



DX MONITOR

PUBLISHED BY
THE INTERNATIONAL RADIO CLUB OF AMERICA

January 16, 1971

VOLUME EIGHT, NUMBER 17

DXWW times are GMT (UT). Domestic section times are EST. GMT = EST + 5 hours.

President: (All dues and changes of address should be sent here)

Mike Northam, P. O. Box 1122, Lake Grove, Oregon 97034. 503-639-9727.

Membership Dues: (U.S. funds) \$9.50 first class mail, \$6.50 third class mail, \$14 air mail. Third class is not recommended because of unreliable service.

Please mail dues to Mike at Box 1122 only and make funds payable to 'IRCA.'

Publisher: Don Erickson, 6059 Essex St., Riverside, Calif. 92504. 687-5910 (714)
Bulletin schedule: Weekly, dated Saturdays. Next issues, Jan. 23, 30; Feb. 6, 13, 20, 27; March 6, 13, 20, 27; Apr. 3, 17; May 1, 15. Publishing is currently done anywhere from Tues. night through Sat. night; last-minute tips can be taken until a few hours before mailing time.

Editors' Deadlines: Each editor should clearly list the deadline every week.

NEW MEMBERS!!!

Dr. Michel Breger - 2 Williams Blvd., Apt. 2A - Lake Grove, N.Y. 11755 (NRC)
Jim Catterfeld - 3765 Conklin - Saginaw, Mich. 48603 (via WBAP)
H. John Clements - 1125 Pacific St., #1 - Bremerton, Wash. 98310 ('71 Comm. Hdbk)
Gregory Condon - 218 Healey Terr. - Brockton, Mass. 02401 (via Shel Swartz, KFAB,
Alan Davis - 160 Kennard Ave. - Downsview 475, Ont. CANADA (via WWVA) WBAP)
Don Dunbeck - 801 N.W. 6th - Pendleton, Oregon 97801 (via WBAP)
Miss Carolyn Forehand - 2612 Higbee Rd. - Adelphi, Maryland 20783 (via WCFL)
Miss Nancy J. Gantzer - 67 Liberty St. - Fredonia, N.Y. 14063 (NRC, KFAB, WWVA)
Brian Goslow - 45 N. Ashland St. - Worcester, Mass. 01609 (via WWVA, WBAP, WCFL)
George Kesteven - 3524 Benton Dr., N.W. - Calgary 48, Alta. CANADA (NNRC, KFAB, KSL)
Max R. Klewitz - 4253 N. Avers Ave. - Chicago, Illinois 60618 (via KSL)
Blake Lawrence - Box 803 - Canon City, Colo. 81212 (via '69 Comm. Hdbk, NRC, WCFL,
H. H. Lee, III, ETN2, B20-79-45 - KFAB, WBAP)
Operations Div. - USS Neptune (ARC-2) - FPO San Francisco, CA 96601 (unknown)
R. L. Oaks - 499 Stanley Road - Akron, Ohio 44312 (via WWVA)
David Peterson - 800 Humboldt Ave. - Winnetka, Ill. 60093 (via KFAB, WCFL)

RENEWALS

Credo A. Bisquera - 86-123 Kakaiapola St. - Waianae, Hawaii 96792 (joined 2-14-70)
Paul R. Daplyn - 94 Mortimer Ave. - Toronto 355, Ont. CANADA (joined 2-1-69)
David J. Egan - 12A Andrew - Valleyfield, P.Q. CANADA (joined 2-14-70)
William Grant - 16 Goulding St. - Worcester, Mass. 01609 (joined 3-15-69)
Mike Hardester - 401 Birchwood Ct. - Modesto, Calif. 95350 (joined 5-3-69)
Stephen S. Howe - 16 Windsor Road - Great Neck, New York 11021 (joined 1-24-70)
Charles Hrinko - 2-33 Thirtieth St. - Fair Lawn, N.J. 07410 (joined 1-5-65, #253)
Donald K. Kaskey - Hotel El Rancho, P. O. Box 235 - West Sacramento,
California 95691 (joined 12-10-66)
Alan Merriman - P. O. Box 6 - Fairfax, Virginia 22030 (joined 2-18-67)
Dave Saint - 4415 - 4th Avenue - Regina, Sask. CANADA (joined 1-10-70)
Reid C. Wheeler - 615 O'Farrell - Olympia, Washington 98501 (joined 2-1-69)
Leslie G. Wood - 1463 Tadmor St. - North Merrick, L.I., N.Y. 11566 (joined 1-18-69)
J. A. Worcester - Worcester Electronics Lab - R. D. 1 - Frankfort, NY 13340 (2-14-70)

January 16, 1971

CHANGES AND CORRECTIONS

Mike Daniels - 226 East Glendale Road - Webster Groves, Missouri 63119
 Gary D. DeBock - 2539 N. Meridian Dr., EV - Great Lakes, Ill. 60088
 Marc DeLorenzo - 35 Sylvan Drive - Hyannis, Mass. 02601
 Tom Zeglin - Room 336, Altoona Campus, Penn State Univ. - Altoona, Penna. 16601
 (+renewal; joined 1-24-70)

		<u>EST</u>		<u>DX CALENDAR</u>		
Sat. Jan.	23	0200+	WMNC	1430	Morganton, N.C.	1kw NNRC
Mon.	25	0100-0200	WSSC	1340	Sumter, S.C.	250w NNRC
Mon. Feb.	1	0200-0400	WNAK	730	Nanticoke, PA	1kw NRC/Howe & Friedrich
		0300-0330	WHIP	1350	Mooreville, NC	1kw NNRC
			WNUE	1400	Ft. Walton Beh, FL	1kw IRCA/Bill Lemak
Sat.	6	0300-0330	WNWI	1080	Valparaiso, Ind.	250w IRCA/Al Ogrizovich
Mon.	8	0400-0600	KSRM	920	Soldotna, Alaska	5kw NNRC
Mon.	15	0100-0400	WSAR	1480	Fall River, Mass.	5kw IRCA/NNRC-Bob Friedrich
		0100-0400	WJDM	1530	Elizabeth, N.J.	500w IRCA/Bob Friedrich
		0230-0300	WSTP	1490	Salisbury, N.C.	250w NNRC
		0400-0500	WDEL	1150	Wilmington, Del.	5kw NRC/IRCA-John Lombardo
Sat.	20	0110+	WKKE	1380	Asheville, N.C.	5kw NNRC
Mon.	22	0200-0400	WSAR	1480	Fall River, Mass.	5kw NRC/Dave Schmidt
Mon. Mar.	15	0200-	WJMX	970	Florence, S.C.	1kw NNRC
Mon. Apr.	26	0200+	WGEG	1400	Greensboro, N.C.	250w NNRC

Note correct date for WSAR IRCA/NNRC is 2/15, not 2/1. WJDM is correct call. City is Soldotna. Because of errors which occur in taking info over the phone, those calling in CPC info are requested to also send an air mail pc to DEE with all details so there will be something to check against.

WMNC reports should be sent to: Mrs. Madelyn Y. Patton, PD, WMNC, P. O. Box 969, Morganton, N.C. Info from: -NNRC/John T. Tweedie

WSSC reports to: Mr. Al Earnhardt, Operators Engineer, standard add. -DX NEWS

WNAK is a repeat of earlier very successful test. IRCAers Stephen Howe and Bob Friedrich arranged this program, for NRC, since 730 is an NRC CPC freq. Reports should be sent to: Mr. Robert Neilson, CE, WNAK, 40 E. Main St., Nanticoke, PA 18634.

WHIP reports to: Mr. Ed Stanton (for) Mr. Wayne M. Nelson, Owner, WHIP, P. O. Box 600, Mooreville, North Carolina 28115. -John T. Tweedie, NNRC CPC Chairman

WNUE will use rr mx. Reports to: Mr. Jerry Ryan, CE, WNUE, P. O. Drawer 400, Fort Walton Beach, Fla. 32548. -IRCA/Bill Lemak

WNWI will test either 0300-0315 or 0300-0330. Reports to: Mr. D. E. Wiggins, CE, WNWI Radio, Center Street, Valparaiso, Indiana 46383. -IRCA/Al Ogrizovich

KSRM reports to: Mr. Bert McAllister, News Director, KSRM, P. O. Box 950, Soldotna, Alaska 99669. Does anyone know if this is the same Bert McAllister formerly at KBRC-1430, Mt. Vernon, Wash.? Bert was a DXer and NNRC member so it is likely. -NNRC

WSAR will test on Feb. 15, not Feb. 1; an error on your publisher's part. Mailing address and IDs will be given; taped reports as well as written reports are desired and should be sent to: Mr. Duane Burnham, CE, WSAR, Box 927, Fall River, Mass. 02722.

Name could be 'Brupham' per Jerry Starr. Correct name next week. Phone number is 617-677-9477; presumably calls are appreciated, prepaid as always. -Bob Friedrich

WJDM is correct call, not WJDN. WJDM is ex-WELA, eff. 1-4-71. Reports to: Mr. Robert N. Talitz, Asst. CE, WJDM, 9 Cardwell Rd., Elizabeth, N.J. 07201. Phone number is 201-965-1530. -IRCA/Bob Friedrich

WSTP reports to: Fred J. Ostwalt Jr., CE, WSTP, Box 157, Salisbury, N.C. 28144. -NNRC

WDEL will use music, cycle tone, and a surprise. Reports to: Joseph W. Jones, WDEL, P. O. Box 1269, Wilmington, Del. 19899. -John Lombardo

Nothing further of urgent importance.

WTLB DX was heard by John Lombardo, Irvington, N.J. w/good sig on lkw-ND.

WKLX was heard by Tom Sundstrom but no special programming; this was to be part of RS with dedications to NRC members. WJRL-1530 DX 1/4 not heard by Tom. No definite reports on WJRL, WMBS, or WASK at pub. hdq. as of 1-16-71.

This issue hits the mails Sun. AM sometime. Next issue only 3 or 4 days later in all likelihood. If any bulletin you receive is postmarked PM, it shouldn't be! -DEE

DOMESTIC CONTEST

#	Name, State (Province)	S&P	Pts	Stns	Types
1	Tom McCormack, IN	33	379	62	(14-48- 0-19)
2	Andy Kwiatkowski, IL	23	252	40	(9-20-11-12)
3	Gary DeBock, IL	23	247	38	(3-32- 3-10)
4	Rick Evans, IN/IL	26	246	37	(0-30- 7-19)
5	Ron Coleman, VA	21	232	40	(6-19-13-13)
6	Richard Eddie, MO	16	183	24	(10- 7- 7- 9)
7	Al Ogrizovich, IN	16	142	24	(2-11-11- 7)
8	Quentin K. Brown, Ont	19	133	23	(4- 9-10- 4)
9	Russ Brown, MI	14	125	18	(2-13- 3- 7)
10	Fred Hendricks, IL	16	122	19	(2-12- 5- 1)
11	Bruce Portzer, WA	10	121	21	(7- 7- 7- 2)
12	David Singer, VA	13	112	18	(2- 7- 9- 7)
13	Neil Bartlett, WI	12	106	16	(4- 4- 8- 8)
14	Larry M. Abraham, MI	12	105	20	(0-10-10- 7)
15	Steve Taafe, IN	11	93	14	(1-13- 0- 0)
16	Chuck Albertson, WA	10	92	14	(3- 8- 3- 1)
17	Micheal Daniels, MO	11	88	16	(1- 7- 8- 2)
18	Joseph Fela, Jr., NJ	10	88	13	(1- 6- 6- 8)
19	Douglas Nyholm, AZ	12	83	14	(2- 5- 7- 2)
20	Melville C. Coffin, BC	5	50	9	(0- 7- 2- 1)
21	Gordon Hanson, WA	6	44	8	(0- 2- 6- 0)
22	Roger S. Horie, MT	5	43	7	(1- 3- 3- 1)
23	Dave Christensen, WA	4	39	4	(0- 1- 3- 0)
24	Dan Adams, CA	5	35	5	(1- 2- 2- 1)
25	Mark Drogin, NY	3	33	7	(0- 5- 2- 0)
26	D. Alan Cunningham	4	24	4	(0- 1- 3- 0)
27	Father Jack Pejza, CA	1	10	1	(1- 0- 0- 0)

No Entries; Campbell, Ely, Faulkner, Friedrich, Hartloff, Heimburger, Hein, Hill, Johnson, Kamp, Kirk, Likens, Lombardo, Luoma, McDougald, Mohler, Nickels, Nittler, Northam, Nuthals, Pearkins, Pawlowski, Plonka R. & S. Shurtz, Tarr, Thatcher, Wheeler, Zimmerman

CALL LETTERS CONTEST

#	Name, State (Province)	Pts	Stns	Types
1	Tom McCormack, IN	109	43	(39- 4- 0)
2	Ron Coleman, VA	95	37	(28- 7- 2)
3	Jim Lersch, IL	89	33	(25- 5- 3)
4	Rick Evans, IN/IL	76	29	(25- 4- 0)
5	Andy Kwiatkowski, IL	70	29	(19- 7- 1)
6	Al Ogrizovich, IN	52	20	(14- 6- 0)
7	John P. Lombardo, NJ	49	27	(19- 7- 1)
8	Richard Eddie, MO	46	16	(11- 4- 1)
9	Quentin K. Brown, Ont	38	17	(13- 4- 0)
10	Fred Hendricks, IL	35	14	(13- 1- 0)
11	Larry M. Abraham, MI	35	13	(10- 3- 0)

Con't on Side #2

CALL LETTERS CONTEST
con't

#	Name, State (province)	Pts	Stns	Types
12	Neil Bartlett, WI	34	12	(9- 2- 1)
13	Chuck Albertson, WA	33	13	(12- 1- 0)
14	Bruce Portzer, WA	32	17	(16- 0- 1)
15	David Singer, VA	30	11	(9- 2- 0)
16	Mark Drogin, NY	28	9	(6- 3- 0)
17	Russ Brown, MI	24	7	(6- 0- 1)
18	Gordon Hanson, WA	24	7	(5- 2- 0)
19	Melville C. Coffin, BC	23	6	(4- 1- 1)
20	Micheal Daniels, MO	21	8	(8- 0- 0)
21	Steve Taafe, IN	20	7	(7- 0- 0)
22	Douglas Nyholm, AZ	19	6	(5- 1- 0)
23	Joseph Fela, Jr., NJ	16	5	(5- 0- 0)
24	Dave Christensen, WA	15	3	(1- 2- 0)
25	Dan Adams, CA	13	3	(2- 1- 0)
26	D. Alan Cunningham, IL	10	2	(2- 0- 0)
27	Father Jack Pejza, CA	6	1	(1- 0- 0)

No Entries; Campbell, Ely, Faulkner, Friedrich, Hartloff, Heimburger, Hein, Hill Johnson, Kamp, Kirk, Likens, Luoma, Mc Dougald, Mohler, Nickels, Nittler, Northam, Nuthals, Pearkins, Pawlowski, Plonka, R. & S. Shurtz, Tarr, Thatcher, Wheeler, Zimmerman

FOREIGN CONTEST
Junior Division

#	Name, State (Province)	Stns	Ctys	Pts
1	Chuck Albertson, WA	3	3	59
2	Gordon Hanson, WA	4	3	48
3	Quentin K. Brown, Ont	3	3	35
4	Ron Coleman, VA	3	3	30
5	Bruce Portzer, WA	2	1	28
6	Steve Kamp, CA	1	1	20
7	Rick Evans, IN/IL	1	1	17
8	Dave Christensen, WA	1	1	17
9	James P. Mohler, IA	1	1	16

No Entries; Hein, Hendricks, Horie, Johnson, Kirk, Northam, Pearkins, Pejza, Tarr.

Senior Division

No Entries; Garcia, Godwin, Nittler

Foreign Contests

Prizes-----!

*

*

Domestic	Call Letters	Jr. Division	Sr. Division
\$----place	\$----place	\$----place	\$----place
5 - 1	5 - 1	5 - 1	5 - 1
3 - 2	3 - 2	2 - 2	
2 - 3	2 - 3	1 - 3	
1.50- 4	1.50- 4		
1.50- 5	1.50- 5		

Convention Bids. This is the last call for convention bids for the IRCA's Annual Convention this summer. If you are interested in hosting a convention, write to me as soon as possible giving details of probable activities, hotels, etc. and naming those who will help put on the convention. The membership will be voting on the site at a later time (probably in February), so get those bids in. Richmond, Virginia has made the only bid received thus far.

Volunteers needed. The following posts are now vacant and interested volunteers are solicited. Please write, giving a brief resumé of your experience and qualifications, if you are interested in any of the following areas: East Coast DX Forum and DX Round-up Editor(s), assuming Marc DeLorenzo's duties (you may volunteer for one or both of these positions); Elections Committee Chairman (responsible for preparing and tabulating ballots in all club elections); State of the Month Editor (compiles information on the most easily-heard stations in the more difficult to be heard states); Publicity Committee Chairman (prepares promotional material on the club which could be broadcast on radio stations, published in magazines, etc.). In addition to these appointive posts, Tom Hartloff, 49 Highview Court, Nyack, NY 10960 could use some assistance on the New Member Welcoming Committee. This would involve writing to new members welcoming them to the club and providing answers to questions they may have.

Proposals going to the Board soon. All members are invited to comment on proposals as they go to the Board for decision. Write directly to your Board member, or submit your comments in a Forum report.

Bylaws Amendment, adding Article VI, Section 2 to read: "A uniform system of time shall be used throughout the DX Monitor for the reporting of receptions; this system of time shall be Eastern Standard Time. The Board of Directors shall not have the authority to change the system of time used without approval by a majority vote of the club members voting in a ratification vote." [Submitted by Phil Sullivan]

Editorial Policy Amendment, amending Article III, Section J to read: "No advance publicity will be given to any station broadcasting in violation of the rules of its specific nation's radio regulatory agency. Reports concerning reception of such stations may appear in applicable DX columns; however, no reports shall appear from any member who is reporting reception of such a station of which he is a member of its staff and no editor of any portion of the DX Monitor shall allow such a report to appear from a person who is not a member of the IRCA, but is a member of a station broadcasting in violation of the rules of its specific nation's regulatory agency.

[Violations of this paragraph shall be dealt with in accordance [with] Article XII, Section 2 of the Bylaws of the [IRCA]. Repeated violations, totaling 3 or more, shall be dealt with in accordance [with] Article XII, Section 3 of said Bylaws, if the 3 or more violations are incurred by any one member.] (Delete last two sentences) [Submitted by Mike Hardester]

ANARC Report

Wendel Craighead, 2110 W. 74th Terrace, Prairie Village, Kansas 66208 is now the Executive Secretary of ANARC, as IRCAer Gray Scrimgeour's term of office has ended. Wendel's primary DXing activity is SWBC, where he has logged 178 countries. His occupation involves directing educational, industrial and television films for a motion picture studio in Kansas City.

Alan Thompson of Great Britain has been elected Secretary-General of the European DX Council, ANARC's counterpart across the Atlantic. This marked the first time since EDXC was founded that the headquarters has been outside the Nordic countries.

