

NORTH AMERICAN SHORTWAVE ASSOCIATION FRENDEX

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OFFICIAL BULLETIN

JULY 1964 EDITION

Headquarters-NASA

1503 Fifth Avenue A2

Altoona, Penna. 16602

THE ANARC; HOPE FOR A BETTER FUTURE

Aesop once said "United we stand, divided we fall". Though the old storyteller lived and died long before our hobby was heard of, his words still have meaning, even for every DXer today. United our hobby will continue to grow and flourish, divided it will crumble and fade away.

In a hobby so diversified as ours, unity is the only means by which success can be accomplished. Probably no other hobby depends so highly upon its participants being willing to cooperate than DXing because one person will never be able to know all that is going on in the ever-expanding world of communications. The average of DXers would be lost if he had to depend on himself to be able to receive and verify the stations he wishes to. This is the main reason for the formation of DX clubs; To aid and to share with others the information each has acquired.

When there were but a few DX clubs, interclub communication was relatively easy due to the fact only a few letters were needed to do the job. Today the story differs. Interclub communication has become an enigmatic mystery...a maze clouded with many rumors and even falsehoods. Unless you are a member of every club, it is practically less than impossible to know how each thinks/acts on the basic problems of the hobby. And anyone who has attempted to keep up-to-date on the policies of clubs which he is not a member of will soon learn of the complexities involved in trying to establish true interclub relationships. Unification of DX clubs is a highly difficult task, yet today the impossible can be conquered.

In June 1963, our Executive Editor proposed a 'congress' be set up and each club be represented whereby all could mutually voice ideas, opinions, problems. Such would result in overall benefit of the hobby. Soon after, other clubs began suggesting a/or similar unification proposal(s) and then last month this 'congress' became a reality with the formation of the Association of North American Radio Clubs (ANARC), headed by our own Don Jensen as Executive Secretary.

The task of DX club unification is not over, it has only just begun. And though the association has a capable man at its helm, it still takes an entire crew to keep the good ship afloat. Our club will have a voice through our representatives, but they need the full support of each/all member(s) if they are to become effective voices. In order that they represent us worthily, as is their desire, we must let them know our opinions, our ideas, suggestions and wants.

DX club unification is only as far away as your nearest mailbox and do not forget the future of our hobby is in the hands of you and I, all of us. Unity is the first word of our motto, our task is to preserve it.

NASA member - Paul Kirkpatrick

"We on this continent, in this generation, are- by destiny rather than choice- the watchmen on the walls of freedom. We ask, therefore, that we may be worthy of our power and responsibility- that we may exercise our strength with wisdom and restraint and that we may achieve in our time and for all time the ancient vision of peace on earth, good will toward men." John F. Kennedy (from his undelivered speech, 11/22/63)

"FRENIX" is the official monthly publication of the North American Shortwave Ass'n. There are no subscriptions! Only interested and active members are entitled to receive copies by application/joining the organization and paying the required fee (\$3.00 a year to all residents of North America, \$4.50 per year to all others). This and all editions are made possible through the combined interest and cooperation of the club officers, editorial staff and reporting members. Our motto. "Unity and Friendship".

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WATTA GOOF!!



(This "gem" has nothing to do with radio, not basically, but it does concern the club and thus it might be of some interest to certain of you. So.....) The other day I was enroute to the bank and postoffice with a stack of mail. Included was a plain unsealed envelope containing checks and money-orders. As I arrived at the PO, I met a friend and we had an eyeball QSO right in front of the mail deposit slot. Know wat happened? Yep, I dropped the mail & the bank biz right down the lil ole hole. Man you should have seen the look on me face when I realized wat I done did. Watta goof!! But after I came too a split second later, I headed straight for the PostMasters office and gave him the the story...the facts man...the facts. After about an hour of red tape and such (I had to do everything imaginable ID-wise, etc. For awhile thought he might even ask to see my birthmark) the envelope was returned to me, intact. Right away I then off to the bank wheeled. Afterwards, on the way home, I had to laugh at myself. Does this tale have a moral? Dont zakly think so unless it might be such as....Always be careful to put the right things in the right hole....or.....Dont let an eyeball QSO with a buddy cause you to "misdropriate" funds. Hi! (B.E.)

UNITY AND FRIENDSHIP

Recently, on the 258th anniversary of the birthday of Benjamin Franklin, there was procliamed in Independence Hall and in some fifty countries throughout the world, a Declaration Of Interdependence. Forward of the declaration read... "People have the power to help or harm each other. A nation can live in peace or war. The fate of humanity depends upon the feelings of individuals toward one another. Common interests drawing people together are so much stronger than the artificial barriers now keeping them apart." (WPE9GCZ)

HEART OF NASA

It is always a pleasure to see so many a new member join us in the club/hobby and over the months we have had much to give reason for rejoicing. Many OM have gotten their pals to climb aboard. We have had dad's get their son's to join...Brother get brother....An XYL get her OM. But the latest example is even more heartening; A son recommended us to his mother. Here then is proof that we have heart and that we are, in a sense, one family all. Yes, though DK be our quest and news-facts-etc thereto be our want, we must always keep in mind that a combined family of friends united in common interests, is very much needed. If we work together, if we report to one/some of the sections regularly, we can/will prove to the DKing world that we truly are...The Club with Heart...NASA. Are you one of the family??? (B.E.)

THE SONATA OF A DKER

I've heard the voices of Cathay,
The sing-song from Tomkins shore;
The haunting strains from exotic isles,
The soft sighs of southern seas.
I've heard the tirades and harangues,
The thunder of dire threats,
The voices of doom!
I've heard voices calm and poise,
Of wistful plea, of happy lilts,
The voices of peace!
Sonorous sounds from sleepy Spanish scene,
Guttural tones from the lands of icy mist.
The deep throb of the Affican drum,
The plaintive wail of the Muezzin...
From dawn to dusk to dawn,
Time blended into space
And from dawn to dusk to dawn,
I listened and the world was mine.
(F. Peters)

NEW FACE

You will note that the frontal page has been done a bit differently from past. We are ever/always trying to better Frendx in all ways we can. Time being we cannot yet approach a professional appearance and we have not sufficient funds to get commercial work done; However, perhaps in the near future these will be possible. No promises are being made, only the fact that a possibility is foreseen. Meanwhile we would like to hear from you as to your opinions, ideas, suggestions re a frontal page. We would be most pleased to have U submit sketches/drawings. Tnx! (Hdq)

HELLO!!

HOWDY!!

GREETINGS!

NEW MEMBERS

WELCOME!

Bill Greene/WPE8HDT, 763 Glendale Road, Marietta, Ohio 45750. Taking off again this month, we begin where we ended last time, adding another new member de W8-land or more specifically... "Merry Etta" Ohio. Bill comes to us via the two preceding OM de his QTH who joined last month, Bob Lindsey and Bob Gerken. (Combining this trio, we could easily dub them the "Three B's. Hi!) Gear, as listed by Bill, is a Hallicrafter SL20 and Lafayette HE80, homebrew amplifier, a tape recorder and an AM-FM rx.. His antennae - 102' longwire and a 27mc vertical. His DXing is done on SWBC/Utility/Ham bands. Other interests of this 17 year old OM are drag racing, motorcycles (wat!!?? another one!!??), photography and hunting. He sez he is a skinny six footer weighing one eighty-eight pounds; Been an SWL for 9 months, logged 54 countries of which 20 have thus far been verified and Radio Ghana his prize to date. Bill plans to take up cardswapping soon and also to become active in certificate hunting. Lotts a luck OM!

Robert Minker, P.O. Box 675, Reading, Penna., is a new SWL/DXer who first heard of NASA via the 1964 WRTH. His rx is a Zenith "Royal TransOceanic 3000" and he employs its built-in telescoping antenna. Bob's DX interests are on SWBC. Other of his likes and interests deal with CBing and tapesponding (he is a member of the ATEA (Amateur Tape Exchange Association). His age is twenty-two. Is awaiting his WPE call.

