially deleted because of the concurrent and simultaneous revocation or non-renewal of the license of KFLY in Corvallis, due to some rather shady operation practises. KFLY owners at time owned KPTN CP, and FCC order specified deletion of both. Perhaps court appeal is pending.

All of the other items except WEOK & 1500 item are known to be or have been within the past six months, in hearing pending final FCC decisions. Once again, it also seems that whatever the rules regarding assignment of calls to applications is not being consistently adhered to.

SUPREMACY RATINGS

Norm Maguire



DKer	Location	T.V.	Ctys	For.	T.H.	H.C.	Asia	Best Verie
L. Kruse*	Iowa	4035	15	77				
W. Stone	Ontario	2910	32	2479				
N. Maguire	New Mexico	2842	54	394			82	37 JOOC 880 500w
G. Allen	California	2737	57	503	3466	60	67	R.Sakhalin 973 20k
S. Drake	Pennsylvania	2415	56	315	2558	63	1	Baghdad 764
H. Holbrook	Maryland	2275	96	692			2	Iraq 764
F. Wheeler	Pennsylvania	1670	23	185	2670	26		
R. Sperry	Connecticut	1611	40	235				
R. Anderson	Virginia	1438	100	423			4	Damascus 786 10kw
A. Rugg	Quebec	1376	54	1188	1452	56		
D. Reynolds	California	1345	75	465			56	R.Brunei 895 10kw
C. Freeman	California	1337	61	336		69	30	VQA-Luzon 1140
R. Luton	North Carolina	1044	23	142				
J. Starr	Ohio	1014	47	166	1112	46		
D. Whatnough	Ontario	839	9	738	1619	28		
H. Gustafson	Illinois	828	94	284			12	Haifa 1025 500w
B. Reynolds**	Missouri	800	24	100	1520	34		
F. Waldron	New Jersey	714	28	161	1120	33		
R. Wood**	Louisiana	629	51	1	1246	79	26	Zahedan 777
D. Phillips	Kentucky	557	25	40	1428			
C. Mohr	New York	557	21	102	761	26		
G. Scrimgeour	Ontario	526	47	440			26	FEN 1580 2kw
T. Davisson	Ohio	474	11	38	1228			
R. Eddie	Missouri	443	9	30	844	16		
R. Richman	New York	412	10	60	557	11		
B. Dangerfield	Pennsylvania	408	109	333			6	Pyongyang 655
M. Sorensen	Ontario	379	8	281	538	10		
J. Renfrew	Connecticut	366	16	47	804	20		
H. Wilkinson	California	330	62	317			87	R.Sakhalin 973
J. Neff	New York	302	29	87		36	1	VQA-Cokinawa 1178
R. Leamy	Pennsylvania	301	41	106				
J. Burger	Holland	291	60	281		77	5	JOLF
H. Robie	Massachusetts	257	85	143		87	3	Alappa, Syria 746
J. Pejza	California	207	18	38	492	34	2	RFSFR 1475
J. Shannon	Pennsylvania	187	9	8	1419	60		
B. Karchevski	California	161	5	8				
C. Reno	Connecticut	106	22	58	300	23		

Finished this column just a few hours before departing for the Mainland. Will be there for an indefinite period, but hope to return home about the first of July. Next issue will feature African totals and best verie. Hope you all have a fine summer and will find some time to bring your Supremacy Rating totals up to date. Please send all reports to me at 2877 Kalakaua, Apt. 704, Honolulu, Hawaii 96815. 73 and Aloha,