No bids have yet been received for ANARC's 1971 Convention, though Richmond, Va. has indicated a willingness to co-host the ANARC Convention along with the IRCA gathering if they are selected by the IRCA.

FCC Rules

The following FCC Rule should clear up misunderstandings regarding CPC requests:

§73.10 Experimental period.

The term "experimental period" means that time between 12 midnight local time and local sunrise. This period may be used for experimental purposes in testing and maintaining apparatus by the licensee of any standard broadcast station on its assigned frequency and with its authorized power, provided no interference is caused to other stations maintaining a regular operating schedule within such period. No station licensed for "daytime" or "specified hours" of operation may broadcast any regular or scheduled program during this period.

The following measures are hereby submitted to the membership for vote. Enclosed you will find your official ballot, which should be sent to the temporary Elections Committee Chairman, Dave Prather, 1711 6th St., Apt. 14, Woodland, Calif. 95695.

Deadline for receipt of ballots is March 1, 1971. To be approved, the two Constitutional amendments must receive a two-thirds majority of the total club membership, the taped veries issue and the Bylaws amendments must receive a simple majority of those voting, in accordance with Art. VIII of the Constitution and Art. V, Sect. 2, Part 3-e and Article XV of the Bylaws.

Constitutional Amendment 1 [Submitted by George Bryson]. Amend Article VIII of the Constitution to read as follows:

"Amendments to the Constitution of the International Radio Club of America may be made by first submitting a proposal for amendment to the president of the IRCA, who shall have said proposal published in the DX Monitor no later than 30 days after receipt of said proposal. After publication, the president shall have the proposal put to a vote by the total membership of the club no later than 60 days after publication in the DX Monitor, with a deadline for acceptance of balloting to be set by the elections committee. Results of balloting shall be published in the DX Monitor no later than 30 days after the end of voting. To be enacted, an amendment must have the expressed favor of two-thirds of the total voting membership. Members who did not vote shall not be counted as against the amendment in any way whatsoever.

A. Any merger attempt brought about by either the government of the IRCA or any other DX club shall follow the same proposal and voting guidelines as set forth above, but for a merger to become enacted, it must have the expressed favor of two-thirds of the total club membership. Members not voting shall be counted as against said merger."

Constitutional Amendment 2 [Submitted by Phil Sullivan]. Amend the Constitution by adding Article IX--PUBLICATION to read as follows:

"All official publications of the IRCA shall be printed using either a typesetting or photo-offset process. The IRCA shall not rely entirely on volunteer effort to produce any official publication. This Article shall take effect 30 days after ratification."

Proposal 4.1-58. Taped verifications. [Submitted by Larry Godwin].

"Should taped verifications be fully accepted as having equal status to written verifications, and should the criteria for the constitution of taped verifications be identical to those set out in the current "Achievement Award Regulations?"

Proposal 4.1-59. Amendment to Article V, Section 2, Part 1, a new sub-part [o.] to read as follows: "(The President) Shall, in September of each year, request the Board to re-confirm the appointment of each Editor and Committee Chairman currently serving the club. Such request will be accompanied by the President's recommendation concerning each individual, based on a review of the past year."

Proposal 4.2-8. Amendment to the Bylaws, Article X, Section 3 [Submitted by Jon E. Pearkins, Jr.], the revised section to read as follows:

"The Board of Directors shall solicit during September of each calendar year bids submitted by those wishing to host the annual convention. The Board shall subsequently cause a special election to be held among the members to select the convention site and date. Such special election shall be conducted during the final third of each calendar year. The Board may, on its own motion, determine any bid made as unqualified prior to the special election."

Proposal 4.2-15. Amendment to the Bylaws, Article III to be replaced by the submitted draft and Article V, Section 4 to be replaced by the submitted draft. [Submitted by Larry Godwin.] These drafts appeared in the Dec. 5, 1970 DX Monitor, and, because of their length, they will not be redistributed at this time. If you do not have a copy of the drafts, they may be obtained, free of charge, from the publisher. The drafts basically clarify and amplify the IRCA election process and provide for the Board of Directors to be elected at-large, rather than on a regional basis.

Note: 4.1-59 above is an amendment to the Bylaws, submitted by Larry Godwin.

DEADLINE FOR RECEIPT OF BALLOTS IS MARCH 1, 1971

[This stencil typed by Mike Northam, on behalf of temporary elections committee chairman Dave Prather.]

ADDENDA

These are additions to last week's material caused by your pub. mimeographing himself into a corner and then finding the amount of material had been underestimated. Thus, no room left. Hopefully, this will not happen again. See this week's sections for addresses of Dave Faulkner and Bruce Heimburger and report regularly! -DEE

- 580 WCHS WVA, Charleston fair to good 1215 12/13. (BL)
- 1050 WHN NY, New York City off 2108-2128 + 2150-2200 12/13; no explanation except "operational difficulties." (RK)
- 1070 KNX CALIF, Los Angeles steady 0712 12/19; KYW & WHN weak by this time. A good time to listen if your rx is not selective and you have splash problems. (QKB)
- 1080 WOAP MICH, Owosso has only been hrd by me a couple times lately, 1500-1530 EST w/fair sig. (KB)
- 1160 KSL UTAH, Salt Lake City only hrd once last week, 2030-2101. (KB)
- 1190 WLIB NY, New York City good s/off 1715 12/5. Was over at Brh's house where DX tends to be bad for me. (DF)
- 1240 CANADA, Ontario: CRTC has approved a mini-network of COMMERCIAL 40w stns at Lake Helen, Pays Platt, MacDiarmid, Longlac, Aroland and Gull Bay. "The Dept. of Comm. has indicated that it would grant a technical certificate for this license on an exp. basis and that it does not prejudice its policy of requiring a minimum of 100w for privately owned AM broadcasting stations." (QKB)
- 1330 WHAZ NY, Troy at 0245 12/5 on ET. (TDP)
- 1340 WHAR WVA, Clarksburg poor w/ID 0421 12/28. (DSS)
- 1360 KFFA ARK, Helena was on my way to 1350 to check out KRNT tip but hrd MBS promos & end of MBS sports. ID 1759 12/8 turned out to be that of KFFA. Down tempo MoR. (DF)
- WPPA PA, Pottsville believed hrd on r/c-TT 0030-0045 12/28. (DSS)
- 1400 WJHO ALA, Opelika fair w/nx, wx 0230 12/28. (DSS)
- 1440 KOKY ARK, Little Rock hrd about 0630 12/13 till 0650 end of unsked test with 1000 cps tone. (DF)
- KHOG ARK, Fayetteville at 1800 12/9 s/off following KOKY s/off w/WHIS nulled.
- 1470 KZNG ARK, Hot Springs at 1805 12/14 hrd briefly w/Soc. Sec. PSA. (FDP) / (FDP)
- WCHJ MISS, Brookhaven at 1800 12/20 s/off. (FDP)
- WBIG NC, Greensboro ID & HI 0145 12/14; fair sig. AN MM? (QKB)
- WOHO OHIO, Toledo off at 0115 12/14 leaving XESM & WBIG. (QKB)
- WHHY VA, Huntington in o/mess (primarily WOHO) 0622 12/13 w/ID & spot for Huntington area business. (DF)
- 1480 KLEO KANS, Wichita at 1805 12/5 w/local WCIN nulled, while trying for KBOX after WMQM s/off. Didn't get KBOX but am quite satisfied w/KLEO. (FDP)
- WSHP PA, Shippensburg 0615 12/13 dominating freq. w/Xmas mx & nx. (DF)
- 1500 KGMR ARK, Jacksonville at 1750 12/17 w/WDEE nulled. (FDP)
- 1560 ???? unIDeds on 12/23: SS stn o/u WTRQ 0015-0017, who? Weak SSB 0040 looped west, who? Weak tone u/WTRQ looped S 0020, who? RR stn way u/unIDed MoR, once over 0050, loop W, who? MoR weak, ID as WPRC 0025-0055, looped W, who? (all unIDeds per QKB on 12/23)
- WKOG GA, Gorden commenced ET at 0135 12/23 w/mx. I must be the last person to hear this one in the EC. (KB)
- WADD NY, Brockport hrd 1628 12/24 s/off w/SSB; on top and in the clear. (KL)
- WTRC NC, Warsaw weak but loggable on ET w/mx 0010-onward 12/23. (QKB)
- 1580 WCCR ILL, Urbana. R/c 0115-0130 12/12 (second Sat.). (KGS)
- KCHA IOWA, Saint Charles f/c in nicely 0130-0200 12/23 w/rr mx, many IDs. Lots of testers this Wed. AM. (QKB)
- NJ, Washington was easy log under CBJ on 11/27 from midnight for TEST; Received form-verie in 10 days. (KGS)
- WILA VA, Danville---MD-I have 3 witnesses, all of them IRCAnS, to testify that we did hear WILA s/off 1715 on the afternoon in question. (DF) (See page 4, 12/12 issue; WILA was rptd in 11/ with both 1700 and 1715 s/off and MD (Marc) noted 'something fishy'. Explanation is on bottom of page 10 where this section is continued. C U there. -DEE)

SPECIAL FEATURES

Editor: Harry Helms, Box 111, Clark Howell, UGA, Athens, Ga. 30601

Not TOO Technical Reports on Some SONY Products

by Tom Garcia, Box 15186, Tucson, Ariz. 85708

First, a few further words on the Sony CRF-230 to supplement the DXF report of 9/5. I have a catalog from Sony (in seven languages what less!) which calls the "World Zone" portable a "masterpiece of radio technology". It is a 23 band receiver for the man who has everything, I guess, considering the price. Grant reported its US price as being \$695. At Sony at Tokyo I was quoted ¥198,000 and was told that the item first came out in 1968. At the current rate of exchange this works out to be \$550 US. Of course, you would have to pay Customs charges upon bringing it home. However, I have purchased a number of Sony items at my favorite "hole-in-the-wall" discount shop in Tokyo at an average of 23% off list, minimum. This makes the price work out to \$425, US. There is one small problem, the CRF-230 is very scarce, even in Japan you will have a hard time finding one to buy "off the shelf". Hope that this gives some of the discount price hunters a few ideas.

I have a Sony TR-1000 4-band portable which gives excellent results. It's much easier to carry around on trips than my Zenith Trans-Oceanic (now retired) and the price was much more reasonable. On top of that, it performs better. A few issues back, I noticed the comment, "For just a few dollars more you can buy the TFM-1000, with an FM band". True, but with the TFM (a look-alike to the TR) you sacrifice some of the SW frequencies as you only have 2 SW bands instead of 3. I prefer more SW bands, as FM is useless in the boon-dock places I visit. To further confuse you: The TR has 10 transistors and 4 diodes plus 1 thermistor while the TFM model has 14 transistors and 7 diodes plus 2 thermistors. Both feature RF amplification stages for high sensitivity.

An interesting Sony BC receiver of vest pocket size is the IC-200. This comes with a recharger for its built-in NICAD battery. The use of integrated circuits allows for the small size. List price in Japan is ¥7,900 (US \$22), discount price is US \$17. I haven't seen one for sale in the US yet, but it will be interesting to see how much they want for one. By the way, avoid this receiver's predecessor, the IC-100, it was a lemon.

The Sony TC-110 "Cassette-Corder" has several features which cause me to highly recommend it for use in the radio monitoring field. First, it has a built-in condenser microphone which is located behind a tiny grill at the front left corner of the 5½x9½ inch case. Due to this (and the fact that the unit operates on self contained batteries, it sits on my monitoring desk causing a minimum of clutter. Pickup quality of the built-in microphone is so good that I have not felt it is necessary to wire it directly to my receiver. As my monitoring desk contains quite a number of various receivers, it is quite handy to have a recorder which can be placed in front of any receiver, as required, without any dangling wires. Next, the Sony has an unique end of tape alarm which sounds a gong if you are using a Sony "Auto-Sensor" cassette. This recorder has all the extras, to include: Automatic level control, remote control, AC cord, optional rechargeable battery pack, and an optional switch controlled external microphone. CONTINUED ON NEXT PAGE

If you missed the 9/70 issue of CONSUMER REPORTS, check one out at your public library. Tested are 17 battery operated AM/FM radios. Only one was rated excellent on AM M/W selectivity. None rated higher than very good on AM sensitivity. The text does a very good job of explaining what to look for in a portable radio.

A number of bargains are available these days in 3 inch and 5 inch tape recorders. As far as sales go, these have had it. Any store still having these in stock must unload them, at a loss if need be. The cassette recorder has taken over. Watch Olsen catalogs as this company is the best source I've found. One word of caution, stick to well-known brands. Highly recommended: Panasonic products.

.....
 Review of the National NC-120

---by Bruce Portzer

The National NC-120 is a rather curious creature. To begin with it is a bulky sun-of-a-gun, weighing 70 lbs. and measuring 1x1 $\frac{1}{2}$ x2 feet in size. It features 12 tubes, 2 RF and 2 IF stages, and a phasing control never works. An additional feature is a phone jack in the rear permitting one to tape what one is monitoring off the front panel jack. Although the NC-120 has no bandspread control, which makes it almost useless for SW DX, it does have an excellent logging scale with which one can establish a frequency to as close as 1-2 kHz on ECB.

Selectivity is fair, with pretty broad bandwidth, especially on locals. A Q-Multiplier can compensate for this. And if you live across the street from a 50 KW xr and want something that is relatively spur resistant, I suggest that you avoid this rx like the plague. In an area of high station density (3 50 KWers and 5 5 KWers within a ten mile radius of my QTH) with a longwire antenna, I have had all sorts of trouble, e.g. a KBOI spur on 750, CBU/XETRA spur on 730 louder than CKLG, and a KJR spur on 1000 wiping out KOMO. However, a good loop will work wonders and reduce this problem to a tolerable level.

Sensitivity-wise, the NC-120 is a very hot performer. The results can be seen in my DXR and DXW reports of the past couple of years.

The NC-120 is not a very common rx, so I cannot say what a good price for it is nor can I say how mine compares with others of the same model, mine being the only one I know of in existence! However, if you are looking for a decent 30 year old receiver, this one just might do the trick.

Review of the General Electric P-780

by Bruce Portzer (again!)

The General Electric P-780 is a transistor portable selling for around \$40.00. It features a tone control, a dial light controlled by a momentary contact switch (which doubles as a standby switch when the batteries get weak, hi), and the antenna and ground terminals. Although it has no headphone jack, I found it a simple job to install one by drilling in the plastic cabinet. Power is supplied by six flashlight batteries.

You mean the Cowboys finally won a big one ???-Lynn Brooks
 My statements in the 12/12 DXM still stand!-Efram Glotz

GE P-780 Review Conclusion

Selectivity is good. I have heard, and in some cases verified, stations 10 kHz away from my locals, including the 50 kW-ers. The rx is relatively spur free with only 2 or 3 notable ones in a city of 12 locals and an equal number of suburban stations. Sensitivity is also great. I have rxed CAX4U-1010 in Lima plus several Asians on it. Total is 1/4 countries, plus numerous domestics. When used with an NRC loop things really got hot! It seems to have a relatively high internal noise level, but the front end is hot enough to take care of this.

I would rate it as an excellent rx for the price; it's shown itself to be a good performer on more than one occasion. It is probably as good as the Realistic TRF, but unfortunately lacks some of the features of the TRF and costs 50% more.

I don't know if Marc DeLorenzo started a trend, but here is another editorship up for grabs. The schedule I have and my new outside responsibilities make it impossible for me to get anything out by a certain deadline, and some of this material, Tom Garcia's in particular, has been sitting here too long. Thanks to all the contributors, it's been fun, and I hope that I again will have the chance to serve the finest DX organization in the world. 73's and good DX-HLH.

East Coast DX Roundup1/9 ADDENDA

(continued from the bottom of page 7)

- 1580 WILA VA, Danville. See page 7 this issue. The reason why two DXers rptd different sign off times in the same month for the same stn is that WILA is required to leave the air by 1715 EST during November. However, they may sign off earlier if they so desire. This applies to all daytime stns at both s/on and s/off; they may s/on later than SS and s/off earlier than SS. (DEE)
- ???? unIDed. Hrd stn here w/ "Country Music, U.S.A." at 0245 12/13. Definitely not KLOU or WCLS. Could it have been KBG0 Waco, Tex.?
- 1590 WGOE VA, Richmond TEST came on about 15 minutes late but also stayed on late. A real bunch of nuts was at the mike! (DSS) (FDP)
- 1600 WKSK NC, West Jefferson poor u/WWRL on f/c 0010-0015 12/21. (DSS)
- WCPK VA, Chesapeake hrd at s/on w/SSB on PSA 0600 12/28. (DSS)

CONTRIBUTORS

- (KB) Gregory Kim Bodker - 26791 Ross Dr. - Detroit, Mich. 48239 (my mistake last issue; DEE)
- (QKB) Quentin K. Brown - 59 Kenilworth St. - Ottawa 3, Ontario CANADA
- (DF) Dave Faulkner - 1430 Pine Grove Ave. - Port Huron, Michigan 48060
- (RK) Roger Koss - 78 East Second St. - Freeport, N.Y. 11520
- (BL) Bill Likens - 2578 Spaatz Avenue - Columbus, Ohio 43204
- (KL) Ken Lyon - 9415 Goodrich Road - Clarence Center, N.Y. 14032
- (FDP) Fred D. Precht1 - 6128 Glade Avenue - Cincinnati, Ohio 45230
- (KGS) Gray Scrimgeour - 227 Hanna Road - Toronto 350, Ontario CANADA
- (DSS) Dave Singer - 5501 Old Richmond Avenue - Richmond, Virginia 23226

Please be sure to report regularly to Dave and Bruce; make their job easier by reporting DX promptly. Always arrange by frequency, give call, state, city, times and date and details. Put your initials at the end of every catch and your name and full address on every sheet of paper. NEVER use both sides of the paper. These requests will make it possible for cut-and-paste and search-and-type editors to interchangeably use reports. And we can never tell when an emergency will arise.

BE SURE TO FILL OUT YOUR ENCLOSED BALLOT CARD AND MAIL IT TO DAVE PRATHER!!!

Editor Dave Faulkner 1430 Pine Grove Ave. Port Huron, MI. 48060

Deadline - Fridays, 8 days before date of issue.

Reports may be sent to Bruce's or my address for either DXR or DXF.