Margaret Vandevelde/WPELITR, 19 Oswego Avenue, Oakland, New Jersey 07436. Housewife/mother and new DXer joining via her son, NASA member-Emil Vandevelde. She uses a S40 receiver and a longwire antenna. Is also interested in painting and artcrafts. She writes "I like to meet people and everyone is welcome to drop in for a visit." Her DXing time is spent on both SWBC and ARO bands and listed as her most cherished of 55 QSL's thus far rcvd is the one from "The old Redhead" Arthur Godfrey/K4LIB. (aint that just like a gal? Hi hi!) Margaret is a new swapper and hopes to make many new friends via same. And so a special welcome to "Mom Vandevelde" and best wishes for good luck, good listening, good friendships and God blessings.

Robert Moore/WPE3FLW, 42 Belmont Avenue, Wilmington, Delaware 19804. A twenty-one year old OM with an S38D, Knight "OceanHopper" and MonitoRadio 33A, Globe CB-100 as his gear. DXes the SWBC and utility bands. Has 75 QSL's to date and sez his topper is one from Radio Japan. Antennae used are 70' longwire, Mosely TA31 Jr and a CLR II. Bob comes to us via his brother Dick and his SWL buddy Clarence Green. He is a member of the Delaware Valley CB Association and as other hobbies he lists as being his, he sez fire fighting!?(Shades of arson.Hi hi!) His immediate goal is to log/QSL/swap all states, provinces, countries in North America. Rotts a ruk Rob!!

Gene Carlson/WPE3FGC, 2711 Johnson Drive, Williamsport, Maryland 21795. Tnx to member Bobby Binciu for getting this OM to latch onto NASA. Gene is 14 and a rather new DXer having twenty QSL's to date and NBA - Canal Zone as his best/prized. He listens to SWBC, MW and Utility bands on a KnightKit "StarRoamer" (which he built himself!) and an RCA-6X621. His skyhook is a 30' longwire. Cardswapping and model building are his other interests. Also sez he is interested in starting to tapespond...his recorder is a Fujiya (translated in English it means "goodie").

Dick Staples/WPELFNN, 10 Burns Avenue, Caribou, Maine 04736. Although aiming for a ham ticket in future, this OM of 17 is still much the SWL minded. His gear consists of a Hallicrafter S53A, SX140 and a HT40 (latter for future operation). Antennae are a dipole and a 110' longwire. Gene is interested in earning certificates and in radio repairs. He is a cardswapper; Monitors SWBC and ARO bands, sez QSL from Iran as his choice of 64 so far rcvd. Continued good listening Gene and much success in the upcoming novice exam. Glad to hear you plan to be an active member! FB!!

Roy Henrichs, 1119 Grizzly Peak, Berkeley, California 94708. Here is our youngest of members...a lil ole fella of 10! Most happy we are to welcome him aboard the good ship NASA! Not only is he interested in DXing all bands, but too, he has interests in weather, bugs, rocks and photography. Has his own amateur weather station. His rx is a HeathKit GCW-1A; Antenna an inverted V and telescoping whip. Roy wants to learn all about SWLing (attention you oldtimers!!!). He joined us via '64 WRTH. Here is wat he

....NEW MEMBERS, contd....

sex of himself... "Although only ten years old I have gotten a 9th grade average in the Stanford Achievement Test for the past two years. I am interested in books on radio, also magazines as I have very few at present being new to the hobby and not well up on publications connected. This summer I hope to visit a VOA station (he did not say which one, but presumably means one in California) and Radio Canada. My amateur weather station consists of an anemometer, sling sycrometer, barometer, and a rain guage." Let's all give lil buddy Roy a "Big Brother" welcome!!!

Jerome Hartweg, 2506 Geddes Avenue, Ann Arbor, Michigan 48104. A student of music at University of Michigan, new to the hobby, aged 23, is interested in hearing SWBC stations from all over the world via his SK110 antennaized with a 65' longwire. He served with the U.S. Army band on Okinawa during his service tenure of duty. (Watta racket!...not the band, but the branch! Hi!) Jerry would like to hear from members on how to improve reception...how to make a good reception report. He first heard of NASA via "Radio WorldWide, N.Y." WRUL. Uses a Sony "300" for his tapespondings. Glad to have you with us Jerry, you ole "skin-pounder"! (for those of you which may not dig...Jerry was a drummer with the army band!) Hi!

Tom White, 5528 Fernwood Avenue, Apt.5, Hollywood, California 90028. At long last it can now be sed that NASA has a Hollywood reporter...not the usual gossip de glitter sort, but the DXing hobby type. Tommy is forty-three and joined us, being recommended by the DSWCI (Danish SW Club International). Employing a Hammarlund HQ145 as his rx and a 20' dipole plus 15' longwire, he DXes SWBC. Other interests are languages and record collecting (wat kinda records Tom?) Hope to see you become a "star" of NASA de out Hollywood way OM! Know we can count on you to keep the friendship lite aglow!

Serge Neumann, II WPE6AKA, 4043 Lincoln Avenue, Culver City, California 90231. Born in Ludwigsburg, West Germany some seventeen years ago (approx) Serge has been DXing SWBC for about 2 1/2 years now. His rx is a Hallicrafter S20R with a DB20 preselector, and a Sony "102" tape recorder to roud out his shack...gear. As antennae, he has a 48' inverted L and a 35' longwire. At present has logged 100 countries, verified 81 and prizes QSL from Radio Bangui above others. Here is an OM who can definately be counted on to uphold the NASA motto and to be an active/reporting member. He joins us on recommendation of "Mr. DX" himself, August Balbi. A cordial welcome Serge OM!

George Buchanan/WPE3VB, 554 Lyman Place, Webster Groves, Missouri 63119. Another university student, lil ole George ("Doc") is rather an oldtimer at SWBC DXing. He has been at it for five yars and has over 250 QSL's from 125 different countries. When home from university (he is a junior at Drake) and not bizzy with summer job, he dials a National NC109 hooked to a "multi-directional" 110'/30' longwire. Other listening aids in his den are a lkc crystal calibrator and a tape recorder. Doc's age is a wild 20; He is intersted in politics and classical music. (Quite a swingin combo that!) WPE3BWL is credited with this OM coming to NASA, and is elated too. A big howdy to ya George and remember...when ya can drag urself away from political powowing, clazzical clambakes and summer salt-mining, zit urself down and do some DXing like in da good ole daze. Relax and git an earful of QRM via ye ole 109. Hi!

Ed. C. Horacek/WPE4OJ, Route 2, Box 117, Yankton, South Dakota 57078. Sez Ed "I am 47 years old. Besides SWLing (SWBC) I DX MW. Am also interested in radio-TV and electronic experimenting. Have built most of my own eqiptment. Rx's consist of a Lafayette, Zenith and RCA. (models?) Antennae are a 58' whip and a 58' whip and 100' longwire. Other gear, taperecorder, signaltracer, assorted test eqiptment." Aside from nowing being a NASA member, this OM is also a NNRCer. He came to us via P.E. Welcome Eddie, hope to see reports de you on SWBC results from out South Dakota way!

(NOTE! Also joining us this month is the "Dean of DXers"...The "Tip Topper" of the SWBC bands. An intro and a tribute will given him in these pages next month. Be on hand! Dont mizzitt! Meantime scan the SWBC section herein and see some of his wrk.)

RENEWALS. Most elated we are to again bid hello to the following fine fellows who rejoin for another year: Paul Bassiri, Bob Binau, Dick Cohen, Clarence Green, Dick Little, Nick Vrettos, Jerry Sullivant, Bill Ruland. Tnx OM and best to you all ways!

"Apathy gone makes NASA strong!"

ANARC REPORT

Each month, if/when there is news to be published re the Association of North American Radio Clubs, it will be submitted by either of NASA reps Doug Benson or Frank Peters. The following then is such report sent us for your info at this time by the former.

Item A: Results of voting by member representatives

1. Proposal that each club submit \$2 per rep to defray expenses was passed unanimously, 11-0. (NASA has already sent its \$4)

2. Proposal concerning SWL Hall of Fame was passed by a vote of 6-5, but general obvious support was so lacking that the ANARC exec secretary has tabled measure for later action. Secretary noted that the project was too "ambitious" an undertaking, as indicated by mail from representatives, until other matters are first cleared up.

Item B: Resignation and withdrawal of member club

1. The parent organization of the SWL-CHC advises that the SWL-CHC hence withdraws from ANARC. The reason; stated by Clif Evans/K6BX, president, was that the CHC will not affiliate with any group, nor will it subordinate to another. It should be noted that the ANARC exec secretary accepted the withdrawal/resignation with regret and too, club rep Gary Hammond expressed likewise in saying he must however abide by the wishes of his president.