Norm

VERIE SIGNERS

A - J. Critchett	G - R. Karchevski	1140	K L U C	K. Stewart (Griffith)	GH		
B - A. Lagattuta	H - S. Kamp	1150	W H Y T	H. Kelly, CoE	I		
C - R. Wood	I - R. Edmunds		K I I S	G. N. Riggs, CE	AG		
D - R. Sabo	J - W. Heinen		K W K Y	L. Newman, CE	F		
E - K. Burlingmair	K - T. McCormack	1170	W F W LmE	(A. Faust Sr., SM	D		
F - W. Boyd	L - E. Cooper			(T. Schober, CE	I		
			K CqB Q	C. Mallett, CE	H		
540	K V I P	J. French, GM	G	1180	W HqA M	A. Davis, CE	G
550	K TqS A	J. Ferr	E	1190	W OqW O	B. L. Wolfe, CE	E
560	K BuL U	R. L. Nix, CE	A		K RrD S	D. Coffey	A
	K LqZ	E. I. Jenkins, DoE	E		K W A N N	M. H. Blum, P	J
570	K G R T	R. Reymont, CE	G	1230	W Q U A	P. Burk, St E	E
580	W CqH S	S. Shrader, CE	E	1240	W I B U	D. Sherwood	E
590	K T H O	W. A. Kingman, CE	G		K S M A	J. I. Groom, CoC	G
	W RqO W	C. Henry, CE	D		K W A K	C. R. Sandine, M	F
600	W MfT	R. Wilson, CE	E	1260	W EfK Z	A. L. Stewart, CE	C
610	K PFR C	T. D. Razowich, CE	C	1270	W I L E	J. Pheil, CE	F
	W T O R	C. Ieland, CE	I	1300	W W C H	L. Schmader, CE	F
620	W SmU N	T. Bell, PD	E	1310	K Bfu Z	S. Bash, CE	G
	C KqC K	H. C. Dean	E	1330	K V K M	J. R. Aker, PD	A
	W T M J	Eng'g Dep't	E	1340	K RfA M	R. Wood, DoE	G
	W H E N	R. W. Ardner, CE	F	1350	K T X J	G. Dodson, CE, GM	H
650	W SqM	Mrs. Lois Hall	G		K R N T	J. W. Sneller, CE	F
690	W VqO K	G. Blasgow	H	1360	KmF IsV	J. Walker, PD	H
	K KqU A	A. Roycroft	H		K G B	C. N. Duncan, CE	G
725	PZX-26q	Dir., S.R.S.	H	1400	K S L Y	H. Hallikainen, CE	G
730	W QpH S	u/u, OpM	L	1430	W P C F	Belinda Paulk, Trf M	F
750	K M M J	D. Swanson, TSu	H		K T Y N	J. Rufus, CE	K
790	KfG MmI	Jill Hargrove, Trf M	H		C KqF H	G. A. Wilson, CE	I
860	X EqM O	u/u	H		K IqO	J. Adamson, CE	H
	K CqN O	W. A. Kiley, CE	E	1440	K I L O	R. Blaine	G
880	W CqB S	u/u	G	1450-	W F I X	J. Garrison, M	B
910	K NqE W	L. A. Wilkinson, CE	A		W F B S	J. Wright, CE	F
930	K AFF F	T. Rangel, O	H		K D X U	J. Miner, GM	H
	CmJ CqA	G. Skutle, CE	H	1460	K SqO	G. Myers, ESu	E
	W K C T	R. J. Hendrick, CE	E	1470	W M M W	K. Leach, CE	I
940	K H O S	R. H. Holsclaw, CE	G	1480	W T R A	A. Calisti, CE	F
	W F N C	J. L. Sprouse, CE	I		K TmH S	D. Patterson, CE	A
950	W SqP A	H. R. Beckhart, CE	E	1490	K V A C	G. Allen, CE	C
960	W SmB T	R. Bell, PD	E		W D A N	H. W. Shoup, CE	F
	C FqA C	S. Gilbert, TechStaff	I	1510	W L K R	G. Edwards, NxD	B
	K OqO .L	u/u, CE	H	1520	W V O B	S. A. Appel, PD	F
990	K TrR M	B. Hughes, CE	H	1530	K CrL R	D. Taylor, CE	H
	K W A M	E. N. Hodges, CE	F		W C T R	T. Epperstein, OpM	F
	K N I N	E. Bell, CE	F		W O B R	G. F. Williams, CE	K
1000	K Tfo K	C. H. Jones	EH	1540	K AmS A	J. Clark, CE	A
1010	X EnN L	LuisSuarezHuizar,GN	G		K XqE L	J. Dee	E
	KrD JmW	C. A. Foster, CE	A	1550	W PmJ D	R. A. Mayer, MD	L
1050	C HqU M	G. Jones, E	H		K U A T	G. C. Hendrickson, CE	A
	K WmS O	R. T. Bann, M, CE	H	1560	W KpD O	u/u, M	L
	C JqI C	D. Irwin, CE	K		K PqM C	J. E. Patterson, CE	J
	W LqI P	G. A. Dodge, CE	E	1570	W F U R	G. White, CE	F
	W HqN	W. Durkin, CE	DL		C H L O	J. L. Moore, P	J
	W B N C	F. Gardella	L	1580	K T G R	W. Wallace	K
1060	W NqO E	E. Trepaguer, StE	G		W H E X	D. Shank, CE	F
1070	W IqB C	R. Smart, CE	E				
1100	K Rce X	M. Shafer, CE	H				
1110	W BqT	u/u	G				
1140	K CqEM	T. A. Hill, CE	H				
	W RqV A	J. B. Tansey, DPubRel	H				

Thanks to all the above for the v/s, but why don't more of you join in and send in your recent v/s? Don't send any that have appeared recently. Please double space.