"Well bigger burger here goes nothin'

"Right Faulky"

- 540 CBT NFLD Grand Falls atop w/end of s/on 12/31 0431. (DF)
 560 KLZ CO. Denver w/Co. wx, then ID, 1823 12/23 atop mess. (DF)
 WFRB MD. Frostburg good w/cw nx 0645-0655 12/27 (JR)
 WHYI MASS. Springfield w/"WHYI nx w/Chuck ???" 0030 12/29)DF
 WIND IL. Chicago one of my most long sought, finally hrd w/
 telephone talk show 12/24 0230. (DF)
 WIS S.C. Columbus o&u WHBQ w/sx, nx, and wx, 1725-1734 11/21
 (JR) (Please report nothing over 1 mo old. - DF)
 570 WMCA NY. New York L&C 12/29 0028 w/ telephone talk show. Fast
 ID in the middle of a phone call. (DF)(Brh)
 WAAX ALA. Gadsden fair to good u/WMCA s/off 12/29 0105 (Brh)
 WKYX KY. Paducah 0100 s/off 12/29 w/SSB (DF)
 WWNC N.C. Ashville tent hrd 0120 12/29 rr & ID (Brh)*(Brh)
 580 WCHS W. VA. Charleston w/poor to fair QSA 12/22 2108 w/wx & rr*
 610 CHNC QUE New Carlisle in atop in FF w/s/off, GSQ 12/23 2358(DF)
 WSGN ALA Birmingham good w/rr, Drake type format, 12/21 0056
 (DF)
 WTOR CT. Torrington real surprise @ s/off 12/21 0001 after CHNC
 s/off. Completely dominating freq. (DF)
 620 CKCK SASK Regina all alone 12/21 0230 w/cw. (DF)
 WATE TENN. Knoxville fair reception at SS. (GKB)
 WVNJ NJ. Newark atop s/on SSB 12/31 0530 (DF)
 630 WPRO RI. Providence good w/CFCO nulled 0125-0129 12/26 w/rr (JR)
 680 WRKO MASS. Boston most sought after of all time finally hrd w/
 drake rr format 12/31 1804 for a climax to a fantastic
 year at the dials. (DF)
 WRNG GA. N. Atlanta o/QRM w/nx & sports 1700-1711 11/21 (JR)
 710 WOR NY New York xlnt reception 2200 EST. (GKB)
 730 CJNR ONT. Blind River in null of WVIC 12/22 1650 (DF)
 WLOK GA. Thomasville fair @ s/off 1800 1/4. How come so late???
 v/l (TM)
 WLIL TENN Lenoir City is regular here L&C between 06 & 0700
 daily. (TM)
 WFMV KY. Madisonville good w/cw 1740-1745 s/off 11/29 (TM)
 WPIK VA. Alexandria poor w/wx 0655 11/29 v/f (TM)
 740 CBNM NFLD Marystown good 0427 w/GSB then on @ 0429 12/31 (DF)
 WBAM ALA Montgomery in vly well w/phone calls and nx requests
 on ET 1/1/71 monitored 0130-0150 (Brh)
 ????? ?? Hrd AN w/MoR nx in EE MM 1/4 KRMG & KTRH are off (TM)
 790 KFGO ND Fargo fair on r/c-tt 0245 12/15. DO they verify (TM)
 840 WMOB ALA. Mobile bombs out WHAS daily 12 minutes a/LSS. (TM)
 850 KOA CO. Denver hrd 12/31 poor reception (GKB) (What time?-DF)
 WHDH MASS. Boston good u/o KOA, rr nx 0120-0135 11/30. (JR)
 WKIX NC Raleigh good o/u KOA /TEST 0103-0108 12/14 (JR) (KIX
 is still for kids. grok! - DF)
 860 KONO TEX San Antonio w/weak rr 0560 (that's what it says.
 grok! whatever that means - DF) 12/27 (JR)
 870 WHCU NY Ithaca w/CBS nx a/WKAR s/off 1700 12/22 (DF)
 910 WGBI PA Scranton o/u WSBA w/cw 0040-0200 s/off 12/7 (JR) Hrd
 12/21 AN w/cw. All Night show, RS. (DF)
 920 KDHL MINN. Fairbault way o/everything w/cw 12/21 0025 (DF)
 WJAR RI Providence good o/WMNI w/MoR 0237-0231, 12/26. (JR)
 In fair every SM 0200-0500 (TM)
 930 WLLL VA. Lynchburg good w/x/off of AM 1700 w/FM continuing AN
 11/28. (JR)

- 940 WMIX IL. Mt. Vernon S-9 ET @ 0230 11/27. They can be hrd daily here. (T.)
- 960 CFAC ALBT Calgary atop 12/21 0255. Are they 50 kw yet? (DF)
WELI CT. New Haven good w/tt and ann'd "on for frequency measurement 0110- 0113 12/14 (JR)
- 970 WMAX IL. Springfield long sought finally made it w/wx 0035, 12/21 atop freq. (DF) KAKC in later.
- 980 KMBZ MO. Kansas City 12/21 0257 w/ID Probably ET (DF)
- 990 WEEB NC Southern Pines OK on DX SPECIAL 0107 u/CBW, CBW is on til 0215 (TM)
WTCB ALA. Flomaton in on r/c-tt 12/24 0300 fair (DF) *(TM)
???? ?? hrd ETing often on MM 1/4 w/MoR & classical rx. Who? *
- 1000 WMAX MI. Port Huron in 12/21 1545 w/rr, female DJ. Good in null of WCFL 100 mw supposedly from Port Huron Northern HS three mi. away. (DF) *(JR)
- 1020 WPEO IL Peoria good w/KDKA nulled & w/MoR 1748-1800 s/off 1/2*
- 1060 WCOK NC Sparta all alone 12/21 0110 w/r/c-tt & ET (DF)
- 1080 WKLO KY. Louisville weak u/strong KRLD, 12/21 0130 rr. (DF)
- 1150 CKX MAN. Brandon just atop mess / "And now more Canadian talent on CKX" 12/21 0219. (DF)
WNDB FLA. Daytona Beach good w/nx & sports 1805-1815 12/18(JR)
???? ?? FF booning in w/talk, many mentions of Quebec. Rapid beeping interval signal-like tones between each rx item. 12/25 2340 (Brh)
- WGOW TENN. Chattanooga in w/ID 12/26 0400 QRM on ID FF. (Brh)
- 1170 WLKE WIS. Waupun in WWVA null 12/30 1644. cw until s/off when replaced by KVOO (DF)
- 1190 WAMB Donelson TENN w/ET playing jazz 12/28 0235-s/off 5 minutes later. (Brh) in perfectly w/weekly ET 0130 HMs (TM)
- 1210 KGYN OKLA Guyman null of WCAU 12/22 1830. Good. (DF)
WILY IL. Contrailia good in WCAU null until w/off from 1726 12/22. cw rx, down tempo (DF)
- 1220 WKRS IL. Waukegon w/ spots for bank of N. Chicago rr 12/30 1657 (DF)
WFWL TENN Camden good s/on 0715 11/29 (TM)
- 1250 ????? ?? Hrd w/classical rx. AN MM 12/28 u/WTAE, KSWU? Who?(TM)
- 1260 CFRN ALTA Edmonton good w/nx YL s/off ann 0305 11/30 (TM)
WNOO TENN. Chattanooga good on ET w/ID 0353 12/21. Do they verify? (TM) (Only thing I can say is try and see - DF)
- 1290 WCHK GA. Canton s/on poor 0600 11/30. (TM)
???? ?? Someone ANing MM w/ classical rx on 1/4. Who? (TM)
- 1310 WFAH OHIO Alliance 12/21 1701 w/nx. (DF)
WORC MASS. Worcester w/ID & something about a r/c. 12/28 0026 Not listed in f/c list. (Brh)
- WTLB NY Utica w/down tempo cw 12/29 1652 until 1700 pattern change & power cut (DF)
- 1320 WHIE GA. Griffin 12/29 1709. Just slipped thru. (DF)
- 1330 WOLD VA. Marion fair w/nx, spots, 0635 11/29, I suspect 500w PSA. (TM)
WYGO KY. Corbin ETing, SIDs 0345 11/28. (TM)
- 1340 WBAC TENN Cleveland fair s/on 0502 12/14 MM. (TM)
KSEK KAN. Pittsburg good @ 0102 s/off 12/16. (TM)
WGAU GA. Athens good on r/c-tt 0125 12/21 MM v/1 (TM)
- 1380 WAMS DEL. Wilmington first from Del 12/24 0210 w/rr. Just stopped here to sort of regroup and look what happened. (DF)
WAYZ PA. Waynesboro good at end of ET using OC 12/24 1216. (DF)
WLCY FAL St. Petersburg w/rr 12/24 0213 ID after WAMS fade(DF)
WSIZ GA. Ocilla good @ s/off 1745 1/4. Hrd on SRS as well.(TM)
- 1390 WLAN PA. Lancaster 12/20 2358 preparing to sign off. Good. (DF)
- 1410 WAZY IND. Laffayette 12/21 0400 DX TEST xlnt & atop w/tt & SIDs (DF) and very well done on 12/21 (TM)

- WCMT TENN. Martin r/c o/u mess 12/24 0242 ID. (DF)
 WDOE NY Dunkirk fair o/CKSL 2006-2009 12/30 (JR)
 WKBH WIS. La Crosse 12/21 0011 down tempo MoR good. (DF)
 1420 KTOE MINN. Mankato noted AN MM. Hope this is temporary (TM)
 WKCW VA. Warrenton fair o/QRM w/s/off 1645 12/31. (JR)
 WOC IA. Davenport w/info on stock sale, 12/31 1655. (Brh)
 1430 KELI OKAL Tula in fair w/ness 12/20 1801 MoR-rr (DF) Under WIRE
 w/ rr nx, 0232-0235 12/7. (JR)
 KOSI CO. Arvada 12/23 1758 fair w/sports, mentioned "our Denver
 broncos" 1800 ID. (DF)
 KRGI NEB. Grand Island 12/24 0150 xlnt on r/c-tt. (DF)
 WRMG ALA Red Bay on r/c w/dial tone o/WIRE. YL IDer. Do they
 verify? (TM)
 1440 KILO ND Grand Forks 12/29 0120 ID as KILO, Grand Forks' much more
 rx stn." (DF)
 WBAB NY Babylon s/on 500 w PSA 0600 11/29. Very strong. (TM)
 WGEM IL. Quinch atop at s/off 12/29 0130. (DF)
 1450 WLKS DY. West Liberty fair at s/on 0500 MM, 12/14. (TM)
 1460 WPON M(. Pontiac good w/ 500w PSA (? - DF) s/on 0501, 12/1.
 1480 WLEE VA. Richmond noted AN MM w/rr while looking for KRAE DX 12/
 18. (TM)
 WJFC TENN. Jefferson City 12/29 0201 w/r/c-tt, poor. (DF)
 WCFR VT. Springfield #1 from Vt. r/c-tt 12/23 0002-0006 end of
 r/c. Must have changed powers recently as CE gave 1,
 000 watts first, then corrected to 5,000 watts. (DF-Brh)
 1490 KLNK NB Omaha poor w/ID & psa 0315 MM 11/30. (TM)
 WLCX WIS. La Crosse good w/s/off 0210 12/21. (JR)
 1500 KOSG OKLA Pawhuska good at s/off 1815 12/16. (TM)
 KTXO TEX. Sherman fair at s/off 1815, 12/18. v/1 (TM)
 1500 WVSM ALA. Rainesville fair at s/off 1802 1/4. (TM)
 1530 KFBK CA. Sacramento in w/good sig. easy listening nx 12/21,
 0250 (Brh)
 KECK NE. Lincoln good on blizzard ex, 0205 MM 1/4 NE # 30. (TM)
 KPCR MO. Bowling Green fair on ET 0131 MM 12/28. (TM)
 KWLA LA Many on r/c-tt 12/21 0145. (DF)
 WELA NJ Elizibeth poor on ET w/old Railroad nx 12/28 before CL's
 change. (TM)
 WLCB ALA. Moulton 12/29 0246 1/ID on r/c during WCKY fade (DF)
 1430 WABQ O. Cleveland good ETing w/soul rock 0405 12/14. (TM)
 WKYK NC Burnsville rce & AWO pse note that this is a liscensed
 BCB stn and is not a pirate in Columbus Ind. Sri. (TM)
 1550 KKHI CA. San Fransisco booning in w/classical selections 12/21
 0230-0245. (Brh)
 KKJO MO. St. Joseph good w/rr nx 0120-0127 12/22. (JR)
 WBAZ NY Kingston 12/29 0110 ET w/rr DJ having fun cueing up rec-
 ords on the air and such. (DF)
 WRFL IND. Laffayette (Radio Free Laffayette) pirate xlnt w/under-
 ground acid rock til 0230 s/off w/250w, 12/15, 20 db
 o/S-9 here (TM)
 1570 KLLA LA. Leesville good 1805-1815 s/off 12/15 o/KMAR v/1.(TM)
 WTQX ALA. Selma fair w/rr & "WTQX power play" IDs 1749 1/4(TM)
 1580 KDAY CA Santa Monica finally w/ID poor 12/21 0220 (Brh)
 WAMY MISS. Amory w/s/off 1745 12/31. (Brh)
 WAXU KY. Georgetown good at s/on 0710 11/29. v/r. (TM)
 WJVA IND. South Bend good w/ rr, 1625-1640, 12/13 (JR)
 1590 WCBG PA. Chambersburg w/r/c 12/28 0000-0015. (Brh)

CONTRIBUTORS

GKB Gregory Bodker, Detroit, MI DF Yur editer
 Brh yur other editer JR Jerry Robertson, Crosswell MI.

TM Tom McCornack W. Laffayette, Ind

This has been such a riot that I want to do it more often. - DF

Jerry Robertson - 6065 Gardner Line - Crosswell, Mich. 48422

Sorry to hear about Marc's resignation, but now I can save on postage by taking most of my reports down to Port Huron myself, hi. If you guys need any help, just ask and you won't get it from us, hi. Totals now are- 509 hrd, 234 vrd, 38 states hrd, 32 vrd. Veries are WWRL-1600 v/q, WKNY-1520 v/l, KFEQ-680 v/q, WIP-610 v/q, KWOC-930 v/r, WMPS-680 v/l, KFER-680 v/q, WGY-810 v/q, CHOK-1070 v/l, CFTJ-1110 v/l, WSB-750 v/c, WGAR-1220 v/q, & KTOE-1420 v/l & CM. That makes about 200 CM'S, so everybody who wishes to swap CM's please write. CG: what freq. is a decent frequency? With nearly 6000 AM stations how can every frequency be decent? 73s and peace.

Tom McCormack - 275 Littleton Street - West Lafayette, Indiana 47906

Greetings! Domestic DXC points are at 411 now and 115 points in the CL's DXC with little DX done here in the past few weeks. Totals here are 50/50, 8/8, and 727 verifications. My most recent DX catches include WLKS-1450, WBAC-1340, WOLD-1330, WFMW-730 (#28 logged here on 730), & WBGN-1340. (A number of other stations were omitted for reasons to be found on another page-ed.) Recent veries received here are: v/l-KKDA-730, KJLT-970, WJEM-1150, WDIA-1070 (sent 60-70 enclosures), WDDT-900(hi DDT!), KOEL-950, WWOD-1390, WRYT-950-DX (v/s is Phillip J. Shea C.E.), KLLA-1570, WABQ-1540 (v/q too), WGAU-1340 (hiRC of Va.), KULF-790, KTXO-1500 (sez I'm their most distant), and WALE-1400 (took one year, w/s is Arthur J. Arruda C.E.). v/c: CFRN-1260 (my 8th verie from Alberta). v/r:WAXU-1580. v/f:WSRF-1580, WPIK-730, and WDEV-550 (my 50th state verified). v/q: 4VEC-830 and WABQ. GDD: KJR-950 has been noted with R&R mx. between 0400&0500 on MM here. Congrats to 'DCC' on hearing WPIC-790-DX test! DX'ers are welcome here anytime. 73's from Hoosierland. BECENYU (Tom, answer to question to be found later in ECDXF)

Gregory Kim Bodker-26791 Ross Dr. - Detroit, Mich. 48239

Hi, I have only received one verie since last report and that was WJIM-1240- Lansing. The date I heard them on was 1/2/71 and I got the QSL on the fifth. East service I's Say. Here's my QSL blacklist of stations holding out: WKHM-970, WQTE-560, WOAP-1080, WIID-1090, & WSDS-1480. Denver-KOA has been heard periodically with bad reception. Every time I have heard them I just haven't made enough details out for a QSL. (Kim, that is DX law no. one, hi.) So I'm still trying for it to get Colorado verified. Best DX to Everyone. 73's

DDT -817 Rawlins St. - Port Huron, Mich. 48060

The following will be a resume of our editorial policy. DXR: 1) dou-space all reports, 2) use only one side of the paper when reporting or some of your report may be chopped up, 3) don't type over mistakes as they are hard for DRF to read, 4) keep individual tips to under 3 lines when reporting, & report to DXR & DXF on separate sheets as DRF will be doing all DXR and I (Brh) will be doing all DXF. If this isn't done and the report comes in just under the deadline, one or the other section will likely be left out. DXF: I too, will stick closely to the EP and will make these few Inclusions: 1) I will not print any stations in which the DX'er has only sent out a verie to (this policy as MD's of a few issues back), 2) no slander, 3) a maximum of 5 catches that have been heard (but not reported) will be printed if they are included but they should generally go in DXR, 4) and finally, the deadline will be 8 days before publication date or every Friday.

Achievement Awards Committee The AAC, headed by Percy R. Kesteven, has prepared a two-page sheet of regulations for applying for achievement awards certificates. All member should have this sheet; new members get a copy with their New Member Packet. If you would like a copy, send a note to Don Erickson and request "AAC Rules". This in answer to Tom McCormack.-DEE

EDITOR: Richard C. Evans

DEADLINES: Thursdays thru 3/24!