Item C: Matters currently under vote

1. That ANARC go on record either pro/anti the Benelux DX Club proposal that non-verifying stations be listed and publicized.

2. That a committee be formed to serve as both clearing house as well as instigator for courtesy programs now being aired for all member SW clubs.

(Note to all members!!! Anyone, having ideas/suggestions/proposals for or to be given consideration by ANARC, is notified to do so via club representatives. In this case they should be sent to Frank Peters, 820 West 34th St., Chicago, Illinois, or to our other rep, Doug Benson, 2709 Balltown Road, Schenectady, New York. DO NOT send them to any club hdq nor to the ANARC exec secretary! This be standard operational procedure.)

***** CLASSIFIED AD YOUR MAIL WANTED/NEEDED *****

For sale...50 watt CW xmtr (Heathkit). All ready to operate except for crystal. This is the ideal/perfect rig for the novice. Is in A-1 condx and includes manual. All you need is a key and antenna. Priced really reasonable. Write Walt Smart/WPE9EKW, Rt.1, Pittsfield, Illinois 62363 for scoop.

Member "Margaret "Peggy" Fairless, 245 Chestnut St., Bound Brook, N.J. and also Member/Editor Nick Vrettos, P.O.Box 217, Fort Leonard Wood, Mo. will be in the hospital by the time you read this. They would both be very grateful for letters and/or cards from fellow members. (Your prayers would also help!) Send mail to the heregiven QTH's. Thanks! and thanks!

REMINDER

SUPPLIES

Integrity plays a vitally important part in this hobby of ours. This is particularly and especially so re reports and data sent in for publication. Hdqs nor sections eds cannot always doublecheck, thus submitted reports, etc., are taken as fact. YOU are entrusted to be truthful, reliable! The soundness of the club and the good of the hobby lay in your hand, head, heart.

Club stationary/letters and club rubber stamps are still available from hdq. \$1.50 per 100 ppd on the former, 89¢ ppd on the latter. Copies of NASA awards program also on hand for SASE as are application blanks for anyone you might think interested in climbing aboard the NASA bandwagon.

NASA is the "growingest" DX club in N.A.!! NASA is in affiliation with the ANARC!!!!

 * **FRIENDSHIP CORNER** *

NASA
 UNITY

++JULY++

NASA
 FRIENDSHIP

 * * * * *
 Larry Marshall, Cardswap Editor Box 291, Devils Lake, North Dakota
 * * * * *

++SWAPPER OF THE MONTH++

Canada is the home of this months featured swapper. He's Rodger McNicoll of Toronto, Ontario. Rodger has been an SWL since March of 1960 and since then he has earned 47 amateur band awards including a SWL-CHC #24 award. Rodger has also received six cardswapping awards since he entered this field. He has swapped 625 cards, including cards from 56 countries, 50 states, and all 10 provinces. Two of his more interesting cards include MP4-10413 from Bahrein (after 1/2 hour of research your editor found this country to exist and is located near the Persian Gulf. HI!) and UA3-333/JT1 from Mongolia. Rodger claims that this JT1 is the only one of its kind in North America! I can't prove him wrong, can you? His receiver is a Heathkit Comanche and he uses a long wire antenna. Rodger keeps himself busy in CDXC as the awards editor. Rodger swaps 100% and he will be glad to swap with anyone interested. Congratulations Rog. on being the July "Swapper of the Month." ADDRESS: 44 Smithfield Drive, Toronto 18, Ontario, Canada.

 I would like to take this time to welcome Joe Fela, Jr. to the staff of NASA. He is the new mediumwave editor for our club and by the looks of his first column he will do a hang-up job!! Support Joe and the mediumwave section by contributing often!!!

For the benefit of those who missed the story on Arthur Godfrey, I'll reprint his address for you. Arthur Godfrey, star of many radio and television shows is a ham operator and will be glad to swap with anyone! ADDRESS: K4LIB, Arthur Godfrey, Beacon Mill Farms, Paeonian Springs, Virginia. (Be sure to mention North American Shortwave Association!)

 Bill Eddings passed a list of pen-pals to me from the Danish Shortwave Club. These are people that would like correspondence with others who have the same interests, etc. (all are SWL's/DXers!)

Erik Hansen, Bredevej 4, Seest, Kolding, Denmark; Age 20, speaks English, Danish, and German. His occupation is a electrician.

Robert Hunt, 22 Station Rd., Sheringham, Norfolk, England; Age 22, speaks English and French. Interests are music, postcards, coins. Medical Stud.

Reiner Ruft, 5 Koln-Weidenpesch, Drosselweg 27, West Germany. Age 18; General interest in everything! Speaks German, English, & French.

J.F. Salmon, 34 Bonhay Road, St. Davids, Exeter, England. Age 28; speaks English, French, German. Works for the Government. Likes football and music

Alan Harlan, 13a Linden Road, Gosforth, Newcastle Upon, Tyne 3, England. Age 24; interests are stamps, foreign 45rpm records, and folk dances.

Jeff Stover, 25274 Kildare Rd., Southfield, Michigan. Age 14; interests are stamp and coin collecting.

Svend Hansen, Bredgade 13, Hurup Thy, Denmark. Age 20; Speaks English, Danish. His interests include classical music, books, photography.

I hope that some of you write to one of the above people and gain knowledge and friendship via pen-pals. Know on to page two for this month's list of 100% swappers.

(Swap lists contained in Frendx are neither copied nor duplicates of any other lists! All names contained here are either submitted by other member/swappers or sent direct from those listed. This section prefers to think in terms of quality, not quantity.)

The following swappers are considered to be 100%. If you know of any who are not, contact me at once so they will not be listed again!