P. O. Box 2146, Chicago Avenue Station, East Chicago, Indiana 46312

+++++

540 CBEF ONT Windsor, s/off w/GSQ 0105 12/24 (CG)
 WYLO WI Jackson, 1616 12/29 w/C&W mx, good (RK)

550 WGR NY Buffalo, way u/CMAN 0242 12/28, but enuf for rpt (CG)
 0205 12/28 w/mx, fair (RK) 0307 1/4 noted briefly (rce)
 KTSA TX San Antonio, 0347 12/28 w/EC, good (RK)

560 WHBQ TN Memphis, R&R, ID 0400 1/4 (rce)

570 CJEM NB Edmunston, poor, in FF 0040-0100 w/opera, piano mx
 till nx & fadeout (AK)

580 CKY MAN Winnipeg, in well nearly alone 0106 12/24. This is
 the first time I've hrd this one & now it's coming
 in every night! (CG)

600 WPDQ FL Jacksonville, weak w/RR mx 0328 12/28 (SM) R&R 0300-
 0330 1/4, fair some QRM probably KOGO (rce)

610 WIOD FL Miami, weak w/RR mc 0518 12/28 severe WDAF QRM (SM)

690 KSTL MO Saint Louis, good w/s/off 1745 12/28 No SSB (AWO)

730 CHIR ONT Leamington, 0256 12/29 w/HI show, good (RK)
 WPIT PA Pittsburgh, L&C 1650-1700 1/2 carry ing the NY Metro-
 politan Opera //-CBL-WGN (rce)

750 WHEB NH Portsmouth, 1703 1/2 w/road reports for the local area.
 Made a believer of AWO who was here & hrd it, hi (rce)

780 KCRL NV Reno, finally 'ere 1/1, 1928 to pattern change 1959,
 strong signal (JCJ)

810 WSJC MS Magee, excellent w/RR, local ads 1745-54 12/29 (NB)
 KAFE NM Santa Fe, 1/2 1910-s/off 1916, Gud sig with no one
 else around (JCJ)

850 WKIX NC Raleigh, fair, at times good on DX w/ET 12/14, slight-
 moderate KOA QRM (SM)

860 KONO TX San Antonio, excellent w/RR 0205 12/27 (NB)

890**WLS** IL Chicago, s/off 0102-0600 1/4 which enable me to catch
 WCBS s/off for a report (SM) Noted off 1/4 but some
 ET done with little splash (rce)

910 KCJB ND Minot, in well w/WSBA 0031 12/24. Been after this one
 for a while (CG)
 WSBA PA York, fair w/MoR mx 0340 12/28 (SM)

920 CKCY ONT Ste. Ste. Marie, noted w/RR o/WOKY during unusual Cx
 2050 1/1. WBAA & KARK also underneath w/RR (GDD)
 WGST GA Atlanta, 0332 12/28 w/sports, fair (RK)
 WOKY WI Milwaukee, 1315 12/27 w/ID, good (RK)

930 WBCK MI Battle Creek, 1033 12/25 w/spot, fair (RK)
 WBEN NY Buffalo, 0119 12/27 fair w/wx (RK)
 KROE WY Sheridan, Jan s/on 0800,...s/off 2045 daily (JCJ)

950 CFAM MAN Altona, 0225½ 12/27 w/ID, poor (RK)
 WSPA SC Spartanburg 2229 12/29 w/ID, heavy WWJ QRM (RK)
 KWAT SD Watertown, rare SSS catch again hrd w/CW mx, nx 1800
 1/3, traces of KLIK & KXJK s/off underneath (GDD)

980 WITY IL Danville, 0105 12/28 s/off ann. poor u/WONE (RK)
 WSIX TN Nashville, fair-poor mostly u/WONE 2240 12/21 rptd (CG)

990 WEEB NC Southern Pines, tentatively on DX w/mention of "----
 Radio Club" occasional c/w mx 0118-22 and also in
 briefly for next half-hour or so 12/27. Poor sig w/CBW
 on. Was WEEB on? (NB) Belive it was Neil, too tired
 here to fight CBW, though I did hear traces of it--rce

KTRM TX Beaumont, 0222 12/27, fair sig w/C&W. First time heard
 here at nite (RFK)

1010 KDJW TX Amarillo, 12/29 s/off 0100, Noted off other mornings,
 too. No longer AN? (RFK)

1050 CKSB MAN St. Boniface, 0342 12/25 w/mx FF (RK)
 CJIC ONT Ste. Ste. Marie, good w/MoR mx light RR 0137 12/28 (SM)

EDITOR: Richard C. Evans

DEADLINES: Thursdays thru 3/25!

+++++

1050 WHN NY New York, 2055 12/29 w/mx severe QRM from CJIC CKSB(RK)

1060 KGFY SD Pierre, s/off 1830 1/2 o/KYW, as I tuned in (rce)

1070 CHOK ONT Sarnia, fair u/WKOW w/"OK Radio" & MoR SID 0028-0033
12/27 (NB)

WKOW WI Madison, effective 1/2/71, new calls are WTSO (NB)

1080 WTIC Hartford, 0230 12/28 exc. w/nx, no KRLD (RK)

KRLD TX Dallas, 2258 12/29 w/BB game fair (RK)

1150 WDEL DE Wilmington, after centuries of trying, finally got
enuf 12/26 w/SSB s/on 0458 into "WDEL Radio News"
gone at 0505. CKX QRM, CKOC no problem here, easily
nulled (AK) (And, alas, I was in Mich. sleeping, hi-rce

KKUZ IA Burlington, fair 12/27 0742-0757 "Country Tiger" ID's
format is 100% C&W mx (AK)

KIMM SD Rapid City, 1830-1845 1/2 s/off w/live annmt RR mx (rc

1240 WSNY NY Schenecfady, poor w/rr 12/21 0303-0315 fade-out (AK)

1260 WFBM IN Indianapolis, exc. w/little QRM, MoR 0504 12/29 (AWO)
0318 12/25 w/nx, fair (RK)

1270**WRJC**WI Mauston, on quickie "frequence measurement test" w/100
cps tone 0102-6 12/31 (NB)

1280 WMRO IL Aurora, no AN-6, SP MM's 0100-0630 I believe, since
12/16. Plays underground RR mx AN (SM)

1300 WOOD MI Grand Rapids, 0528 12/28 w/nx, has WTAQ changed their
sked? (RK) Sure hope they're no longer NSP--rce

1310 WCCW MI Traverse City, L&C 1730 1/2 s/off no SSB or QRM (rce)

1330 WEAW IL Evanston, 1406 12/29 exc. w/spot for Chrysler/Plymouth

WTRX MI Flint, in o&u/WHBL 1758 12/27 (CG) (RK)

WHBL WI Sheboygan, in briefly alone 1759 12/27 (CG)

1340 WOOK DC Washington, in thru mess w/unID TT 0134 12/28 (CG)(SM);

1350**WXCL**IL Peoria, r/c is 0245-0300 4th MM per consistent receipt.;

???? MN, alone and fair, 1735-1742 FO 12/27 w/Minn nx (CG)

WSLR OH Akron, 0152 12/30 fair w/wx (RK)

1360 WSAI OH Cincinnati, 0303 12/28 fair w/nx (RK)

1370 KREL CA Corona DX test 0309-0333 12/14, Weak, fadey sig. fair
at times, almost inaudible after 0333 (RFK)

WTTS IN Bloomington, weak, fair w/RR mx 2126 12/16 (SM)

KGNO KS Dodge City, f/up to this one 1/1 1832-44 briefly--
first time since 1963 (JCJ)

1380 CKLC ONT Kingston, in shortly u/WKJG 2107 & 2114 12/27 (CG)

1400 WWIN MD Baltimore, ID thru all 0200 12/28 (CG)

WKFR MI Battle Creek, s/on 0530 1/2 w/non-coval SSB, into RR
pgm w/many SID's. Good sigs, QRM from WDUZ (GDD)

???? ?? Unid, had Carolina Cougars BB till SSB s/off 0224
12/30 (AK)

1410 CKSL ONT London, 0400 12/29 w/ID fair (RK)

WOTTNY Watertown, strong signals on 12/29 ET 0033-0100 tune-
out. Still on past 0300 (AK)

KWYO WY Sheridan, s/off nightly 0100 Sunday 0030 (JCJ)

1420**KXOW**AR Hot Springs 0642 12/28 "This is Radio Station KXOW
1420 kc. Hot Springs National Park, Arkansas concl-
ding equipment test" (AK)

WHK OH Cleveland, 0342 12/29 good w/mx (RK)

OUT OF ORDER

1410 WRMN IL Elgin, 1257 12/25 good w/rel (RK)

1440 WIOK IL Normal, only thing hrd was SID 0126 12/28 (CG)

WROK IL Rockford 1142 12/25 fair w/nx (RK)

KDNT TX Denton, in briefly w/SID 0032 12/23 (CG)

1450**KLWW**IA Cedar Rapids, unlisted f/c 12/28 so strong gave WVON
trouble! for list: 0305-0320 4th Monday (AK)

KOBENM Las Cruces, AN the morning of 12/27 12/28 0305 ET (RFK)

Editor: Richard C. Evans

Deadlines: Thursdays thru 3/25!

+++++

1470 WMPP IL Chicago Heights, 1216 12/25 good w/spot (RK)
 WMBD IL Peoria, 1809 12/30 good w/nx (RK)

1480 KLMS NE Lincoln, strong nights this area, 3 or 4 others under//, should be easy catch for west (JCJ) Also easy catch for east on r/c (rce)

1490 WABJ MI Adrian, strong w/ABC nx 0605 1/2, mx followd, QRM from WOPA & unid s/ons (GDD)
 KDMO MO Carthage, unlisted f/c 12/27. For list: 0240-0255 4th Sunday (AK)

1500 KSTP MN Minneapolis, 1545 12/27 daytime DX, fair sig (RFK)

1520 WKVI IN Knox, is a regular from Bremen, the only place I DX (CG) (Thanks for clarifying this, Chuck--rce)
 KMPL MO Sikeston, 0636 12/31 fair w/wx (RK)

1530 KSMM MN Shakopee, noted way o/WCKY during SSS 1/2 1755, local Nx final pgm, s/off 1800 non-vocal SSB used (GDD)
 KECK NE Lincoln, briefly 1829 s/off, no report too brief (JCJ) 0200+ 1/4, on for snow emergency, carried phone call from Ind., mentioned 70 inches of snow on the ground, hi. hrd while trying for WJRL special (rce)
 KRYT CO Colorado Springs, Nightly lately after KECK s/off 1831 1/2 Weak to strong (JCJ)
 WJRL MS Calhoun City, undoubtedly not on special as Roger Winsor called the station and got no answer. This during the time the test was sked to be on (rce)
 KMAM MO Butler, fair and very fady w/C&W & local spots, w/YL announcer occasionally 1704-12 12/29 (NB)

1540 WTKM WI Hartford, fair-good w/MoR 1310 1/1, no QRM noted. Fine sigs for power (GDD)

1550 KQXI CO Arvada, s/off 1900 1/2, very poor (rce)
 WCSJ IL Morris, fair 1300 1/1 w.MoR way u/semi-local WMIR. WMIR partially nulled (GDD)
 KOKA LA Shreveport, good w/nx 1805 12/31 (AWO)
 KOBY NV Reno, probably the one hrd very, very poor on SSS 1915 1/2 but SSS died 10 minutes too soon and CBE just rolled right in! (rce)
 KRGO UT Salt Lake City, poor on s/off during CBE dead air 1900 12/26. Hrd while replaying tape (NB) I didn't need a t/r! hi. L&C 1900-1928, nx, wx, many mentions of Utah during nx, almost no trace of CBE (rce)

1560 KPMC CA Bakersfield, weak but clear w/C&W mx 0134 12/27 (NB)
 WQXR NY New York 2055 12/29 fair w/spot for Taylor Wine Co(RK)

1570 WFUR MI Grand Rapids, dominant w/Nx, Wx 0605 1/4 o/CHLO/XERF after 0600 s/on. SM rel. pgm followed (GDD)

1580 KTUF AZ Tempe, s/off 1843 1/2, urging listeners to tube to 102/5 on the FM dial, unneeded (rce) (SM)**
 KLOU LA Lake Charles, fair w/RR mx 0118 12/12 much fluctuation*
 KWED TX Seguin, exc. w/MoR. s/off w/SSB 1820-30½ 12/27. Only QRM from KLOU which was barely audible (NB)

1590 WAIK IL Galesburg, a surprise battling WAKR 1723 12/22 (CG)
 WGEE IN Indianapolis, s/on 0600 SM 1/4 (??-rce) w/"Meet the Newsmakers" interview pgm. Gud sigs u/WAKR (GDD)

1600 CJRN ONT Niagara Falls, 0405 12/28 MoR weak sig u/KWOW OC & TT. KLAk off. What is CJRN's power? (RFK)(25kw--rce)
 KCRG IA Cedar Rapids, o/KLAk afternoons strong rock mx (KLAk is C&W) 1/2 (JCJ)
 KNCB LA Vivian, good w/s/off SSB 1814 12/31 (AWO)
 KBBB TX Borger, 1848-59 1/1, over KLAk mostly s/off 1859 (JCJ)

PLEASE USE THE 24-HOUR CLOCK WHEN REPORTING TO ME. THIS IS ALSO KNOWN AS ARMY TIME FOR THOSE INCLINED THAT WAY, HI.

+++++

REGULAR CHECKS VIA THE IRCA LIST:

1st FRI: WAMY-1580 MS (SM)	1st SAT: WSHN-1550 MI (AWO)(SM)
4th MON: KCRV-1370 MO (RFK)	KNIR-1360 LA (SM)
WXCL-1350 IL (RK)	3rd MON: WYMB-1410 SC (SM)
WHUN-1150 PA (RK)	WDIC-1430 VA (SM)
WCBG-1590 PA (CG)	4th SAT: WABD-1370 KY (RK)
KSYL- 970 LA (CG)	KIML-1270 WY (RK)

A TIP OF THE HAT THIS WEEK TO:

NB - NEIL BARTLETT, 717 Mark Drive, Verona, Wisconsin, 53593
 GDD - GARY D. DeBOCK, AdCom, NTC, Great Lakes, Illinois 60088
 rce - RICK EVANS, Box 2146, Chi. Ave. Stn., East Chicago, Ind. 46312
 CG - CHUCK GRISE, 1134 Northwestern Ave. W. Lafayette, Ind., 47906
 JCJ - JOHN C. JOHNSON, 625 Park Street, Sheridan, Wyoming, 82801
 AK - ANDY KWIATKOWSKI, 9624 Avenue M, Chicago, Illinois, 60617
 RK - ROBERT KRAMER, 3406 West Pierce, Chicago, Illinois, 60651
 RFK - RALPH KEMPER, 297 - 27 3/8 Road, Grand Junction, Colorado 81501
 SM - STEPHEN MILLAY, 550 Swain Avenue, Elmhurst, Illinois 60126
 AWO - ALLEN W. OGRIZOVICH, 2429 Schrage, Whiting, Indiana 46394

Rick Evans

Nice visit 1/2 from Al Ogrizovich who wanted to see what it was like to DX with a HQ and a loop. Made a believer out of him, hi. SSS that night was fabulous!! Noted WHEB-750 N.H. for the first time in quite awhile, but unneeded here. Also caught s/offers of WCCW-1310 KGFX-1060 KIMM-1150 KQXI-1550 KRGO-1550 KTUF-1580 and probably traces of KOPY-1550. You should have stuck around, Al. With SSS spanning the continent, that had to be my best session in a long, long time! Only verie in this week was v/q WDEF. Re return postage, I always send it and in about 75% returns, the station uses it (the staple hole is rather distinctive). And, I think, those who have seen my reports would disagree with the statement that I have to bribe a station to get a verie! At one time, it was urged that we send commemorative stamps on the chance the person at the station might be a stamp collector. Anyone who is familiar with, or seen, either the LaSalle or ICS course in business management, please write. 73....30.....

Reception Reports Those who are having trouble getting veries from KOA and other reliable though slow verifiers should bear in mind that reports are extremely unimportant to them. And the quality of the average report is so terrible that it amazes me stations continue to verify. Some reports are six months old when mailed; many in pencil and/or on notebook paper. Times are not converted to the stations' local time. And many have nearly illegible addresses.

Leaflet R "Writing Reception Reports" (Leaflet R) is taken directly from the IRCA DX Booklet and put into reprint form. It is available free, free, free. Already, at least 75 copies have been sent on request to non-affiliated DXers. It is hoped this might help stem the rising tide (?) of poor reports which is bound to decrease the number of verifying stations.

Worthy of Special Mention It is worth mentioning that some DXers go above and beyond the call of duty in sending extremely fine reception reports. Of the hundreds seen, those of Bob Karchevski and Richard Ryrholm are easily the very best. Each of the dozen reports seen from each of these IRCA members was a work of art. And if you follow all the guidelines in Leaflet R and then go that extra 'something', you, too, can do the same thing as Bob and Richard. -DEE

EDITOR: Lynn D. Brooks - Box 253 - Ponca City, Oklahoma 74601 405/762-6566

DEADLINE: Every Thursday

Report Often!!

MARV GARBER - 2539 Kessler Blvd. - Lincoln, Nebraska 68502

Cx here the past 2 mos. have been rotten compared to last year at this time. Very little TA activity here either. I have managed to log some needed WC stns, however, butmost have not verified. I'm interested to know if this so-called "Space Magnet" is really as good as it sounds. Now that NRC has taken upon themselves to put it down I don't know whether or not to buy one. Would somebody out in forum-land advise me pro or con?? LDB, you did an excellent job as MWDXR editor - tnx for a job well done! Gee, maybe the Cowboys still have a chance. We'll know by the time this is in print, hi! DX in DXR. 73. (Yes, the Cowboys still have a slim chance of making the Super Bowl, hi. Actually they are in it. Finally! One portion of your report had to be cut per EP, Marv. -LDB)

GARY NUTHALS - 1155 Mather Street - Green Bay, Wisconsin 54303

Recent veries are v/l WASK WCAZ KIXL WEUP KBRS KNIN WNOV v/f KRMG KGFX v/q KDAL WCTT WBAL KOB WBAM KSYL (verie signer WPE5ETY) & WPIC-DX. The CE at WBIC said he plans to run another test in the near future. New totals 590/295 stations. I've been sending return postage with my reports and most stations used it. As a sideline to BCB DXing I've sent reports to the circuit adjustment stations. Recently I received a letter from Cable & Wireless which said they couldn't verify the report because it was illegal. I know reporting telephone calls is illegal but test transmissions aren't to my knowledge. Sorry to see the DXC is back to written veries. I agree with GM that tapes are definite proof of reception. When the tape verie proposal comes up for voting by the membership (soon I hope) let's approve it. SCers write. 73.

ROBERT KRAMER - 3406 W. Pierce - Chicago, Illinois 60651

Hi. Just logged 3 new states: SC, MD, ND, & one new province ALB, & 20 new stations that I will not list. It looks like I'll reach my 1970 goal of 200 stns logged as I have 198 with 5 days to go. I will release my totals in the next bulletin. Latest: v/q WOHO WSMB WELI v/l WEEFw/bumper sticker. My rx has left me no choice but to DX BCB because all I get on SWBC is static. I think my new long wire is to close to the power lines. I think the day KOA veries will be the same day CMQ begins praising the USA's govt. Note to CE at KOA: don't verie till I get a taped verie, hi. 73.

BLAKE LAWRENCE - Box 803 - Canon City, Colorado 81212

This is my first report to MWDXF so I'll give you guys an intro. I'm 15, a sophomore at Canon City High School, & I've been DXing for two years. I just joined IRCA but I've been in the NRC since Sept. 70. I am an SCer, so SCers please write. I always have access to KDZA-1230 SCs and sometimes others. I use a Motorola Table radio, a Knight-Kit "Star Roamer", a very old Zenith console radio, & the family car rx. I hope to build a loop soon. I have heard some 521 stations from 39 states, 6 provin, Mexico, Nicaragua, & PJB-Bonair. My verie count is so small I won't even mention it here, hi. My farthest domestic is CBA-1070. Other good catches are YNX-750, PJB-800, WKBW, WTIC, WIFE, VOA-1180, KMBY-1240, & WUNI-1410. Best verie is WCFL, who sent me 2 SC's, pix of their DJ's, & a v/q, all sent AIR MAIL!! I'd better close so 73 from Canon City, Colo., home of the Blossom Festival, Royal Gorge, Buckskin Joe, me, and the Colorado Home for Incurable DXers! (Thanks for the fine report, Blake, and welcome to the MW-DXF. Report often! -LDB)

JIM BIRKENBACH - 3344 Bayshore Pkwy. - Arnold, Missouri 63010

Hi! I'm a new member and this is my first check in to DXF. I'm 19 yrs old & began serious DXing at the start of this season's winter DXing. I have heard 60/45 stns, 2/2 prov, 2/3 ctys. 20 states & 25 counties. Recent catches are: XERF XEG XELO CBW CBC. I use a 2' dia. spiral loop fed to a Knight-Kit "Star Roamer" & a Heathkit GD-125 Q-multiplier. I am anxiously awaiting my MMP for info on ant. & rx's suitable for BCB DXing. Tnx for info on KOMA. DEE, you are doing a good job and thanks for the name correction. Good DXing & 73's. (Welcome to the IRCA, Jim, and we hope to hear from you often. -LDB)

GEORGE W. TANNER - 8349 E. Cypress - Scottsdale, Arizona 85257

For the past 2 yrs I have been the Elections Committee Chairman for IRCA. I have met all deadlines req'd by our Constitution & Bylaws & have conducted several special elections as well. I hope the BoD will allow me to continue to serve in this position.