ALA.	WPE1HBW	Tom Watson, 502 S. Plymouth Ave., Huntsville 35811	W
ARIZ.	WPE7BXS	LeRoy Ackerman, 2501 W. Missouri, A207, Phoenix 85017	E,*
DAL.	WPE6ETT	Harry B. Okey, Box 1526, La Jolla 92038	E,*
	WPE6AKA	Serge Neumann, 4043 Lincoln Ave., Culver City 90231	E
	WPE6EXH	Ted Palmer, 51 W. Laurel Ave., Sierra Madre 91024	S,M
	WPE6EWU	Al Hart, 5800 Gladys St., South Gate	G,Y
COLO.	WPE0BJG	Ken Brown, 2105 Oakland, Pueblo 81004	E
DEL.	WPE3CGR	Dick Moore, 42 Belmont, Wilmington 19804	E,A,*
	WPE3FLW	Robert Moore, 42 Belmont, Wilmington 19804	E
ILL.	WPE9ENN	Joel Graham, 3406 N. Oconto Ave., Chicago 34	C,*
IND.	WPE9EFJ	Edgar Berning Jr., 1708 S. Taft Ave., Evansville 14	T,*
MD.	WPE3FGC	Gene Carlson, 2711 Johnson Dr., Williamsport 21795	E
	WPE3DTP	Robert Binau, 2704 Johnson Dr., Williamsport 21795	C,*
MASS.	WPE3EWL	Richard Cohen, 39 Neptune Ave., Winthrop	A,*
	WPE1DQZ	Steve Shaw, 138 Common St., Braintree 89	M
	W1-SWL	Andy Kasparson, 37 Woodland Road, Auburn	A,*
	WPE1CIH	Ernest Zecchini, 15 Bruce St., St. Lawrence	M,G,Y,C,*
	WPE1FLD	Barry Kneabone, RFD #2, Wrentham 02093	Y,*
	WPE1FCD	Viktor Decyk, RFD #1, Colrain	W,*
	WPE1FSN	A.D. Hand, 66 West St., Worcester 01609	M
MICH.	WPE8GYN	David Stutz, 1540 E. State Fair, Detroit 3	W
	WPE8GSA	O.J. Wakeman, Box 107, Marshall 49068	K
N.J.	WPM2AI	Margaret Fairless, 245 Chestnut St., Bound Brook	C,*
	WPE2LTR	Margaret Vandavelde, 19 Oswego Ave., Oakland 07436	M,A,*G
	WPE2ATS	Joe Mauriello, 46 5th Ave., Haskell	GM*
	WPE2JMT	Pete Glenn, 12 Prospect St., Morristown	W,K,*
N.M.	WPE5CUD	Steve Dildine, 2965 A Villa St., Los Alamos 87544	T
	WPE5BOC	Jim Creek, Box 102, House 88121	C,A,*
	WPE5DAX	Harvey Young, McAlister 88427	A,*
N.Y.	WPE2MI	Doug Benson, 2709 Balltown Rd., Schenectady 12309	A,*
	WPE2ISM	Roger Gaborski, 110 Baird St., Rochester 14621	Y
	WPE2KOU	Bob Berlan, 6410 Strickland Ave., Brooklyn	C,*
N.C.	WPE4FZS	Larry Standley, 2403 S. Gardner, Gastonia	C,*
N.D.	WPE0BNX	Larry Marshall, Box 291, Devils Lake 58301	*
PENN.	WPE3CL	Tom Bispham, 3 Dreycott Lane, Haverford 19041	A,*
R.I.	WPE1CMW	Charles Archambault, Box 534, Woonsocket	C,*
S.C.	WPE4HQQ	Pat Binkley, 1355 Virginia Acres, Florence 29501	A,*
	WPE4GXY	Tom Norman, Lakeside Drive, Florence 29501	W,C,*
TEX.	WPE5DTQ	Michael Ware, Rt. 1, Box 20, Quitman 75783	E,*
	WPE5DDB	Alan Herrington, Drawer 588, Palestine	Y,*
UTAH	WPE7BAT	L. Val Hanney, Box 124, Randolph 84064	Y,M
WASH.	WPE7BHC	Bill Colyn, 1822 McDougal, Everett 98201	A,*
Wisc.	WPE9BZG	Andy Kozlowski, 3011 S. Wentworth, Milwaukee 7	G
N.B.	VE1PE3L	Gregg Calkin, 174 Waterloo St., St. John	J,*
NEWF.	VO1PELAI	Frank Davis, Box 2, Carbonear	R
N.S.	VE1PE5S	Fredrick Seamen, Box 413, Kings Co., Wolfville	M
ONT.	VE3PE1VZ	Bob Nadalin, RR #1, Belle River	Y,*
	VE3PE1ZS	Jim Olsen, RR #1, Tilbury	T,*
	VE3-10334	Rgg McNicoll, 44 Smithfield Dr., Toronto 18	J,*
QUE.	VE2SWL	Sam Simmons, 11685 Guertin St., Montreal 9	Y
SASK.	VE5PELA	Bernard Koenig, 1309 Victoria Ave., Regina	J

FOREIGN

- USTL. VK6PELE Peter Drew, 84 Adelma Rd., Nedlands, Western Aust. A,*
- WIAL3138 Greg Earl, 7 Gordon Cres., Black Rock, Victoria. D
- ++(The two swappers listed above require 1 IRC)++
- CUBA CO2PELA Oscar Reyes, Carmen #277, Vibora B,*
- DENMARK OZDR1167 Per Cederholm, Gronagervej 23, Copenhagen 5 B
- OZDR1147 Via 1503 5th Ave., Altoona, Penn. 16602 E
- ENGLAND G-10091 Ken Pearse, 69 Munday's Mead, Wincanton, Somerset A,*
- G-7235 Pat Lambourne, 18 Sherbourne Close, Hove 4, Sussex R
- ? Ray Dixon, 6 South View, Grimsby, Lincolnshire A
- ZB110618 Dave Beale, RAF Siggiewi, BFPO 51, Malta G.C. Via London K
- HUNGARY HA9-007 Jenó Matzon, Via 44 Smithfield Dr., Toronto 18 J,*
- JAPAN JAL-3487 Noboru Sakurai, Via 5975 SW 91st Ave., Portland, Or. T,*
- N.ZEAL. ZL1-SWL Barry Marx, N. 6 RD, Otorohanga *
- NORWAY LA-M3701 Knut Lambrigtvik, Eide Pr.; Grimstad B
- SCOTLAND GM-8489 John Fraser, 49 Gardiner Rd., Prestonpans, E. Lothian E
- THAILAND HS-9324 Hans Kiesinger, G.P.O. Box 76, Bangkok J,*

 CREDITS+++++CREDITS+++++CREDITS+++++CREDITS+++++CREDITS

A very special thanks to each of the contributors this month! It gives me a great deal of pleasure to see so many listed in the credit section! Will your name be here next month? I certainly hope so!!!

Warren Anderson	W	Richard Jenneman	J
Doug Benson	S	Ambrose Maxim	M
Richard Cohen	C	Walter Smart	R
Bill Colyn	B	Edward Smith	T
Jim Creek	K	Harvey Young	Y
Peter Drew	D	DIRECT	A
Bill Eddings	E	EDITOR	*
Neal Gregory	G		

 Richard Jenneman would like some information about two radios. The data he would like is on an RCA Echophone Commercial Serial #77804 and power transformer data for a Coronado Console model C11A54. If anyone has any info on these two radios, please write to Richard. Oh yes, he wants band selector data on that RCA model. His address is R.R.2, Box 104, Stanley, Wisconsin, 54768.

I recently wrote to Bob Muecke, of Sioux Falls, South Dakota and asked him if he still would swap hombrew cards so that many of you could swap South Dakota. Bob is a ham operator and he told me that he didn't have time at present so he is definitely QRT!! Please pass this info along to other clubs and swappers. By the way, I'm presently working on getting a new swapper for Wyoming. If this one decides to swap, I'll list him at once! Does anyone know of any other South Dakota swappers?

SWAPPERS SCOREBOARD

swapper	total	states	countries	prov.
Andy Kasparson	155	50	20	4
Ed Smith	92	41	5	6
Ambrose Maxim	67	44	6	6
Peter Drew	?	16	14	2
Larry Marshall	385	50	37	7

 That does it for another month fellows. I sure would like to hear from you before the next deadline, which is the 5th of July. Remember, friendship is never out of season!

Members of DXers/cardswappers are also interested in philately and since many of our members of our club, the following is directed to them especially.

: : : : RADIO / STAMPS : : : :
by Jon

Since many of us collect stamps, a number of us in the DXing hobby use to advantage such sources as cardswapping, QSL collecting and penpal relationships. The questions however that sometimes arise are; How to divide time between DXing and philately? Which hobby comes first when time is available? Which gets the most cash (when it is at hand!)? Well the choice is rather difficult at times, but there is a way that it can be overcome. Combine the two! Why not try to collect stamps concerning radio? Here is a listing of some and the data concerned/of use to the philatelist:

Country	Date Issued	Scott Ref.No.	Subject
Falkland Islands	Oct. 5-62	145	Radio Xmtr
Falkland Islands	Oct. 5-62	144	Radio Rcvr
Falkland Islands	Oct. 5-62	143	cw Key
New Zealand	June 1-62	356	Teleprinter
New Zealand	June 1-62	357	cw Key
Rhodesia/Nyasaland	1959	159	VHF Beacon
Japan	1950	499	Microfone
Japan	1956	633	Radio tube
India	June 8-61	342	LF Tower
Qatar	1961	26 to 36	ARO(ham)

This is only a few, I am sure there are many more, but you tell me!(This is the best I can do until I manage cw at 12wpm. Hi!) Jonathan Gentry, Gailey Vicarage, Stafford England. I would appreciate info on any other stamps re radio and/or subjects like.

Here is list of names of some NASA members who are interested in stamp collecting; Bob Rooney, Neal Gregory, Frank Lendziozek, Cahrls Rader, Jim Creek, Tom Lehtio, Dick Little, Walt Smart, Peter Drew, Dick Cohen, Andy McLellan, Hector Pressa, Ron Gober, Bob Lindsey, Jon Gentry, Louie Stober, Dick Jenneman, Fred Parsons.

FRIENDLY FUNNIES

Many people are under the misapprehention that bulls hate the color red. Actually it is not so....It is COWS that hate red. When you wave a red flag at a bull he only gets angry because you are mistaking him for a cow.

If an elepahts feet cover four square foot of ground....what does his tail cover?

Why do elephants wear asbestos boots?....
So they can walk on fireflies!