CHUCK GRISE - 1134 Northwestern Avenue - W. Lafayette, Indiana 47906

DX activity up a little due to vacations, but 1970 will still be a poor year, mostly due to apathy. Reports out to WSIK WAIK KCJB CKY WHBL WGR. Veries: wagl-1560 KFMJ-1050 WREN-1250 (needed f/up) KAMO-1390 KUPK-1050 WDIA-1070 KTCE-1470. Totals: 621/494 44/44, 6/6, 12/9. Heard total at 1082. Hope to have 500 verified soon. Good DX in 1971. 73

GARY D. DeBOCK - AdCom, NTC - Great Lakes, Illinois 60088

Greetings. Veries: v/l CKX-1150 WHAK-960 WHSM-910 v/q KHOW-630. WHSM & KHOW are slow verifiers but eventually get to it, hi. Totals 419/73 with 280 DXC pts; quite a few rpts out. The 12/19 Hammond, Ind. get-together was great, but we need one for all area members, not just the Chicago DXers. Too bad more dudes around here don't have a car, hi. Am hopeful of seeing a Wisconsin SoM article mentioned by NB in the 12/26 DXF; Wisconsin is a most-wanted state for many on the WC & has no 50kw pushover stns which anyone can hear. WBAY-1360 seems to be the best bet on the WC, with WOKY-920 a close second. West coast reception is pretty bad from this location; 5kw Seattle stations don't make it like I thought they could. On the other hand, 1kw EC stations like WHAG-1410 boom in on SRS, & Delaware-1410 is a regular catch at night. RCE says this has something to do with Lake Michigan, which seems possible when KJR-950, KUUU-1590, & KRKO-1380 are reported from the eastern shore. Verrry interesting, hi. 73's.

ROBERT KRAMER - 3406 W. Pierce - Chicago, Illinois 60651

Hello. As I promised last time I will give my totals for 1970. These will be from the end of May (when I started BCB DXing) to Dec. 31. From May to the middle of Sept. most DXing was on SWBC, but since then it has been mostly BCB. Stations: 221/125 (most of these loggings were this month when I sent out 120 reports, mostly BCB, so they are not veried yet), states 34/30, prov. 5/4, ctys 6/5, F/C 20/9. The big surprise for me was the logging of the r/c of KIML-1270 the same frequency as WWCA Gary, Ind. who is about 40 miles from here, & I didn't use a loop. If you want a complete verie from VOA (a different color too) send your reports to USIA, c/o Frequency Division, Washington, D.C. 20547. Latest: v/q KSCJ WIRL WBCK Radio Nederland-800; v/l KULY WKBH WLTD. Bye.

BLAKE LAWRENCE - Box 803 - Canon City, Colorado 81212

The NSP bunch has hit close to home. Semi-local KDZA-1230 is running promos for their "ultimate in service to Pueblo" by going 24 hours 7 days a week. I only have 4 stations logged on 1230 and KDZA will kill prospects on MMs I suppose unless I get a fantastic loop. I haven't gotten a DXM yet in my week of membership (not surprising) so I'm using editors' addresses in my sample copy of 10/3/70. I hope nobody has changed addresses since then. I'm looking forward to getting DXM weekly - I hope it's publishing & arrival dates will be more regular than the NRC's (my DX News is again two weeks late). (Blake, in nearly all cases your DX News or DXM's arrive late due to post office problems and not to publishing schedules. Once it is mailed there's nothing the NRC or IRCA can do about it. -LDB) I finally got my most wanted state of Oregon in KYXI-1520. Now my most wanted states are Virginia & North Carolina. I now have 37 states heard, 6 prov, & 6 countries. My sixth country came this week in 4VEH-1035 Haiti, which was also my first split. I now have a limited supply of KTLK, KIMN, & KDZA SCs (limited, hah! I nearly wiped out a whole store's collection of the things!). I am willing to trade, please write. That's 15, so 73s.

LYNN D. BROOKS - 2109 Mary Street - Ponca City, Oklahoma 74601

Well, I thought I would take a few lines to clear up a problem that may have developed. I had a call from an IRCAer up North who wanted to discuss his report which he said I should have received on a Wednesday. Not only did I not receive it on Weds., but it's now 11:00 PM on Thursday and it still isn't here so won't make it in this issue of the DXM. Ponca City is a small town of about 30,000 people, and to put it mildly, out postal service is horrible. I sometimes receive letters 5 or 6 days after they are mailed via first class. I also receive letters on occasion that were mailed from up north and went thru the post office in Lawton or Norman, Okla. which is way south of here. They are postmarked there and then sent here. Figure that one out. And it's happened several times. So if your report doesn't appear in the issue in which you think it should, usually the P. O. is to blame. Mail early, hi!!

=====

560 KLZ COLO Denver hrd w/local spots 12-27, 0530, KSFO off (DG)

790 KGHL MONT Billings noted r/c w/exc sig 0245-0300 1-4, very little fading, ID every 3 min. (CA)

810 KCMO MO Kansas City, hrd w/CW 12-27 0423. (DG)

860 KOAM KAN Pittsburg four state nx, 0735 12-30, good sig. (DG)

880 WRFD OHIO Worthington w/nx 0755 12-30 w/CW. (DG)

910 CJDV ALTA Drumheller hrd w/nx 0535 12-28. (DG)

KNEW CALIF noted off the AM of 12-28. (DG)

KALL UTAH Salt Lake City plays ins and outs w/KDEO/KNEW constantly during evening hours, KNEW dominant. (ds)

920 KOYK NEV Las Vegas apparant call change here w/NBC net, SID's 0210, 1-1. (ds)

970 WFLA FLA Tampa hrd 12-26 0548 w/wx check, great sig at times. (DG)

980 KUPI IDAHO Idaho Falls s/on 0758 12-30

1150 KAGO ORE Klamath Falls had a test 12-28 abt 0454. (DG)

1230 KQIK ORE Lakeview fc per list w/some mx 1-4 0300-0320. (DG)
1-4 0301-0325 w/good sigs. (BB)

KGEE CALIF Bakersfield 0330 w/ID and mx 1-4. (BB)

1320 KXYZ TEX Houston noted w/boating and fishing pgm 0650 12-28 (DG)

1330 KCLM CALIF Redding dominant on SSS w/ID & Mutual nx 1830, 1-3. (CA)

KOVE WYO Lander o/KPOK on SSS w/MOR & PSA 1845 1-2. (CA)

1350 KSRO CALIF Santa Rosa dominant w/KLRC looped w/BKB pre-game 2315 1-2. (CA)

1370 KXLF MONT Butte 12-31 0130 only hrd w/portables, looping KEEN & KGB slop. (ds)

1400 KTNM NMEX Tucumcari fc per list 12-28 0330-0345. (DG)

KXIV ARIZ Phoenix hrd at 2330 w/ID only on 12-28. (BB)

KDRG MONT Deer Lodge hrd at 1947 after over 100 hrs of trying on 12-31, it's only too bad I didn't get enough for a report. (BB) (We feel for you Bill...)

1410 WING OHIO Indianapolis hrd w/SID 12-28, 0430. (DG)

KPAM ORE Portland mixing w/CKVN on SSS w/rock 1942 1-4. (CA)

1430 WIRE IND Indianapolis hrd w/CW mx & ID 0441 1-4 fair at times. (DG)

KLO UTAH Ogden noted w/ easy listening mx 0315 1-3, w/ mention of the new sound of KLO...another rocker bites the dust?? (CA)

1440 KEWI KAN Topeka hrd 12-30 0601 w/ID then RR. (DG)

1450 KDXU UTAH St. George fc per list 1-4 0245-0300. (DG)

KGMV MONT Missoula hrd 0314 w/ID and CW 1-1. (BB)

1480 KLEO KAN Wichita hrd w/ID and local ads 12-28, 0506. (DG)

1490 KVAC WASH Forks fc/per list 1-4 0315-0330. (DG)

1510 KSOM CALIF Ontairo fair u/KYXI slop, and KTIM apparant pattern change 1942, 12-29. (KLS)

KTIM CALIF San Rafael fair w/KYXI nulled 1946 s/off msg, to return 1015, 12-29. (KLS)

KMND ARIZ Mesa w/MOR 1820 12-29 w/KYXI slop, & o/KTIM/KSOM (KLS)

1570 KCVR CALIF Lodi dominant o/CHUB on SSS in SS then EE s/off, w/SSB 2015:30. (CA)

1630 UNID? BC Tofino on sked w/wx rpts 2252:30. (CA) (Whots that?)

Thanks to:

CA Chuck Albertson, 103 Cedar Crest Ln. Bellevue, Wash. 98004
 BB Bill Block 1036 N. E. 80th Portland Oregon 97213
 DG Duane Giese, 2838 Darwin St. #7E Sacramento Calif 95821
 dS Dan Sheedy 5890 University #2, San Diego, Calif 92115
 KLS Kevin L. Slater 4750 Verda Lane, N.E. Salem Oregon 97303

San Diego, as of last night is in the running (as far as we are concerned) for the 1971 IRCA convention. Final details were hashed out here by FJP & myself. Think SUN, think FUN...SAN DIEGO 1971!

SPACE MAGNET As if in answer to Marv Garber's query this issue, DXM will soon feature two additional articles on the Space Magnet. Both are purely review, not construction. PRK's review could be considerable a "rave" review. The second one is less favorable and the third is frankly unfavorable. After reading all three reviews, you'll at least be in a better position to decide whether to purchase the finished loop, construct your own, or continue DXing with what you have. Also, if you need further 'fuel' for the decision, some very interesting material has appeared in DX NEWS. NRC's "Musings" editor was so impressed by Dave Copeland's demonstration of his S-M that he is purchasing one. Another NRC member, Isaac Eaves, says: "I sometimes use my 24" DCL just for comparison - it's definitely not in the same class." If it's good enough for Ernie Cooper and Isaac Eaves, your publisher wants one too! And, thus, the next review may well come from me. -DEE

WTMR-800 Camden, N.J. Tom Sundstrom writes: "WTMR-800 Camden, NJ 5kw D is now operating with a PSA power of 500w and s/on is 0600 ELT. ETs are random only when needed. FCs are done on RS and monitored by an operation in Hutton, Maryland."

BULLETIN MAILING Of late, DXM mailing has been on the erratic side. This issue is an extreme case but we'll continue getting them out as early as the workload permits. The 1/2 and 1/9 issues both had PM postmarks on some, but not all, issues. Reason isn't known as they were deposited at the main facility in Riverside, which is an 'NSP' operation, a minimum of 6 hours before noon. Members are requested to send me (DEE) details on when the bulletin is arriving. Anything later than Monday (by first class) for the last two issues is not up to par. No idea this issue but Tues. or Wed. would be reasonable.

KISN-910 KISN is still in hot water with the FCC per 1/7/71 newspaper clipping from Pete Warren, Salem. The gist of the article is that the FCC has refused to delay a hearing on the subject.

More on Loops Word from Ralph Sanserino is that response to the idea of providing kits for construction of an FET altazimuth box loop was very good; Ralph says that further details will appear in the 1/23 issue, including dimensions. The loop, to be known as the "FET-BCB Loop" (to avoid confusion with loops constructed from NRC plans), will cost in the vicinity of \$10 without amplifier and \$15 with it. Your publisher is suggesting that Ralph consider making available kits containing only the wooden parts and hardware for putting the wooden parts together (i.e. no wire and no capacitor, both readily available most places). This would cut costs considerably for those who have junk box parts and some spare wire. Ralph's address is 8422 Crane Circle, Huntington Beach, Calif. 92646.

Western TAs!!! A call from Gene Martin, Denver, on Sat. evening, 1/9, brought the good news that TA carriers were being noted on 665, 755, and 1214. Also 746; hopefully a lot of the Denver-area guys will have some TAs to report next issue.

CPC Members Those who arrange DX programs for IRCA are reminded to be sure and promptly send the details to: Ernest R. Cooper, 438 East 21st, Brooklyn, New York 11226. And whether sending details to other clubs or to IRCA pub, be sure and give all the details.

This issue WC DXF is on the page of DXWV-5

Editor: Father Jack Pejza, 3266 Nutmeg St., San Diego, Calif. 92104
Telephone: 714-282-0076 or 714-282-2184. Deadlines: Fridays, eight days before date of publication. Use GMT (EST + 5 hours) in reports, one side of page, preferably typed in order of frequency.

%% %%

San Diego Does it Again

The San Diego area members of IRCA have submitted a formal bid to mbn for the 1971 convention over the weekend of August 27-29. A block of rooms has been tentatively reserved at the Fabulous Inns of America in Mission Valley, one of the resort areas of the city. The hotel is a brand-new one; since it is a little off the beaten track, it is a little hard pressed in the competitive market for tourists, and is willing to make a real deal--singles from \$10, doubles from \$12-'s, three or four in a room for \$4 apiece per night. Since IRCA historically has been a "western" club, we hope that many of you will decide to join us here for the convention. Easterners are reminded that NRC is having its convention in San Francisco the following weekend; this would be a good opportunity for you to have a real vacation in California, even though you might not belong to NRC. End of commercial.

The Second Half Century of Radio (Condensed from Saturday Review, January 9, 1971)

Fascinating as ever, far more freewheeling than television, brimming with mature news coverage, portable in the ultimate sense via the transistor, the radio world is still very much a part of the American way of life and, in many ways, the most pervasive, and therefore, the most important of all the media of communication as we approach the twenty-first century. Today, believe it or not, radio sets sell at the rate of more than fifty million a year, counting auto radios and portable transistors. Including car radios, there are now more than 320 million radio sets in use in this country; radio advertising volume alone last year was well over a billion dollars. During news emergency periods, such as blackouts, assassinations, wars, political conventions, elections, ice storms, and labor tie-ups, local and national, radio is beyond argument the fundamental communicating medium. It is said that every other person in the United States listens to radio at least once a day.

Where is radio going in its second half century? Well, its a long time from the days of Joe Penner, Fred Allen, H.V. Kaltenborn, Amos 'n' Andy, Paul Whiteman, Fibber McGee's closet, the Quiz Kids, and Orson Welles's Martian invasion. Television has largely superseded radio in the prime evening hours as the great American escape mechanism, just as post-dinner TV has also largely stripped the printed word of its right in the field of escape fiction. Yet, the printed world and radio, now both largely non-fiction, live and flower for an ever better-informed public. Radio in particular seems to have grown up since TV took over its hackneyed situation comedy routines, its stand-up comics, its weekly musicals. What was worst in radio has deserted for the glamour of the picture tube. What is left is often the very best in music at many levels, news coverage unparalleled in any other medium including TV and print, some of the most rewarding talk, sober or gay, available anywhere, and a format so simple and comparatively inexpensive as to be indestructible. Where is radio going in its second half century? It is going to stay right here, that's where, quite possibly continuing to increase in stature and wisdom with the years and at the expense of its wealthier but deteriorating relative, network TV.

Listeners' Loggings- East Coast

- 530a ??? SS in only a few seconds 0941 12/27 with SS talk and LA-type music. QRM from two beacons. No ID. TICAL? (DE) (Probably. Ed)
- 530 NB Ontario, North Bay, beacon, 125 watts. Their tone is 7 seconds long, then 2 seconds SP, followed by Morse "NB" and 2 seconds SP! back to tone. Excellent over another beacon 12/28 0358-0403. They verify. (DE)
- 530 APUP UnID beacon, location unknown. Heard day and night here. ID as APUP every 15 seconds in Morse. (DE)

PLEASE SUBMIT ALL REPORTS TO DXWW IN GMT (EST + 5 hours, CST + 6 hours, MST + 7 hours, and PST + 8 hours. For instance, 2200 1/15 EST = 0300 1/16 GMT.

- 540a ??? UnID poser; EE with Jim Nabors Christmas show; apparent US type announcer gave time as either 10½ hours ahead of EST or 90 minutes less. Classical music also heard; weather report at 1050 called for wind and show, high of 45°. Heard weakly 1037-1050 12/27. (DE) (Could this be CBT, Newfoundland? Ed)
- 650 ??? UnID with organ music 1054-1056 12/27 under WSM test. (DE)(Venezuelan?)
- 655a ??? Weak carrier noted 0230 12/25. Nothing more. (DE) (YSS?)
- 665a ??? UnID with steel band music and EE singers; tones after speaking sessions. Unsure of language spoken--too distorted at times when there was talk. 0356-0408, 0426-0428 12/19. (DE) (Probably TGRT. Ed)
- 670 ??? UnID with EE rock but SS speaker 0411-0416 12/24 under WMAQ.(DE) (Cuban?)
- 700 RJR Jamaica, Kingston heard poorly 1/3 under WGN when Cuban faded, between 0515 and 0600. EE spots, and music. No clear IDs, but mention of Jamaica often. (KGS) (720, Gray? Ed)
- 720 HJAN Colombia, Barranquilla apparently the one with YL and men in SS, LA-type music and marches. ID seemed like "Emissora Unidas" heard 12/22 0322-0339. (DE)
- 750 ??? UnID with steel band music 0326 under WSB 12/19, then faded. Jamaica? (DE) (Could be. Ed)
- 765a ??? UnID Weak carrier noted 0205 12/26. (DE) (YSKL? Ed)
- 780 ??? UnID EE with Big Band music under WBBM 0104-0106 12/24. ZBVI? (DE)(Yes)
- 820 HJED Colombia, Cali, "La Voz del Rio Cauca" good over WBAP 0415 12/16.(DE)
- 830 CMCA Cuba, Havana very good with "CMCA--Radio Cordon de la Habana" ID 0202 12/18. (DE)
- 4VEH Haiti, Cap Haitien poor 2352-2401 12/17-18 with Christmas music, FF ID. Taped 12/25 when it was excellent over WCCO with news, program schedule, etc. 0200-0210. (DE)
- 834 ... Belize, Belize. Usual 20 db over 9 on 1/1 with church service from Belize City to 0615. Has anyone logged the 920 kHz outlet they mention in the sign-off announcement? (KGS) Very good (taped some) with local ads, a biography of Handel and "Your Good Health" plus more ads 0207-0247 12/18. (DE) (No one has reported the 920 outlet to my knowledge, Gray. The country recently, I believe, officially changed from British Honduras to Belize. Ed)
- 840 HJBI Colombia, Santa Marta good under WHAS 0033 12/24 with LA music. (DE)
- ??? UnID FF with Tijuana Brass 0028-0032 under WHAS and HJBI 12/24. Checked CKVL and 4VEH...wasn't either of them. (DE) (Dunno, Dave. Ed)
- 900 ??? UnID with sitar and Indian music, etc., 0449-0500 and then what seemed to be an EE speaker at 0500. Too mucy XEW for a clear ID. 12/18. (DE)
- ??? UnID telephone conversation between YL at station and others. 0434-0440, again at 0527 12/18. Didn't sounds like SS. (DE)
- ??? UnID FF with contemporary and easy-listening music 0514-0533 12/18. I do not think it was Quebec FF. (DE)(The only one I can think of readily which might possibly be one of these 3 UnIDs is Radio Barbados which recently switched here to avoid ZBVI. Ed)
- XEW Mexico, DF excellent over all that other QRM 0414-0418 with chimes, ID, LA music, etc. 12/18. (DE)
- 1035 ??? Weak carrier noted nitely about 0100 here. Haiti?(DE) (Oui. Ed)
- 1060 ??? UnID SS with news 0104, then YL speaker, Cali mentioned. At 0107 "La Radio Pablo..." heard, followed by a march, then pop LA music, 12/18. (DE)'
- 1070 ??? UnID SS with tones and what sounded like "Radio Nacional" in ID 0435 12/16. Announcer sounded military-like. Rumbos music played until fade out at 0443. (DE)
- HJCG? UnId, Bogota mentioned several times 0339 12/17. "Centaura" heard at 0339, possibly part of ID. Ad with two speakers 0340. Cali mentioned 0341. Speech resembling those of Castro at 0346. (DE) (Probably Radio Santa Fe. They slur the slogan; possibly it could sound like Centauro.)