A city matron who had never seen an elephant, woke up one morning and looking out the window saw one in her garden pulling up flowers and eating them. She was very excited and called the police on the phone saying "There's a strange animal in my garden pulling up flowers with his tail." The officer then asked her what it was doing with them, and the lady replied "If I told you, you either wouldnt believe me or you would think I was obcne."

What is a tourists relief map?
One giving locations of highway rest rooms.

Why did one of two oranges rolling down the road stop?
It ran outta juice!

A man was standing outside a bar selling small turtles. A drunk emerged from the bar, bought one and went back in. Minutes later he came back out, asked the man for "another of those pies, but make it a more tender crusted one this time."

NASA NEWSROOM

Ronald Luyster, Editor

Route 1

Flushing, Ohio 43737

ASIAN BROADCASTING UNION INAUGURATED

A link in the World Broadcasting Union, the Asian Broadcasting Union, which has been the long cherished desire of Asian broadcasting circles, has finally been inaugurated. In 1957, the first Asian Broadcasters Conference was held in Tokyo, Japan and representatives of broadcasting organizations of all Asian countries convened there to discuss their common problems. Thereafter, the idea of organizing a broadcasting union in Asia was gradually developed in spite of ever-changing conceptions. However, concrete result was reached at the 4th Asian Broadcasters Conference held in 1962 in Kuala Lumpur. Based on resolutions of this conference, the Statute Drafting Committee drew up the draft. This draft was then adopted at the 5th conference held last year in Seoul, Korea. Now, with its inauguration, the ABU will become the framework of a solid organ formed by broadcasting organizations of independent countries of national character. These countries will be from Asia and the Pacific area within the sphere of 30 degrees East Longitude and 170 degrees West Longitude. Those countries who applied for membership and were approved at the General Meeting are considered full charter members, those with corresponding qualifications will be associate members. The realization of the ABU will not be simply an extension of the ABC to promote mutual understanding among broadcasting organizations in the Asian region and to add acceleration to business for common benefit by personnels, programs and technical exchanges, but to work in concert with the European Broadcasting Union as well as other international unions and to offer its services in forming the framework of a world broadcasting union. The inaugural meeting of the ABU is scheduled to be held around November of this year in Sidney, Australia.

Radio Japan News

SYRACUSE, NEW YORK...General Electric Company has introduced an all-channel TV set (portable transistor) which it says may ultimately make TV sets as numerous as the portable transistor radios. This new model, first to be manufactured in the US, will receive all UHF channels and has a 9 inch picy tube. Can be used on boats, in autos, planes, etc. Is run on a 9 volt battery. (UPI)

COLUMBUS, OHIO...Dr. Ilse Edse of Ohio State University sends two 6 minute tapes to Germany each month for use on a shortwave station there (station not disclosed). She chooses sounds she thinks will tell the German peoples something about America. Recordings of such as a jazz festival...a boy delivering newspapers...a driver aiding a fellow motorist with a flat tire...parades...anything except political topix. (D.B.)

NEW YORK, NEW YORK...Electric energy production across the nation in the past several weeks ran above any this year and year ago levels, Edison Electrical Institute sez. Output totaled 18,869,000,000 kilowatt hours. (Man watta lotta watts!) (B.E.)

MIAMI, FLORIDA...An american mystery man has been broadcasting a series of Spanish code ciphers once again on a powerful shortwave station beamed to Cuba, fanning unconfirmed reports of impending new exile attack against that Island. Havana Radio has made no attempt to comment on a Washington Star newspaper story that two exile groups staged landings there recently. Radio monitors here noted that apparent attempts are being made by Havana to jam the mystery code transmissions. (UPI)

WASHINGTON, D.C....The FCC, which for years was advocating the issuance of fewer and fewer broadcast radio permits due to the overcrowding in the bands, now seems to have another idea up its legal sleeve. A recent comment by a high spokesman notes that they might try to issue permits for less power per station rather than try to curb nww. In addition, there is talk of cutting back the power of existing high-powered stations.

NEW YORK, NEW YORK...A series of 39 seven-minute travelogues as seen through the eyes of children is being filmed for syndication by Screen Gems, Pacific Film Productions, Australia and the TBS network in Japan. "My friends around the world" is the title of the series. (UPI)

What's new in your part of the country/world? We would like to read of it in Frenx!

LONDON, ENGLAND... For sale: One island in the South Sea's, complete with palmshaded lagoon. The island has been put up for sale by the British Colonial Office and The Cable & Wireless Company. There are a few catches; The island is located 3000 miles from any mainland and is no more than 10 feet above sea level at any point. It is 170 miles from the nearest radio station on Christmas Island. It houses a booster unit for the Cable & Wireless Co., but was made obsolete when the Commonwealth Pacific undersea cable opened recently. There are 57 employees on the island and, as described by the Sunday Times, it has a modern village with a guest house, a floodlighted tennis court, a food freezer, and a swimming pool for those who tire of the surf in the lagoon. The owners describe the island as "perfect for children" and an "ideal base for the man who is ocean-going yatchminded". (Any takers?) (UPI via N.V.)

SAIGON, VIETNAM... A new 50,000 watt Voice of America transmitter is sked to go on the air this month. Usually the VOA gives the local government a few hours airtime each day for its own unrestricted use; However, in the case, there are no plans to give the South Vietnamese government any control over the Saigon installation. (NewsWeek)

GENEVA, SWITZERLAND... The United States and the Soviet Union began talks recently on Russian participation in the U.S. planned global space satellite communications system. American and Russian representatives are meeting to discuss how the system will work and the ways in which the Soviets could join. The system, known as COMSAT (Communications Satellite Corp.), is to go into operation on an experimental basis next year. By 1967 it will go into full operation with satellites over the Pacific, Atlantic and Indian oceans, and gradually relieve present over-burdened "earthbound" radio, television and telegraphic facilities. Although COMSAT is and will be under complete American control, the U.S. wants the space communications network to be international. American officials said it will be partly international in any case because each participating country will be responsible for setting up its own ground receiving and xmitting stations and national relay grid.

BONAIRE, NETH. ANTILLES... According to the latest sked rcvd from Radio Nederland, their new relat xmitr on this island went on the air in June. The purpose of these is to attempt to improve condx of Radio Nederlands broadcasts to North America and to West Africa which for some time have been poor in quality. (Radio Nederland)

TKYO, JAPAN... At present, when Japan is deeply concerned with broadcasts of the upcoming Olympics, Radio Japan, this month, will reinforce its transmission output. In the past, 100kw was the highest output, but by utilizing two newly built units of 100kw each, a transmission will be conducted on 200kw. This will be used for transmissions to comparatively remote directions such as the Middle East and North African Service, the North American and North Latin-American Service, and the European. Part of the General Service will also be transmitted on 200kw. The aim is to conduct overseas transmission of news reports and commentaries 24 times daily for 30 minutes, evc hour on the hour. (NHK*Radio Japan)

AROUND THE CLUBS

Canadian International DX Club... New/recently elected officers, by vote of members: Bill Jennings-President, Lorne Jennings-Vice President, John Peters-Treasurer, Ed Peters-Public Relations, Bill Booth-Editor of CIDX bulletin "Messenger". Anyone who might be interested in membership in this organization, info can be had by writing to CIDXC Headquarters, 616 Stewart Street, St. Charles, Manitoba, Canada. (B.E.)

WorldWide Monitors Radio Club... Jerry Seckel who took over from Dick England a year or so ago as manager/publisher, has informed members of his intended resignation. In the same notice Jerry wisely forewarns anyone wishing to consider the position that it is not all "peaches and cream" and that it takes much time, effort, even money. (J.K.)

Finlands DX Club... This is the oldest active DX club in Finland, founded in 1954 and presently standing with 120 members most of which are from Finland, others from Sweden Denmark, West Germany, England, France and the U.S. It publishes a monthly magazine called "Attention" which is mainly printed in Swedish and usually contains 30 pages. For further deatils, write: Finlands DX Club, P.O.Box 214, Helsinki, Finland. (T.L.) Till next time now, may all your news be good news. Lets hear from you! 73, Ron

Paul Gough, Editor

18 Eliot Avenue

West Newton, Mass.

Hello from your TV DX Editor. It appears that nobody is interested in FM DX at the moment, but that is OK because we received a few TV DX reports. First of all, I would like to thank the three who sent reports in this month, and hope that they make a habit out of it, and the non-reporters will give it a try. Most of us have TV sets, so there is no real excuse.