- 1080 HJ?? Colombia? LA chant music, station overpowered WTIC. Faded at 0426 12/16. Mention of Bogota heard, then chimes and orchestral music when fade ended. (DE)
- ??? UnID SS 12/16 0440, two SS men with local ads, chimes at 0441, some sort of news or editorial at 0445, distorted ID at 0445. AST TC at 0514 12/16., ID as "Radio Parisinosa". Another AST TC at 0530, s/off data (10 kw), then guitar ID and silent without anthem. (DE) (Could be YVQJ, Radio Barcelona. Ed)
- ??? UnID SS with guitar music to 0559 12/16. ID as "Radio ... America"; 0600 apparent s/off; NA at 0600 $\frac{1}{2}$. Not Cuban or Mexican. (DE)
- 1100 ZDK Antigua, St. Johns logged on 1/4 and 1/5. On 1/4 was heard off and on from 0100 to 0330 with MoR music and infrequent announcements. Mostly poor with heavy WKYC QRM. On 1/5 was heard 2215-2300 with calypso, spots clear ZDK ID. Good at times but some WKYC QRM. Should be a new country for most as it was for me. Taped report off. By the way, Antigua is pronounced "Antiga", no "U". Lots of luck, Ed Krejny. (AM)
- 1110 ??? UnID news in SS with chimes between reports. 2337-2339 12/16. ID at 2338 sounded like "Ondas del Caribe" but it must have been something else. One tone played every 4 seconds after, as announcer spoke. Lost by 2340. (DE)
- 1120 ??? UnID, very distorted LA music and singers 2314-2326. ID at 2329 seemed to include "Occidente". At 2330 clock, chimes, LA music, then ID at 2332 and orchestral music. Chimes at 2333, signal lost then, 12/16. (DE)
- 1130 ??? UnID SS with sports event, very emotional announcer 0322-0350; may have been a soccer game. LA music at 0355 12/17. Too much WNEW to hear clearly and definitely ID. (DE)
- ??? UnID SS with march fanfare 2343, musical chimes, YL and male speakers with chimes again 2346. Ads, "Lara" or "Mara" heard several times 2354-2356 12/16. News apparently 0003-0008 12/17, with chimes all through. (DE)
- 1475 ... Austria, Vienna IS clear on 12/30 at 0356 but not enough strength from the programming to report. Much wanted. (KGS)
- 1490a ??? UnID with Russian program, with talk about Poles and Americans, along with mentions of Israel. Very clear, deep fades 1101-1112 12/27. Speaker changed 1112, choral music at 1115. Could this be a US station carrying Russian language program early Sunday morning? (DE)(Possibly)
- 1546 BBC England heard at 0600 s/on with one ID, preceded by TT at 0558. Not enough to report, unfortunately. 12/30. There was weak audio under the BBC's carrier before 0558, who's heard on EC--East Germany?(KGS)
- 1562 ... Switzerland, Beromunster. IS's quite good at 0504 12/30 at s/on, but strength not as good as in previous years. (KGS)
- 1586 WDR West Germany, Langenburg good on 12/30 from 0454, but again even on this occasion of decent TA reception, not as good as past few seasons. (KGS)
- Midwest
- 540 YNOW Nicaragua, Managua, "Radio Corporation" s/on 1100 12/7. (BN)
- 650 KORL Hawaii, Honolulu heard for first time in more than 2 years due to local images, booming in 0815 12/7. (BN)
- 660 4V.. Haiti. The 1970 WRTH fails to list a Haitian here, but I had one a year ago, and surely heard it again on 1/3 0240-0300. Symphonic music to 0250, and FF speaking male thereafter for ten minutes. One of 3 non-US station arriving here across that time span while WNBC was absent on auroral night. (GM) (Pg. 233 of WRTH'70 lists 4VUE, R. Lumiere, Cayes, as 250 watts. Ed)
- 690 CMBC Cuba, Havana, SS program with music and announcements by YL. 1/5 0626 excellent; ID at 0630 as Radio Progreso de Nacional, Territorio Libre del America. (RK)
- 700 HCJB Ecuador, Quito ID in EE for DX 12/14 0732 asking for reception reports and promising QSL for 700 kHz. Cutting through WLW very well with some one else in SS, TIHB? (BN) (SI on TIHB. Ed)

- 720 KUAL Hawaii, Kauai 0755-0805 12/29. Caught a good call letter ID on the hour, surprisingly good signal in WGN silence, a new one for me. Weak SS station in background, but I'm inclined to believe Cuba was silent at the time. This Hawaiian later actually put on some Hawaiian music--unprecedented. (GM)
- 725 SRS Surinam, Paramaribo. Conditions have been so poor I'm actually reduced to listing this one heard. Came with fine volume about only time this winter 0235 1/3. (GM)
- 765 YSKL El Salvador, San Salvador ID with calls and frequency 0625 12/7. (BN)
- 810 HJCY Colombia, Bogota, "Radio Sutatenza" heard frequently MMs 0900 with program called "Buenos Dias" through WGY/ (BN)
- 850 YNAV Nicaragua, Managua, "Radio Continental" ID 1020 12/21. (BN)
- 854 OAX4H Peru, Lima, "Radio Nacional del Peru" 0958 11/30. This is your "Ecuadorian", Fish. (BN)
- 870 ??? UnID with "Radio Central" ID in SS 12/21. Who? (BN) (Only thing I have listed, Bill, is Radio Cristal, HCNV2. Ed)
- 880 OBZ4N Peru, Lima strong 0850 "Esta es Union en el Camino" 11/30. (BN)
- 925 PJA6 Netherlands Antilles, Aruba "Radio Victoria" s/on with anthem 11/30 1000. (BN)
- 970 XEDF Mexico, D.F., ID and s/off 0755 12/28. ID as "XEDF, Esta es estacion del Distrito Federal". (BN)
- 1010 XEEB Mexico, Esperanza 0703 much mentions of "San Ramon" through CBR 12/21. (BN)
- 1035 4VEF Haiti, Cap Haitien one of strongest on dial 1015 S9 11/30. (BN)
- 1075 TIFC Costa Rica, San Jose. Always seem to hear this one with religious programming in EE. "Voice of the Evangelical Church" at 0300 1/5. Then into VOA news in EE. There is still a very weak one at about 1071-2. (GM)
- 1080 YVQJ Venezuela, Barcelona heard most MMs 0900 and after. (BN)
- 1100 HJCN Colombia, Bogota heard many MMs 0900 and on. "Radio Reloj" (BN)
- 1150 XERM Mexico, Mexicali, "Radio Mexicana," not "Musicana" as I reported earlier. (BN)
- 1209 CM.. Cuba, "Reloj Nacional" easily separable from HJFF on 1210 0740 12/14. (BN)
- 1210 HJFF Colombia, pereira heard most MMs very strong as early as 0615. (BN)
- 1600 XEAE Mexico, Cd. Acuna s/off 0702 after KLAQ s/off 12/28. (BN)
- West Coast
- 640 CMQ Cuba, Havana very poorly during KFI SP 1107 1/4. (FJP)
- 655 ... North Korea, Pyongyang with fairly good signal 12/31 1305; first time noted in a while. (SK)
- 880 OBZ4N Peru, Lima booming signal on peaks 12/31 1001-1030; fair to poor on fades. "Union en el Camino" (SK)
- 1560 XEVIP Mexico, D.F. strong with special Christmas program 12/25 AN; also ran AN New Years with MoR music program. (SK)

Verifications

- 660 YVNA Venezuela, Coro sent specific v/1 and color postcard QSL. Took just under 3 months. V/s is Director R.J. Oberto Marmol. SS verie. (DE)
- 780 ... Barbados, form letter saying QSLs weren't ready yet, but I would receive one when they were. V/s: CE, signature illegible. (DE)
- 800 PJB Netherlands Antilles, Bonaire sent religious pamphlets and QSL folder. V/s: B. Jones, TWR staff. (DE) / Radio Nederland via PJB took about 3 weeks. IRC enclosed. No v/s. (RK)
- 830 4VEH Haiti, Cap Haitien sent EE program schedule and QSL. They say 4 VEC is the one on 830. "4VEH" I guess is the name of the "Network". QSL Linda Ragsdale is v/s. (DE) (4VEH is the shortwave outlet on 9770. Other outlets are 4VEC, 830; 4VEF, 1035; 4VSO, 2450; 4VE, 6155; 4VEJ, 11835; 4VWI, 15280. All ID as 4VEH. Ed)

- 830 XELA Mexico, D.F. sent friendly SS letter. V/s: Jose Luis Fernandez, H. Address: Rio Tiber 100, 7 o. Y 9 o. Pisos, Mexico 5, D.F. (DE)
- 880 YVMP Venezuela, Barquisimeto sent Radio Lara QSL, confirmation was typed in space but no signature. Took about same time as YVNA-660. YVNA however much more interested in DX reports. (DE)

Reporters

DE Dave Egan, Valley field, Quebec
 SK Steve Kamp, San Jose, Calif.
 RK Robert Kramer, 3406 W. Pierce, Chicago, Ill. 60651. (Welcome, Bob)
 GM Gene Martin, Denver, Colo.
 AM Alan Merriman, Fairfax, Va.
 BN Bill Nittler, Englewood, Colo.
 FJP Your editor
 KGS Gray Scrimgeour, Toronto, Ontario

Geomagnetic Indices

Dec. 30-Jan. 5	10	2	5	18	28	10	10
Jan. 6-Jan. 12	3	0	0	0	5	6	2

Tips on Verifying Latin Americans-- Bill Hein

1. Always report in Spanish. Addresses are in WRTH.
2. Keep a copy of your report for a follow-up.
3. Send a local postcard with your report; sometimes you get a pennant in return.
4. Use mint stamps for return postage. DX Stamp Service has them.
5. Enclose some colorful cancelled commemoratives from the U.S.
6. Use plain stamps on envelop.
7. Wait six months before sending a follow-up.
8. Sent the follow-up registered mail.
9. Good luck!

Question and Answer Period

Q. What is a DXer? A. A DXer is a person who attempts to receive distant and weak radio stations for the purpose of hearing the stations, not merely for their content.

Q. Does membership in a DX club automatically make one a DXer? A. No. It implies that the person is interested in DX, but in no way states that he is actually a DXer.

Q. Should DX clubs admit non-DXers? A. There are two schools of thought. Various DX clubs (E.g. the Australian Radio DX Club) require that a person actually DX and report to the club bulletin regularly in order to maintain membership. Most U.S. clubs, however, admit anyone who has the price of membership.

Q. Which is the better policy? A. This depends on the goals of the club. If it is interested primarily in attracting a large number of interested people, the second policy is better. However, if the club is interested in having all members actively participate, then the first policy is better.

Q. Which policy do you think is better? A. At the moment, I favor the second. Because of this, I have let my membership in various non-BCB clubs lapse; I did not contribute reports; therefore, I felt that I should not belong to such clubs.

World Radio TV Handbook According to O. Lund-Johansen of World Publications, the 1971 WRTH is in the mails to all IRCA members who sent in orders to Larry Godwin. This as of January 9, 1971. Because international air mail from Europe is so fast, those who ordered air mail, probably already have their copies. It isn't unusual to receive air mail from Europe in under 48 hours; rarely does it take more than three days to Riverside. If you missed out on ordering a 1971 WRTH with the first order, don't want to wait until the spring order, and still want to save money, drop DEE a card stating you want a copy. If and when they become available, you will be notified. This applies to WRTH 1971 only.

Renew Early Will anyone see this? Will this actually print out? If you do see this, how about sending your renewal now. Three months before exp. is not too early. Surprise mbn! And when you renew, tell mbn you saw it here!!!-DEE

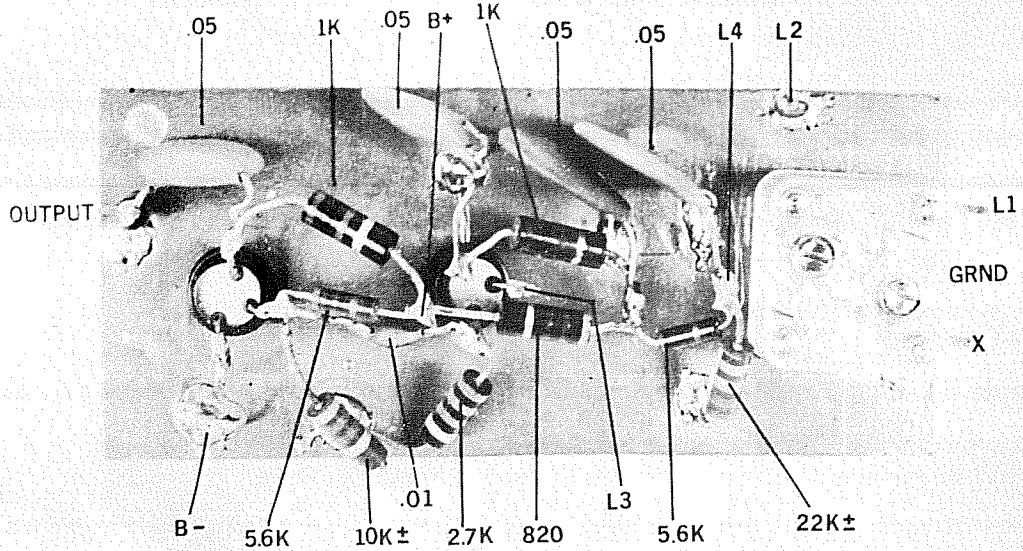
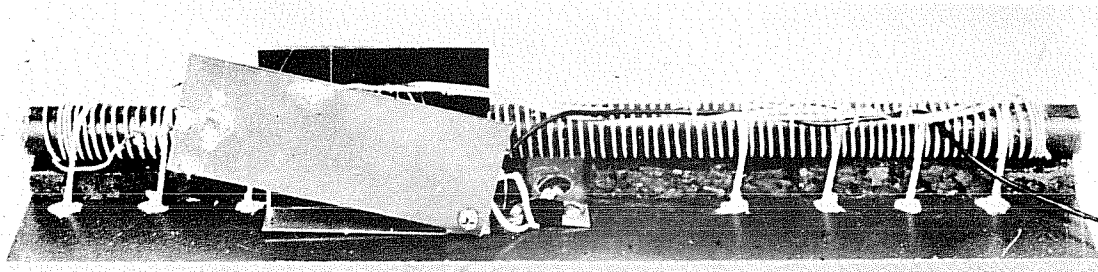
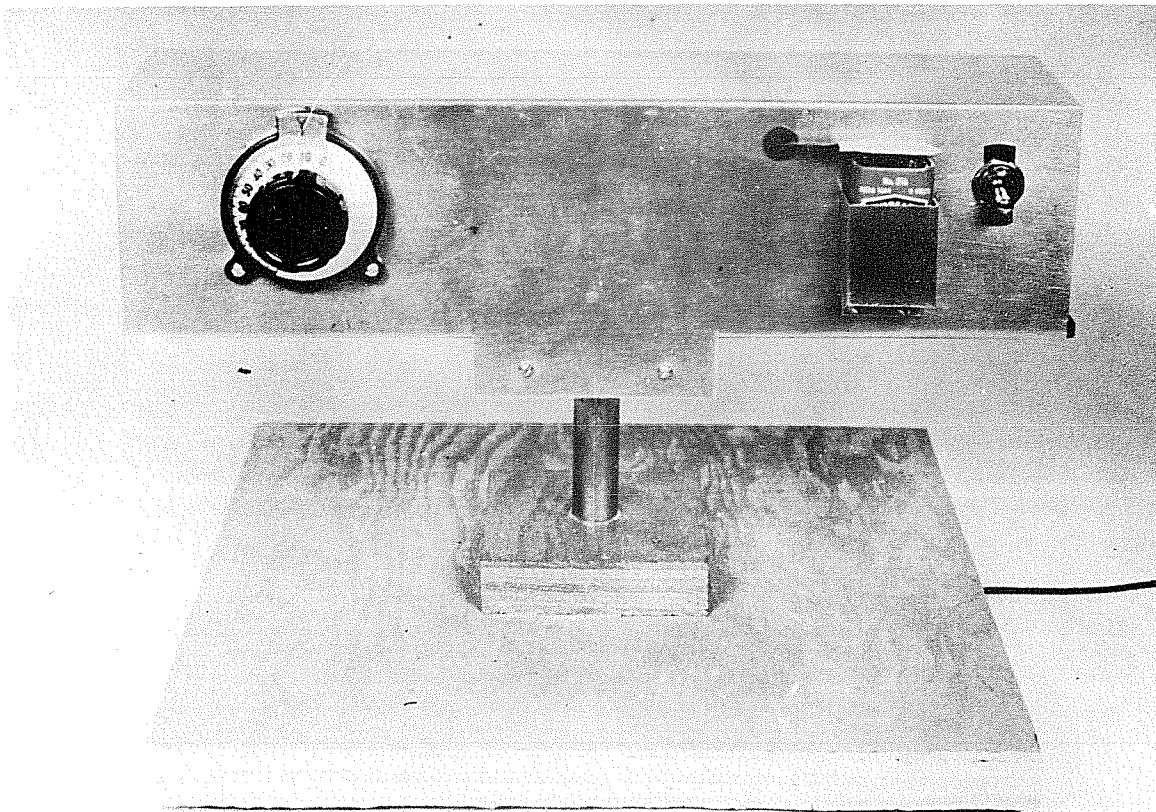
J. Adams: DEE is doing a good job getting the bulletin out and all that; however, I believe his censorship is debatable. Censorship and the "mechanical" aspects of the publ. job aren't related. I feel that DEE shouldn't censor. DEE said some issues ago that "...the bulletin is now being made to reflect the standards of the average member...". Well, DEE, just what is your definition of an average member? Did a whole lot of these "average members" contact you and ask you to begin censoring? Or is this censorship just your own standards? Only about 15% of the membership support DXM. Are the "average members" that other 85%? Would appreciate a definition, DEE. "Personal attacks" aren't as bad as some of y'all think. If someone regularly rpts "fake loggings" to DXM, and these loggings are proven to be fake, then that someone deserves to be attacked. If someone causes irregularities in the club govt, then that someone is asking for it. If someone willfully makes false accusations re someone elses loggings, then that someone is asking for it. The threat of being "canned" by the membership should make anyone be sure of the stns he reports to DXM. 73

Jay Murley - 1733 Candlestick - Newport Beach 92660
(Enroute home from the East.) Spent a week in Boston, Mass. and had the opportunity to visit the "other" club's equivalent of Don Erickson's "Toyland". Only one thought: how these guys ever succeed in putting out a bulletin in the winter is beyond me. They had half a foot of snow on my arrival---and then they got more. And more. And more. When their publishing crew finally gathered, half had to ski in. That's one kind of hassle DEE and all don't have to face. Or can you imagine southern Calif. ever having to coexist with an inch (much less their foot) of snow? (We had over an inch 5 miles from here, Jay-BJ).

Kevin L. Slater - 4750 Verde Lane N.E. - Salem, OR 97303
Hi gang. I see where a certain group is trying to oust our Elections Committee Chairman, George Tanner. George has done a great job in his position. He's been getting blamed for things that aren't even his fault. I think somebody is out to get him for personal reasons and not for valid reasons. From past knowledge, this this is further substantiated. Some of these persons should get the boot themselves. Well, now that the term is about to begin, my DXing will fall back from the active level it's been over these past two weeks. Had a chance to get a few f/ups out and the results are beginning to appear. Recent veries: v/l KKAR-1220, KREL-1370 for DX, KWYO-1410 for their final r/c, KBAM-1270, CKKC-1390; v/SC KATA-1340; v/r KLIQ-1290, KWTC-1230, and KAPT-1220. An article in one of the local nx papers says that KAPT will come back on under new ownership and new calls in two or three months. Time to go. 73

Credo A. Bisquera - 86-123 Kakaianola St. - Waianae, HI 96792
DX conditions in Waianae for the month of Dec. have been sparatic. Loggings still have been confined to the WC with occasional WBAP-820 and WOAI-1200 (Texas) popping in. Had a friendly chat with Glenn Hauser via phone as he was awaiting flight to new assignment in the mainland. California's loggings of 5,000 watt stns. for this month were KCGO-600, KNE-910, KABL-960, KMBN-1290, KDIA-1310, KEEN-1370, KYOS-1480, and KUDU-1590. I enjoyed PRJ's article on the Worcester Ferrite Loop Antenna. "Hawaii Makahiki Hou" and good DX!

Doug Pearson - 2896 Yale St. - Vancouver 6, B.C. CANADA
Greetings fellow DXers. Well the year 1971 is now here. A reintro is in order. I'm 23 and have been a member of the I.R.C.A. since January, 1968. As of late there has been no DX around this radio shack. That is no DX to really be of any value. However, I would like to mention that I have some DXM's for sale. If anyone is interested, pse write. I have Volume 6, #17 to 34, Vol. 7, #1 to 34 and Volume 8 to date. Name your price. Mention re postage. All replies should be directed to me at the above address. Well there is not much to say so I'll wish each and everyone of you a very Merry Xmas and a prosperous New Year. 73 and the best of DX in 1971.



How to Build the SPACE MAGNET Shielded Ferrite Loop

J. A. Worcester
Worcester Electronics Laboratory
R. D. 1
Frankfort, New York 13340

The theory of the shielded ferrite loop was covered in a previous paper titled "The Shielded Ferrite Loop: Principles and Practice". If you do not have this, a copy may be obtained by writing IRCA headquarters, 6059 Essex St., Riverside, Calif. 92504.

Since writing the above article, considerable experience has been obtained with the large size cores and additional or revised information will be detailed briefly. The actual number of turns with the shield in place turns out to be about 102 using a 12" x 0.6" imported rod with a permeability of 400. This is more than twice the estimated number and the computed performance increases accordingly. On the other hand, the "Q" is not quite as good with the imported rod as with a 12" x 1" domestic rod with its permeability of 120 (and its cost of \$20). The "Q", however, affects the signal-to-noise only as the square root and the actual performance is demonstrably better with the \$5 imported rod.

Measurements in a shielded room show quite constant nulling over the band of 60 db. The spaced winding employed is equivalent to a box loop in this respect. Another 10 db or more can be achieved by concentrating the winding in a co-planar configuration in the manner of a spiral loop. The signal-to-noise performance drops considerably, however, and the spaced winding is recommended for general use. It is essential to keep in mind the facts that nulling is very imperfect with sky wave propagation anyway, and that the nulling performance obtained under controlled conditions may be all but ruined by re-radiation from nearby conductors in the home.

Before proceeding with the constructional details, a word about the pre-amplifier. By all means use one. Not only will gain be added but more importantly, the signal-to-noise ratio will be improved significantly, as well. Additionally, the isolation of the loop tuned circuit from the antenna tuned circuit, produced by the transistor, will permit the selectivity of each to contribute algebraically to the reduction of unwanted signals in the manner of a conventional tuned R.F. stage. It is not generally recognized that the use of a loop with the pick-off coil connected to the ant.-ground terminals directly is essentially two tuned circuits connected in parallel. If the two were perfect identical transformers, no additional selectivity would be provided by the loop, the inductance would merely be halved and the capacitance doubled. There is a mitigating effect, however, in the fact that the transformers are far from perfect and the resulting leakage reactance does provide a small isolation between circuits but far from that provided by a transistor.

This pre-amp uses transistors rather than FETs and the choice was not difficult but because of the publicity that the latter have received in the popular press, there is a general feeling among members that, if you want to be "with it," an FET is a must.

How to Build the SPACE MAGNET Shielded Ferrite Loop

Page 2

A basic problem with the FET is stability. An amplifying device has to be unilateral or effective amplification is impractical. A similar high impedance device to the FET is the vacuum tube and for this application, the 6BA6 would be a possible choice. It has a plate-to-grid feedback capacitance of .003 picofarads and it was made this low because it bloody-well had to be. A typical FET, on the other hand, has a drain-to-gate capacitance of .8 picofarads- 250 times greater! So they tell you to neutralize- but neutralizing high impedance circuits 250 times is harder than balancing three billiard balls one on top the other! The transistor has a feedback capacitance of 2 picofarads but its input impedance is only a couple of thousand ohms instead of megohms and the feedback is therefore at vacuum tube levels.

Much has been said and written about the fact that an FET can handle many times the input signal, without overload, than can a transistor. Sure it can; but it has to in order to break even. The reason is that optimum noise figure at one megacycle dictates an input impedance of 65,000 ohms for the FET and 260 ohms for the transistor. This means that a much larger signal has to be applied to the FET than to a transistor. By taking the square root of the above figures, it can be shown to be about 16 times higher. Assuming the FET can handle approximately 700 millivolts, rms, and the transistor, 26 millivolts; there would still be an FET advantage in signal handling capability of $700/26 \times 16$ or 1.68. However, this cannot be realized in practice except at one frequency. The reason is that the tuned loop impedance and the required FET impedance for optimum noise figure vary in opposite directions as the frequency changes. For further information on this, consult the reference in the next paragraph. As a matter of fact, most FET designs are not optimized for noise figure at all and the FET is merely connected to the top of the loop which has an impedance of about 500,000 ohms at one megacycle. Under these conditions, the FET, to break even, now has to handle 26 x the square root of $(500,000/260)$ or about 1.14 volts. Actually, therefore, the transistor input can handle $1.14/.7$ or 1.64 times that of the FET before clipping occurs. Perhaps it should be emphasized that this conclusion applies to the broadcast band and not to FM.

Perhaps the overriding consideration favoring the FET in the minds of most members is the 6 db loss of "Q" that results when the loop is matched to a transistor input. This loss is not necessary because it only occurs when maximum gain is realized. We are not interested in maximum gain but rather in maximum signal-to-noise ratio or best noise figure. This requires a considerably unmatched condition and with a typical A.C. beta of 100, only a 10% loss of "Q" will result from the transistor. Any member who is interested in pursuing this in greater detail is directed to "Noise in Transistors" by F.N.H. Robinson appearing in "Wireless World" for July, 1970. One would be fortunate, indeed, to so successfully neutralize an FET that effective dynamic loading does not exceed 10% on the side of resonance where the feedback is negative.

How to Build the SPACE MAGNET Shielded Ferrite Loop

Page 3

Perhaps I should have mentioned earlier that two FETs in a cascode connection, which, when packaged in one unit, is called a double gate FET, do have an effective feedback capacitance of .02 picofarad. This is a considerable improvement over a single unit but the feedback is still 7 times higher than a tube. It is also expensive, draws a lot of current and is easily damaged; so why use it? The total annual production of FETs is miniscule compared with that of bipolar transistors - and for good reason.

The constructional details that follow are based on experience derived from the construction of several samples in response to members who were either too busy or did not feel quite up to performing the construction themselves. While this turned out to be a rather difficult way to "make a buck," the experience was useful in finalizing a design that is dependable. In anticipation of possible further requests, ten additional samples have been produced which have served to point-up the basic reproducibility of the design so that if reasonable care is used in construction, satisfactory results can be assured.

As can be seen from the photographs, three wood pieces are necessary. I used 3/4" plywood but if this is not available, by all means improvise rather than buying a sheet of the stuff. The base is a 10" x 10" square with a centrally located hole 5/8" in diameter that does not quite go all the way through. The hole accommodates a 4 1/2" section of 1/2" rigid copper pipe.

One of the 3" x 3" blocks of similar plywood is cemented and nailed to the base and also has a through 5/8" hole. The copper pipe is inserted in the small block and pushed down until it seats near the bottom of the base. It is cemented in this position. A 3/8" hole is drilled through the previously undrilled section of the base to permit the passage of the output leads. Four rubber feet are attached to the bottom of the base to permit the passage of the output cable. The remaining 3" x 3" wood block is cemented to the underside of the platform carrying the loop. It, too, has a centrally drilled hole (5/8") and this acts as the bearing for the rotating superstructure. The assembly will look better if the wood pieces are painted. I initially spray-painted the base with dull aluminum lacquer and the smaller pieces with bright penny copper.

The platform mentioned above is a piece of phenolic 12" x 3" x 3/16". In order to make room for the pre-amp, the loop is not centrally located but is mounted 1 3/4" from the front on cork blocks. These blocks measuring 4" x 5/8" are cut from sheet cork 3/8" thick such as is sold by Montgomery Ward for decorative purposes. The cork acts as a resilient cushion for the rather brittle ferrite rod and is non-hygroscopic as well. The best way to cut the cork is with a finishing blade on a table saw but if this is not available, use a razor blade. The cork may tend to flake off. To prevent this, apply a coat of polystyrene Q-Dope which will hold it together and, at the same time, secure the cork pieces to the phenolic board. The holes for the nylon cord used to fasten the loop should now be

How to Build the SPACE MAGNET Shielded Ferrite Loop

Page 4

drilled using a small drill. They are spaced one inch down each side of the cork spacers with the holes on one side being midway between those on the other. While you are at it, drill a $\frac{1}{4}$ " or $\frac{3}{8}$ " hole in the exact center of the phenolic platform to allow the output leads to pass down the copper pipe.

It is now time to wind the loop. As has been reported in DX Monitor previously, the rods for this purpose are available from this laboratory for \$5, plus postage. With a pencil, put a mark every $\frac{1}{8}$ " down one of the flat sides, making a total of 96 marks. Concerning the wire, I have been using #22 solid; but since there is a tendency, with the shield in place, for the loop to want slightly more turns than the pencil marks provide, #24 wire might be preferable as the inductance per turn will be slightly higher. Regarding the use of litz, I have found no improvement of any significance using 15/44, though again, the slightly higher inductance per turn proves useful. On order, I have some 220 strands of #44 litz coming in soon and full information on the use of it will be available by the time this appears in print. If interested, write for additional details.

The loop is best wound by first unreeling about 20 feet of wire and fastening the spool end in a vise or some such. By running the extended length through a cloth held in your hand, the wire can be straightened. Attach the loose end of the wire to one end of the rod by wrapping around a $\frac{1}{4}$ " x 3" length of electrical tape. Since it has been found that most loops tend to bottom out at 550 kc/s rather than 530 or 535 when one turn every eighth inch is used, try winding the first 10 turns closer together so they occupy only 5 marks and then proceed winding one turn per pencil mark until the last 5 marks are approached (remembering to leave room for the tape at this end also) and congest the final 10 turns as at the start. You will find it most convenient to wind by rotating the rod, while keeping the wire taut, holding one end of the rod in each hand, and thus slowly moving toward the fixed source as the winding progresses. The 2-turn secondary will be added later. After finishing the winding, tape down the end and paint the entire winding with polystyrene Q-Dope.

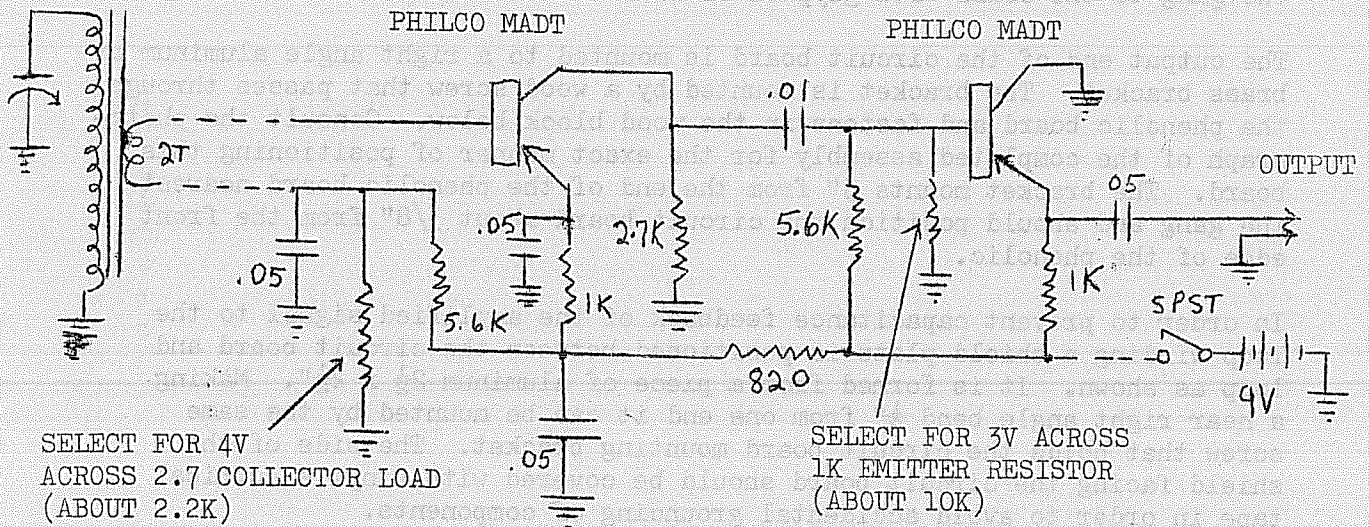
The loop can now be mounted to the cork supports using nylon dial cord or similar material. The cord is simply laced through the holes with the cord secured in each hole as you proceed by pushing a toothpick to wedge the cord and breaking off the ends flush with the board. When this is completed, apply a drop of glyptal to the bottom of each hole.

Now it is time to construct the transistor pre-amp. It is built on a piece of copper clad textolite $1\frac{1}{2}$ " x $3\frac{1}{2}$ ". Two alternate schematics are shown; one for PNP germanium transistors, such as the Philco MADT and one for NPN silicons, such as the plastic packaged planar types manufactured by Fairchild, G.E., Motorola, and T.I. The primary difference in the two schematics, aside from the polarity, is the method of stabilization employed. If you use the NPN silicon types, collector stabilization is best without back bias resistors. This is necessary because of the high offset voltage of silicon (0.6 volt). The use of emitter stabilization with a stiff bias, as used for germanium, would quickly result in unsatisfactory performance as the battery voltage drops with use. The board shown in the photograph is the PNP version, using

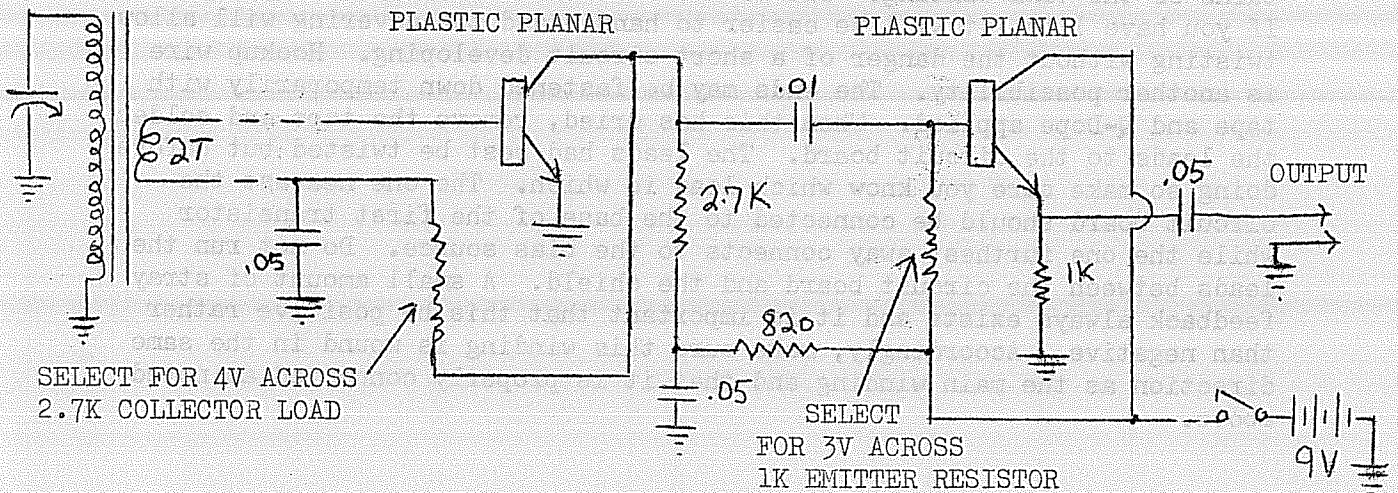
How to Build the SPACE MAGNET Shielded Ferrite Loop

Philco MADTs, the first real high frequency transistor. If you are building the NPN version, use the same general layout, but modify the wiring accordingly. If you are wondering about the phantom resistor tying down the loose end of the .05 output capacitor on the emitter of the second transistor it is merely an improvised terminal support and can have any value in the megohm range. It will be noted that no value is given for the biasing resistors. This is because individual units vary widely in beta and it is best to adjust for the particular unit you are using.