The reports are listed by channels, and the reporter is identified by his initials. Times are Eastern Standard. Please try to keep this format when reporting.

	Date	Time	Station	Location	Reporter
2	Apr 18	2315	WKTV	Utica, New York	DB
2	June 1	1030	WSB	Atlanta, Georgia	HY
2	June		KATU	Portland, Oregon	JC
2	June		CKCK	Regina, Saskatchewan	JC
2	June		KBOI	Boise, Idaho	JC
2	June		WLW	Dayton, Ohio	JC
2	June		KTCA	St. Paul, Minnesota	JC
3	Apr 20	2130	WSYR	Syracuse, New York	DB
3	June 1	0030	WCIA	Champaign, Illinois	HY
3	June 1	2130	WRCB	Chattanooga, Tenn.	HY
3	June 2	0000	WSAZ	Huntington, W. Va.	HY
3	June 2	1900	KYW	Cleveland, Ohio	HY
3	May 10	1000	XHY	Yucatan, Mexico	HY
4	May 16	1700	WTAE	Pittsburgh, Penna.	HY
4	June 1	1000	WCIV	Charleston, S. C.	HY
4	June 1	0000	WSM	Nashville, Tennessee	HY
5	June 2	2000	KFBB	Great Falls, Mont.	HY
5	June 2	2030	KXGN	Glendive, Montana	HY
5	June 4	1830	WLWT	Cincinnati, Ohio	HY
6	Apr 10	2000	Un-ID	Spanish speaking sta.	DB
7	Apr 18	2300	WABC	New York City	DB
8	Apr	2210	WMTW	Mt. Washington, N.H.	DB

Reporters this month were: DB Doug Benson, your short-wave editor, who uses a Crosley 17" set with two Yagis. He DXes from Schenecady, New York. (Note-while his DX may sound like a lot less than that of the others, but it is harder to hear a station beyond the line of sight distance within 300 miles, than it is to hear one 1000 miles away on 'skip'. I know, I have been trying to work a station in NY on 6 meters and can't, while I have no trouble working Iowa. Each kind is hard in its own way. ed.)

HY-Harvey Young used a 30' external antenna (????, he must mean 30' up, but whatever, IT SURE WORKS!!!!) feeding a 24" Curtis-Mathis. He lives in McAlister, New Mexico.

Jim Creek (JC) uses a Zenith 23" set with a Yagi at 40'. He lives in Home, New Mexico. (You boys don't know how lucky you are living away from the large cities (DX wise). The only channel available for DX here is 2, and there is a E*TV station on the frequency WGBH in Boston, most of the good DX times.

Speaking of channel two, please read the second page, on the top is an interesting "filler" which I clipped out of the Boston Globe.

Here in Boston, there is a lot of applicants for the license of WHDH Channel 5, which is currently running the station.

Recently, people watching WGBH-TV (the local E-TV station in Boston), were invited to wave a magnet close to their TV screens and observe how it bent the electron beams. The general manager of the station, Hartford N. Gunn, Jr. explained "What we didn't think to say was, 'Don't do this if you have a color set'. A few of the viewers tried the stunt on their color TV sets and the result, couched in the dead prose of the engineers report 'effected a permanent magnetic distortion resulting in severe color degradation and requiring the set to be degaussed.' In plain language, all the faces turned purple, including WGBH's---and the repairman had to be called! (Note if they had a kit built color set, they could have degaussed it themselves, hi. ed.)

HOW TO TV DX, or WHAT TO DO WHEN YOU GET SICK OF THE VAST WASTELAND!

In order to DX TV, you only need a TV set, and an antenna, the bigger it is, and the higher up it is, the better. First, tune the set to channel two (if there is a local station on this channel, tune to the next higher). If you see nothing, there is no "skip". If you do, perhaps the station is about 1000 miles away. Feep to the channel, because most skip stations rarely stay in for more than half an hour, with another taking its place. Here in the north-east, put the antenna in the south-west for distant reception. If you live anywhere else, ask a local ham who works six meters to give you the direction.

By now, you probably have checked out channel two, and found that there were no DX stations coming in. This is not suprising, because this type of DX is known as Sporadic E, and it is exactly that-----sporadic, and unpredictable. But, you may know when to look for it. It occurs mostly between late May and early September. It may happen at anytime of the day or night, but usually happens between the hours of 9-11 and 1500-2200 local time. Most likely, it would appear at the latter time.

The channels to watch are 2, 3, 4, 5, and 6 in that order. It may not happen on the higher channel, unless it happens on the one lower. In other words, if there is DX on channel 4, there has to be DX on 2 and 3.

Wanted, any comments, questions, insults, reports, data, information, etc pertaining to TV, by your editor. Also wanted are FM reports.

I hope you like my first effort at cutting a stencil, and it is being done very hastily (Yes, I know hast makes waste), so there are mistakes in the stencils that should never be there. Some of it is being written for the first time on this stencil. The only reason for this is that I have been rather busy, and want to make sure that the stencils get to Bill Eddings in time.

Next month, I will try to have a full page article on TELSTAR, and how it works. I also hope to have your report. Deadline will be the 8th of the month, so make sure it gets here to me by then. I sincerely hope you enjoy this section, and would like any comments; good or BAD. If you don't send in the bad ones, I will never know what is wrong. (I know my typing is poor, so don't bother telling me that. Someone once said something like-THE GOOD A-THORS TYPE WITH TWO FINGERS, THE GREAT ONES-ONE! I USEMY LEFT THUMB!!!!) #3 and best of luck & DX.

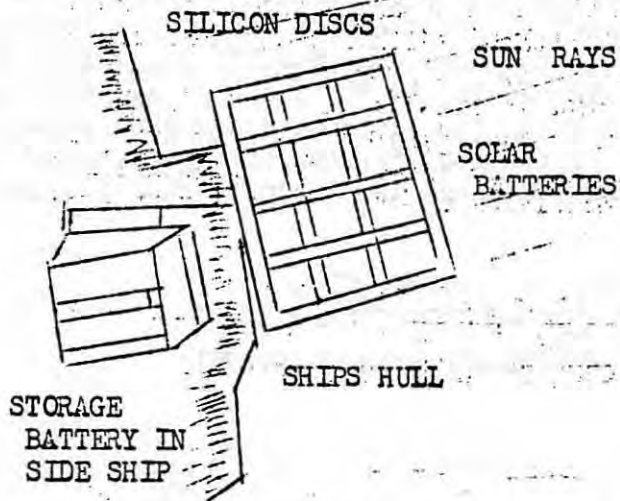
WPE1ASX

Paul Jough *K1ZJC*
30-

SOLAR BATTERIES TECHNICAL DATA

by Nick N. Vrettos

Solar Batteries (Panels containing thin discs of specially treated silicon, which is the main ingredient of ordinary sand) are arranged around the exterior of the ship in such a way that an adequate number of them are, at all times, facing the sun. Rays from the sun are converted directly into electricity. The latter is stored in light weight nickel-cadmium storage batteries. It is possible to draw for a short period of time substantially more electrical energy than the solar battery furnish.



 HIGH VOLTAGE ARC ON RANGER 6?.....
 NASA Administrator Mr James E. Webb, said on 11 February 1964, that the failure of RANGER 6 to take pictures of the moon might have been caused by a high voltage

electric arc which damaged the camera-television system shortly after launch. This arcing might have been triggered, he said about 2½ minutes after lift off when a system designed to report on the performance of the cameras turned on unexpectedly. The system was not scheduled to commence operation until shortly before the spacecraft hit the moon. (FLIGHT INTERNATIONAL PUBLICATION-SUBMITTED BY Ken Austin-Toronto CANADA-Thanks Ken)

ASTRONAUTS PICKED FOR GEMINI FLIGHT:-

A veteran space traveler and a rookie astronaut were picked to close the gap in the United States race to the moon.

MAJ. VIRGIL I (GUS) GRISSOM, 38, the second American in space, and Lt. Cmdr. John W. Young 33, a former Navy test pilot, got the nod as the first crew to fly a GEMINI spacecraft into orbit later this year.

Named as backup crew were Cmdr Walter M. Schirra, 41, pilot of a six-orbit Mercury flight on Oct 3, 1962 and Air Force Maj. Thomas P. Stafford, 33, a test pilot who has written textbooks on flying.