Schematic for PNP Germanium Transistors



Schematic for NPN Silicon Transistors



How to Build the SPACE MAGNET Shielded Ferrite Loop

Page 6

The first transistor is a grounded-emitter voltage amplifier that produces all the gain (about 40 db). If you have a beta checker, use a transistor with a beta of around 100 in this slot; otherwise, take pot luck. The second transistor is an emitter follower to provide a low impedance drive for the output cable.

The tuning capacitor is the antenna section of a Mitsumi polyvaricon having a maximum capacitance of about 180 picofarads. Most of these gangs have a shaft detail that is difficult to use. Edlie Electronics sells one (39¢) that has a long enough shaft. However, the shaft diameter is only 0.2" and it must be built-up to .25" with a split bushing. If you have an old pot in your junk pile and if you are lucky, a portion of the outer shaft may work as the bushing when split with a hack saw. Another irksome matter is the mounting in that the threads are non-standard. One solution is to use a 4/40 tap being careful not to run the tap in so far as to damage the plates. A simpler solution for the home constructor is to merely cement the gang to the board with glyptal or silicone cement.

The output end of the circuit board is mounted to a right angle aluminum or brass bracket. The bracket is mounted by a wood screw that passes through the phenolic board and fastens in the wood block below. Consult the photograph of the completed assembly for the exact manner of positioning this board. The bracket mounts 5" from the end of the phenolic board nearest the gang and should position the circuit board about 3/8" from the front edge of the phenolic.

In order to prevent capacitance feedback of the amplified signal to the loop winding a shield plate is positioned between the circuit board and loop as shown. It is formed from a piece of aluminum $2\frac{1}{2} \times 2\frac{1}{2}$ ". Making a near right angle bend $\frac{1}{2}$ " from one end it can be mounted by the same screw that holds the circuit board mounting bracket. The side of the shield facing the circuit board should be covered with vinyl electrical tape in order to avoid accidental grounding of components.

It is now time to apply the secondary winding to the loop. It consists of 2 turns located at the center of the rod and interwound between the turns of the tank winding. The kind of wire used is not too important. If you have litz, it will be easier to handle and the covering will allow twisting without the danger of a short circuit developing. Hookup wire is another possibility. The ends may be fastened down temporarily with tape and Q-Dope applied. When this has dried, remove the tape and solder the leads to the circuit board. The leads had best be twisted but before doing so make sure you know which lead is which. The one nearest the circuit board should be connected to the base of the first transistor while the one furthest away connects to the bias source. Do not run the leads between the circuit board and the shield. A small amount of stray feedback always exists and it is important that this be positive rather than negative. Accordingly, make sure this winding is wound in the same direction as the main winding and that it is properly connected as noted above.

How to Build the SPACE MAGNET Shielded Ferrite Loop

Page 7

Attach an 8" length of hookup wire to the B+ junction point on the circuit board. Connect an 11" piece of hookup wire to the point where the rotor of the poly-varicon is grounded (center terminal). Incidentally, if your board happens to have copper on both sides, make sure both sides are strapped together in this vicinity, also. Now connect the loop wire nearest the gang to the stator terminal marked ANT. The oscillator section is not used.

There is one more thing to do before forming the shield and that is to connect the output leads. These leads are subject to considerable flexing as the loop is rotated, so it is important that these connections be made carefully. Pending possible revisions as life test experience may indicate, it is suggested that 21 strand hookup wire (#20 AWG), such as Belden 8507-100 be used. It has held up so far without incident. Attach an 8" length of lead to the output terminal and connect a similar one to ground at the point where the output terminal support resistor grounds. Run these leads through the center hole in the phenolic board. Cut a small piece of aluminum, 1" x 2 $\frac{1}{2}$ ", and drill a hole at each end. Cover the area between the holes with vinyl tape and attach it by brass woodscrews to the wood bearing support after drilling through holes in the phenolic. This plate is positioned to cover the output leads to act as a strain relief. Additionally, the plate is grounded via solder lug to the circuit board with a piece of bus wire to shield the output lead from the loop winding.

Let me describe the remaining procedure (do not do it yet). The two leads are passed down the copper pipe. A third wire is soldered to the top of the pipe using a large iron and acid core flux, if necessary. A steel strain relief plate otherwise identical to the one used above is required at the bottom of the wood base and is positioned to captivate the leads immediately as they leave the copper pipe. The two ground wires are soldered to the steel plate. Connection to the receiver is made by a suitable length of 50 ohm coax cable. Another conventional strain relief positions one end of this so that the connection of the two hot leads can be effected. The shield of the coax connects to the steel plate.

All of the above is mentioned in order to emphasize the complication involved to perform the simple task of connecting the output of the pre-amp to the receiver. It would be so much simpler to merely use several feet of single conductor shielded phono pickup arm cable, such as Belden 8431-25. Only one simple strain relief at the pre-amp board would be required. It would not be necessary to ground the support pipe. The only reason for not specifying the above at this time is lack of life test experience. By the time this appears in DXM, considerably more experience will have been recorded and, if you are interested in employing this simpler construction, drop me a line and up-to-date information will be supplied.

The shield is constructed by forming a 20 mil sheet of aluminum, 12" x 10 $\frac{5}{8}$ " into the form shown by the photograph. Each side is 3", leaving a 13/16" overhang on the bottom. This is slit 1 $\frac{5}{8}$ " from the center and the outside portions folded under the phenolic board as shown. Before forming, drill 4 holes to take 6/32 machine screws $\frac{1}{4}$ " from the outside edge of each of the folded under lips. On the unfolded area, drill two holes on each side to pass #4 round head wood screws, 7/8" from the center line.

How to Build the SPACE MAGNET Shielded Ferrite Loop

Page 8

It is also necessary to drill the following holes on the front face. A $\frac{1}{2}$ " hole, 1" from the edge and 1" down is punched to take the SPST on-off switch. Another hole $\frac{1}{4}$ " down and $3\frac{1}{4}$ " over to pass the battery snap leads is required. The size of the hole will depend on the size of the rubber grommet you use to protect the leads from the aluminum edge. The 2" vernier dial must also be mounted. This is a Japanese import that is available at most of the catalog houses. An oversize $\frac{3}{4}$ " hole should be punched $2\frac{1}{4}$ " over and $1\frac{1}{4}$ " down to accommodate the hub while the mounting screw holes had best be left until later to see how the gang shaft lines up.

The battery holder is made from a $2\frac{5}{16}$ " x $2\frac{3}{16}$ " piece of aluminum as shown in Figure 1 and formed as shown by the photograph. It has two holes drilled on the lip for 4/40 machine screws and should be mounted (eventually) as shown in the photo, which brings the first screw about $2\frac{1}{8}$ " from the edge.

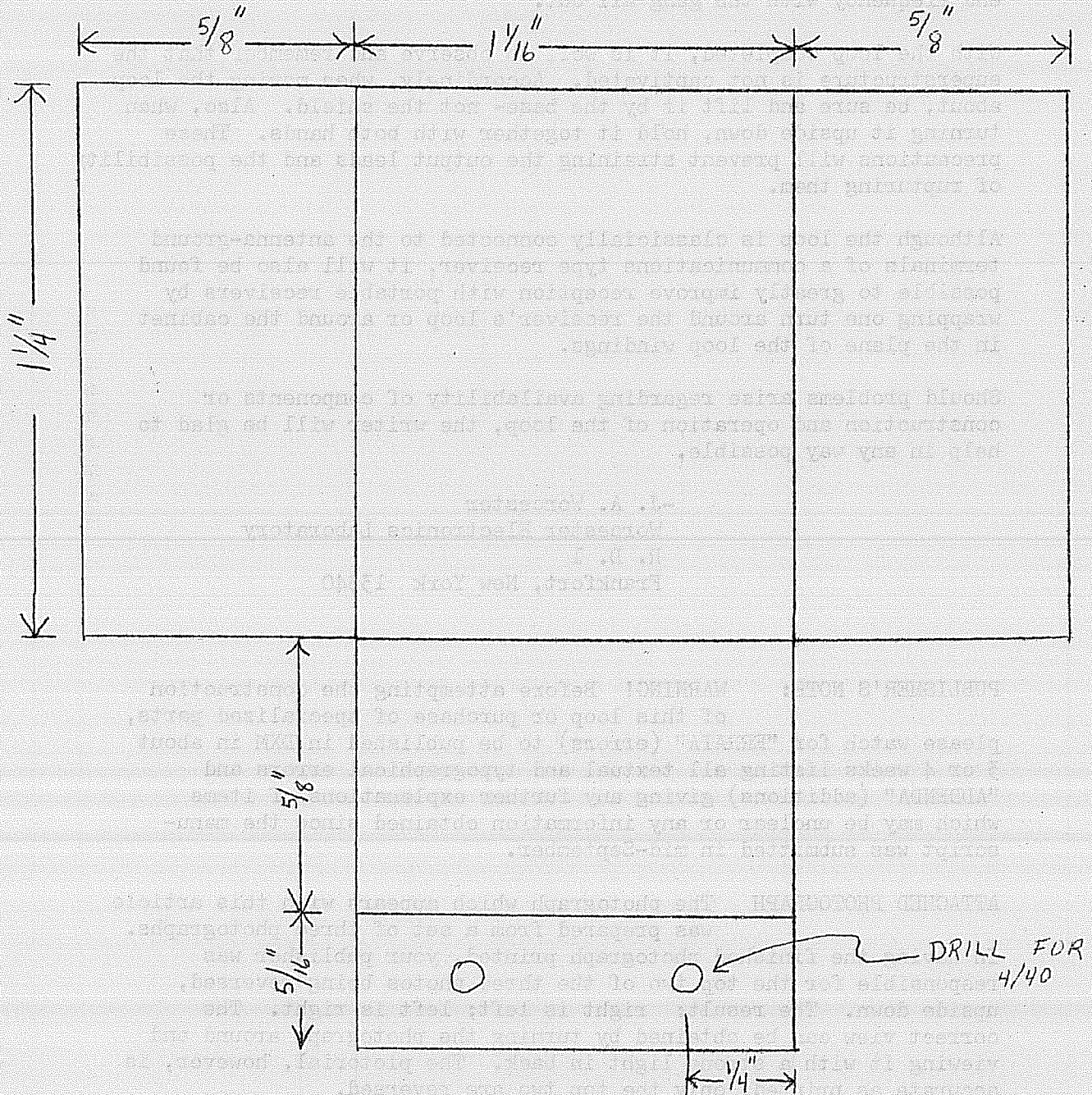
To bend up the shield and battery holder a forming brake is useful but an acceptable job can be done with pieces of wood and a vise, if done carefully. When the shield is completed, spring it over the phenolic board, mark with a pencil the outline of the mounting holes on the phenolic board and drill out for 6/32 brass mounting screws and attach with lock washers and nuts. A solder lug should be mounted under the nut nearest the on-off switch. Connect the long ground wire to this lug and also the negative (black) lead on the battery clamp. The red lead of the battery clamp goes to one terminal of the on-off switch and the B+ lead from the circuit board to the other. The battery, of course, is the 9 volt (Eveready #916) size used in transistor pocket portables.

Since the pre-amp circuit board is mounted at only one point, it is now possible to rotate it slightly until it centers the best it can with the dial mounting hole. Set the dial at the extreme to make the set screw available from the near end. Turn the gang to the corresponding extreme. With the aid of the split bushing, the dial can be attached to the gang. The remaining holes can now be drilled for mounting the dial. Make sure the dial turns easily without binding or slipping and that the line-up is right so that the dial covers its complete 180° travel.

There is only one more thing to do before making the output lead connections, described earlier, and that is to provide a stop limiting the total rotation to 360°. A hole is drilled in the copper pipe $\frac{1}{4}$ " below the wood bearing to take a 4/40 screw. A $\frac{1}{2}$ " long screw is attached by pushing it through from the inside, leaving the head inside and the nut outside. A small hole is drilled in the underside of the wood bearing, $\frac{5}{8}$ " from the center and a 4D finishing nail lightly tapped into the hole with a hammer. Length in excess of that required to get the job done can be removed with side cutters, if desired.

How to Build the SPACE MAGNET Shielded Ferrite Loop

BATTERY CLAMP



How to Build the SPACE MAGNET Shielded Ferrite Loop

Page 10

It goes without saying that the prudent constructor will check out the pre-amp and loop circuits to the best of his ability before attaching the shield as constant removal of the shield to correct mistakes can rapidly prove irksome. A help in this connection is to drill a hole in the back of the shield so that the antenna trimmer of the gang can be reached with an insulated screw driver for setting the 1600 kc/s end frequency with the gang all out.

With the loop completed, it is well to observe and remember that the superstructure is not captivated. Accordingly, when moving the loop about, be sure and lift it by the base- not the shield. Also, when turning it upside down, hold it together with both hands. These precautions will prevent straining the output leads and the possibility of rupturing them.

Although the loop is classically connected to the antenna-ground terminals of a communications type receiver, it will also be found possible to greatly improve reception with portable receivers by wrapping one turn around the receiver's loop or around the cabinet in the plane of the loop windings.

Should problems arise regarding availability of components or construction and operation of the loop, the writer will be glad to help in any way possible.

-J. A. Worcester
Worcester Electronics Laboratory
R. D. 1
Frankfort, New York 13340

PUBLISHER'S NOTE: WARNING! Before attempting the construction of this loop or purchase of specialized parts, please watch for "ERRATA" (errors) to be published in DXM in about 3 or 4 weeks listing all textual and typographical errors and "ADDENDA" (additions) giving any further explanations of items which may be unclear or any information obtained since the manuscript was submitted in mid-September.

ATTACHED PHOTOGRAPH The photograph which appears with this article was prepared from a set of three photographs. In having the finished photograph printed, your publisher was responsible for the top two of the three photos being reversed, upside down. The result: right is left; left is right. The correct view can be obtained by turning the photograph around and viewing it with a strong light in back. The pictorial, however, is accurate as printed; only the top two are reversed.

How to Build the SPACE MAGNET Shielded Ferrite Loop

Parts List - A

<u>QUANTITY</u>	<u>DESCRIPTION</u>		<u>COST</u>
1	10" x 10" base of 3/4" plywood	est.	.25
2	3" x 3" blocks, 3/4" plywood	est.	.05
1	4 1/2" length 1/2" rigid copper pipe (may be obtained from large hardware store or plumbing supply house, about .40/lb.)		.15
1	piece phenolic board, 12" x 3" x 3/16" (9" x 24" sheets may be obtained from John Meshna \$0.60 per sheet, shipping weight 2 lbs.)	est.	.25
1	Ferrite rod, 12" x 0.6", 400 perm. (may be obtained from Worcester Electronics, shipping weight 2 lbs.)		\$5.00
x	20 feet #22 or #24 copper wire, enamel or soldereze insulation.	est.	.10
x	alternate wire for somewhat better Q. 220 strands #44 litz (est. \$1.25) (may be obtained from New England Electric Wire Corp. for \$8.95 lb. or Worcester Electronics 20' / \$1.25)		
2	pieces natural brown cork, 4" x 5/8" x 3/8" thick (may be obtained from Montgomery Ward- 53 B 5193 4 12" x 12" sheets for \$2.89. Shipping Wt. 2 lbs.)	est.	.06
x	nylon cord, about 3 feet (hardware store)	est.	.05
x	electrical vinyl tape, about 1 foot	est.	.02
x	polystyrene Q-Dope. G.C. low loss coil coating (obtainable from any electronics store)	est.	.05
15	toothpicks	est.	.01
1	piece copper clad textolite, 1 1/2" x 3 1/2" (John Meshna sells 5 1/2" x 7" pieces 3/\$1.00)	est.	.07
2	high frequency transistors as described (if not available locally, Worcester Electronics can supply selected pairs of NPN silicon, G.E., Motorola, Fairchild, or T.I. for 50¢/pair, new, or Philco PNP removed from unused fire control boards, selected, for 30¢/pair)	est.	.30
1	Mitsumi Polyvaricon. Antenna section, only, is used and should be about 180 mmf. (may be obtained from Edlie Electronics or Worcester Electronics 3/\$1.00)		.39
4	.05 mfd discaps, 50v		.20
1	.01 mfd discaps, 50v		.05
9	resistors, as specified, 1/2 or 1/3 watt		.27
1	5/16" x 5/16" right angle bracket, brass or 1/8th inch aluminum (sheet material may be obtained from large hardware store or aluminum supply house)	est.	.05
1	2 1/2" x 2 1/2" aluminum piece, 20 mil, folded as described (3' x 3' sheets obtainable at large hardware stores; 4' x 8' sheets obtainable at aluminum supply houses)		.03
x	hookup wire	est.	.10
1	4 foot length shielded phono pickup arm cable, Belden 8431-25	est.	.25

How to Build the SPACE MAGNET Shielded Ferrite Loop

Parts List - B

<u>QUANTITY</u>	<u>DESCRIPTION</u>		<u>COST</u>
1	strain relief bracket	est. .	.03
1	12" x 10 5/8" aluminum piece 20 mil thick, folded as described (see 2 1/2" x 2 1/2" piece above for source)	est.	.55
1	SPST toggle switch (obtainable from Lafayette or Worcester Electronics)		.24
1	9 volt battery snap with 6" leads (Lafayette or Worcester Electronics)		.15
1	2" vernier dial (obtain from Lafayette or World Radio)		\$1.19
1	bushing 1/4" long, 1/4" outside diameter, .2" inside dia. for adapting gang shaft to dial (may be made from copper tubing, 1/4" soft, obtainable at auto supply store or large hardware store about 22¢/foot)	est.	.01
3	4D finishing nails	est.	.01
1	rubber grommet	est.	.03
1	2 5/16" x 2 3/16" piece 20 mil aluminum, formed as described for battery holder	est.	.03
1	solder lug		---
2	4/40 steel machine and nuts, 1/4" length, round head		.04
4	6/32 brass machine screws and nuts, 3/8" length, round head and lock washers		.16
2	#6 brass wood screws, round head, 3/4" length		.04
4	#6 steel wood screws, round head, 1/2" length		.04
4	rubber mounting feet		.16
1	4/40 steel machine screw and nut, 1/2" length, round head		.02
x	G.E. Glyptal household cement or DuPont Duco cement	est.	.05
1	9 volt battery, Eveready type 216 or equiv.		.48
x	lacquer for painting wood pieces	est.	.10
x	rosin core solder	est.	.05

Addresses of sources cited

John Meshna, Jr., P. O. Box 62, East Lynn, Massachusetts 01904
New England Electric Wire Corp., 365 Main Street, Lisbon, N.H. 03585
Edlie Electronics, Inc., 2700 Hempstead Turnpike, Levittown, L.I.,
New York 11756
World Radio, 3415 West Broadway, Council Bluffs, Iowa 51501
Lafayette Radio Electronics, 111 Jericho Turnpike, Syosset, L.I.,
New York 11791
Worcester Electronics Laboratory, R. D. 1, Frankfort, New York 13340

TABLE OF CONTENTS One photograph, printed one side only
Ten pages text, 5 sheets of paper
Two pages Parts List, 1 sheet