An ear ailment similar to the one suffered by former astronaut John Glenn, knocked Lt. Cmdr. Alan B. Shepard Jr, 40, out of consideration for the first Gemini crew. Cmdr Shepard's ear is infected. Lt. Cmdr Shepard was the first American in space. He rode a Mercury capsule atop a redstone missile 118 miles down-range from Cape Kennedy, Fla. May 5, 1961, on a suborbital flight.

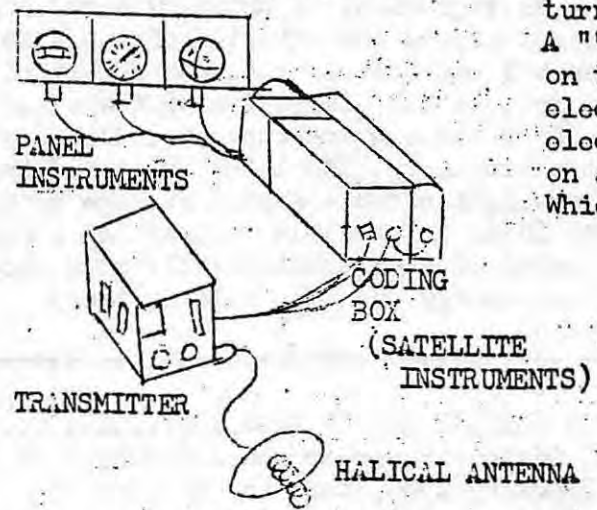
NASA TO TRY EGG-LOFTING INTO ORBIT: One and a half dozen chicken eggs wired like a switchboard may be used to help explore the mysteries of weightlessness in space if they can be blasted into orbit and returned unscrambled. Scientists at North American Space and Information System Division, Downey, Calif., specifically want to know whether chicken embryos will develop normally in space under condition of zero gravity. Chicken eggs are particularly good for space study for several reasons:

- (1) The chicken embryo has been thoroughly studied in the earth environment, and there is little that is not known about its behavior. This gives a good base for comparison with how it is affected by space conditions.
- (2) The egg itself is a well established life support system that is adaptable to space study.
- (3) Metabolic changes are much more rapid in early life, and the chicken embryo, with a 21-day development period, is well-suited to the short duration of a space flight.
- (4) Gravity is known to have some effect on the chicken embryo, as is shown by the need to turn eggs at least once a day in order for them to hatch.

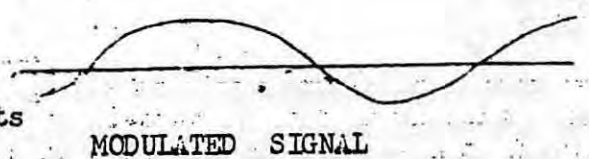
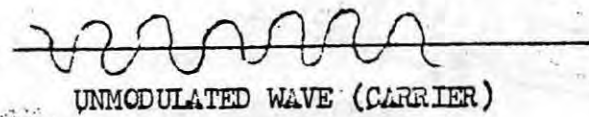
TELEMETRY SYSTEM

TECHNICAL DATA

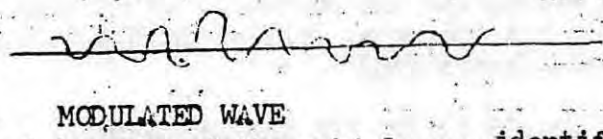
In telemetry systems physical or mechanical measurements are taken, converted into electrical signals, and transmitted by radio to distant ground stations. These in turn reconvert the data to intelligible records.



A "transducer" attached either to a panel instrument or to a duplicate gauge, converts its reading into an electrical signal. In the "Coding Box" all the many electrical signals thus generated are superimposed on a number of tones or "subcarrier frequencies". Which in turn modulated the "main carrier frequency".

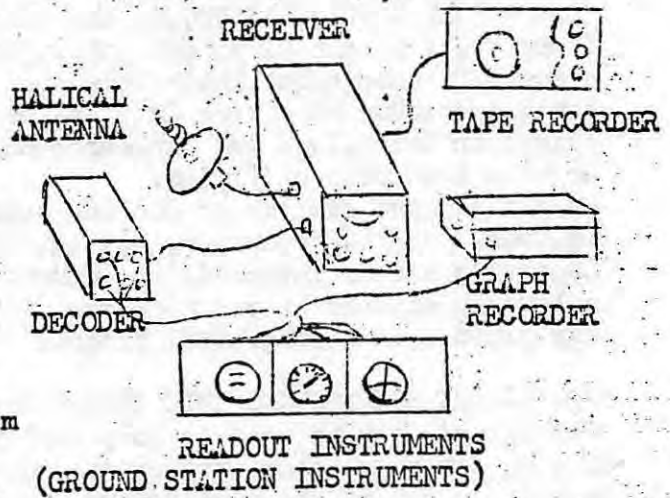


The latter is radioed to the ground by the transmitter. For directional effects a helical antenna may be used. The ground receiver passes the received main carrier frequency on to a "decoder" where the subcarrier frequencies are fished out with the aid of resonance circuits.



In this manner the total message is "un-scrambled" and the individual measurements taken aboard the vehicle are identified. They are then passed on to suitable readout or recording instruments.

In order to provide a possibility for repeating the decoding procedure, or in order to provide copies of the graph records, the original non-decoded signal may also be passed on to a tape recorder whose recording's can be played back into the decoder as often as desired.



WHERE DOES OUTER SPACE BEGIN?
THE NEW YORK LAW FIRM of Hyman, Hayman & Harris has asked the Air Force Office of Aerospace Research to define the boundary between air space and outer space. The firm had been commissioned to draft an opinion by the International Institute of Space Law.

One Air Force scientist, Norman Sissenwino, suggested that the boundary be assigned to an altitude of 62 miles. Above that altitude, he says, the effects on aerodynamic force on re-entry vehicles, such as missile nose cones or manned spacecraft, are negligible.

If the opinion is accepted, the legal line of demarcation between air and space may be the point where a re-entry vehicle begin to become a fire ball.

SPLIT LINER TASK:-

The Federal Aviation Agency and the Space Agency agreed that the FAA will have the dominant role in the development of a supersonic airliner, NASA will provide the needed facilities, background research, technical advice and resources to FAA and conduct advanced flight research. (Nick N. Vrettos, Jr.)

By NICK N. VRETTOS

NAVAL OBSERVATORY TIME SIGNALS: Are now being broadcast at numerous times throughout the day by five widely separated Navy radio stations.

NSS-Washington, D.C.-NBA Canal Zone,- NPG San Francisco, Calif., NPM Honolulu; and NPN Guam.

STATION: NSS WASHINGTON, D.C. Frequency in kc; 121.95; 5870; 9425; 13.575; 17.050.4; 23.650

GMT=	EST ZONE+5	CST ZONE+6	MST ZONE+7	PST ZONE+8	ALASKA-HONOLULU TIME ZONE+10
0155-0200	2055-2100	1955-2000	1855-1900	1755-1800	1555-1600
0555-0600	0055-0100	2355-2400	2255-2300	2155-2200	1955-2000
0755-0800	0255-0300	0155-0200	0055-0100	2355-2400	2155-2200
1155-1200	0655-0700	0555-0600	0455-0500	0355-0400	0155-0200
1355-1400	0855-0900	0755-0800	0655-0700	0555-0600	0355-0400
1755-1800	1255-1300	1155-1200	1055-1100	0955-1000	0755-0800
1955-2000	1455-1500	1355-1400	1255-1300	1155-1200	0955-1000
2355-2400	1855-1900	1755-1800	1655-1700	1555-1600	1355-1400

STATION: NBA Balboa, CANAL ZONE:-Frequency in KC:-147.85; 5448.5; 11.080; 17.697.5

0455-0500	2355-2400	2255-2300	2155-2200	2055-2100	1855-1900
0955-1000	0455-0500	0355-0400	0255-0300	0155-0200	2355-2400
1655-1700	1155-1200	1055-1100	0955-1000	0855-0900	0655-0700
2355-2400	1855-1900	1755-1800	1655-1700	1555-1600	1355-1400

STATION: NPG, San Francisco, California.

Frequency in KC:-114.95; 4010, 6428.5, 9277.5, 12.966, 17.055.2, 22,635.

STATION: NPM, Honolulu.

Frequency in KC:-131.05, 4525, 9050, 13.655, 17,122.4, 22,593.

STATION:-NPN Guam.

Frequency:-in KC;-484,4955, 8150, 13,530, 17,530, 21,760

0555-0600	0055-0100	2355-2400	2255-2300	2155-2200	1955-2000
1155-1200	0655-0700	0555-0600	0455-0500	0355-0400	0155-0200
1755-1800	1255-1300	1155-1200	1055-1100	0955-1000	0755-0800
2355-2400	1855-1900	1755-1800	1655-1700	1555-1600	1355-1400

The above is the schedule of the U.S. NAVAL OBSERVATORY TIME SIGNALS.

BELGIUM BRUSSELS-UTILITY STATION:*

CR12Z:-12.235 Mc/s. with 10 KW transmitter. Directing their XMITR to Cairo, Egypt.

Reports should go to:-Regie des Telegraphes et des Telephones 42 de rue des Palais, BRUXELLES 3, BELGIUM. (Thanks to John T. Arthur for the above item).

BARBADOS ISLAND, has now a new Broadcast band station:- on frequency 795 kcs. Still no short wave station. (Thanks to Donald N. Jensen and Lavoyd Kuney)

RADIO AMERICA* SWAN ISLAND- Can be heard on the regular broadcast band on 1165 kc/s. 0145-0215 hrs CST. They verify with their very colorful veri card. signed by J.TAKAKI (All indications show that this station is located on SWAN ISLAND, I stand corrected Donald N. Jensen).

RADIO MARATHON:-SOMERERO ISLE:- one of the small Florida keys, is the location of this station which transmits the truth to CUBA. Broadcast daily from 6am to 9 am and from 5.30 PM to 11.30 PM EST. on 1180 kcs.

USSR ENDS ALL JAMMING ON UNITED STATES STATIONS BEAMED TO RUSSIA AND HER SATELLITE COUNTRIES: For the first time in 15 years, the United States radio broadcasts have been consistently going thru to Russia. Also Romania and Hungaria have ceased jamming. However, Bulgaria, Czechoslovakia, Cuba and Communist China still are jamming. Short and Medium wave broadcast from Berlin continue, but are jammed by Communist Agency, but FM broadcasting, widely received in East Germany, also continues and cannot be jammed.

73/DX, Nick

***** WORLDWIDE DX COMPETITION DATA *****

LATEST / FINAL RESULTS Compiled by Jack Keene-WMRC

1300-1600kc MW(BCB) Competition

DXer	Sta.	S&P	Cou.	Mult.	Raw	Net	Club(s)
1. Cowles	165	31	4	1.7	547	929.9	KYDKA
* Keene	105	30	13			893.9	WMRC
"	101	30	9	1.7	487	827.9	
"	4	0	4	1.1	60	66.0	
2. Chitenden	172	35	5	1.2	604	724.8	WMRC
3. Coles	87	28	2	1.7	344	584.8	WMRC
4. Drew	71	7	18	1.1	447	491.7	NASA
5. Cleaver	99	24	2	1.4	348	487.2	WMRC
6. Henley	50	2	18	1.1	380	418.0	WMRC
7. Stanley	49	18	2			329.2	?
"	21	8	2	1.8	112	201.6	
"	28	10	0	1.2	106	127.6	
8. Little	22	12	2	1.2	134	160.8	WMRC/NASA

WHO's WHO...Larry Coles-Park Ridge, Ky. Hallicrafters S38E...Jack Keene-Houston, Tex. Hallicrafters S40 w/HD-11 Q mult and Delco RL173...Don Chitenden-Los Gatos, Calif. Hallicrafter S40...Jody Coles-Houston, Tex. Homebrew 4 tube plus rectifier...Peter Drew-Nedlands, W. Australia. B28(11 tubes)...LeRoy Cleaver-Joplin, Mo. Hallicrafter S38...George Henley-Herts, England. Hallicrafter S16...Bill Stanley-Deer Park, Tex. SX110 and Admiral 6 transistor...Dick Little-Ft. Worth, Tex. Hallicrafter S167.
 PRIZES...#1 receives 3 months WMRC plus certificate. #2 and 3 receive certificates. Extra prize of \$1 in U.S. stamps, plus 5 mint Mexican Airmails, went to Larry Cowles for having the highest overall total net score during competitions on BCB.

9.0 - 10.0mc SWBC Competition

DXer	Sta.	Cou.	HAC	Mult.	Raw	Net	Club(s)
1. Coles	100	41	Yes	1.7	425	722.5	WMRC
* Keene	70	32	Yes	2.0	320	640.0	WMRC
2. Drew	124	49	Yes	1.1	513	564.3	NASA
3. Henley	71	43	Yes	1.1	377	414.7	WMRC
4. Cleaver	54	30	Yes	1.2	278	333.6	WMRC
5. Reed	19	17	Yes	1.7	143	243.1	KYDKA
6. Havel	53	28	Yes	1.1	216	237.6	WMRC/NASA
7. Schnabel	23	22	Yes	1.0	176	176.0	WMRC
8. England	27	18	No	1.1	144	158.4	WMRC
9. Little	24	15	Yes	1.1	143	157.3	WMRC/NASA
10. Stover	12	11	No	?	79	?	WMRC

WHO's WHO...Jody Coles-Houston, Tex. Lafayette HE40...Jack Keene-Houston, Tex. Lafayette Explor-Air(2 tubes plus rectifier)...Peter Drew-Nedlands, W. Australia. B28 (11 tubes)...George Henley-Herts, England. Hallicrafter S16...LeRoy Cleaver-Joplin, Mo. Lafayette KT200...Dave Reed-Raceland, Ky. Hallicrafter S120...Don Havel-Forest Park, Ga. Hammarlund HQ140X...George Schnabel-Ashtabula, Ohio. Lafayette HE80 plus HE73...Dick England-Utica, Mich. National NC190...Dick Little-Ft. Worth, Tex. HQ129X...Jeff Stober-Southfield, Mich. (Rx ???)
 PRIZES...#1 gets three months in WMRC and a certificate. #2 and 3 each get a certificate. * Contest official, not eligible for prizes.

I wish to thank the members of NASA who supported these competitions and hope to see them and others join in again when more are announced in future. Good DX! & 73! JLK.

"Unity and Friendship"

- 0000 Mexico XEBR Hermosillo on 11820 with typical programs (Peters)
Haiti Radio Commerce on 9544 kcs (correct. Ed.) with French
 drama. (Peters)
Australia on 15180 w/French to the Pacific (Drew)
- 0100 Germany VOG (DW) on 6015 kcs with German to north America (Drew)
Hungary Budapest Radio on 9833 with English at 0125 hrs (Drew)
Egypt Radio Cairo hrd in Spanish on 9795 until 0130, then
 into Arabic until 0240 close. Xmsn to South America. (Parsons)
Australia Perth on 15425 kcs. at 0130 with kiddie show. Sigs
 were quite poor. (Peters)
Brazil Radio Clube de Ribeirado Preto on 15415 kcs with a
 soccer game. (Peters)
Peru Radio Nacional, Iquitos, on 9855 with spanish news at
 0055. (Peters)
- 0200 Cuba Havana on 9517 kcs. (correct) with Musica Populares Cubana.
 Interference from XEWW. (Peters)
Peru Radio Amazonas, Iquitos, on 9768 kcs. at 0245 with ads
 and music. (Peters)
Australia Radio Australia hrd on 15220 kcs. with a concert, and
 with interference from VOA. (Peters)
North Korea hrd underneath too. (Peters)
Italy Rome Radio logged on 9710 with music at 0230, news at
 0255. (Peters)
Czechoslovakia Prague Radio on 9795 kcs. w/ LA signon (Eddings)
Brazil Radio Diff. Educacao PIR3 hrd with ID on 11950 kcs at
 the half-hour. (Stober)
- 0300 Hungary Budapest Radio on 9833 to North America (Eddings)
Unid (Mebbe Honduras, Editor) on 9708 kcs. with ads and music.
 Hrd at 0330 with much interference. Probably R. Suyapa. (Peters)
Unid Persian-lingoed station hrd June 2nd at 0330 on about
 11730 kcs. Much co-channel interference from Armed Forces Radio
 at Calif. (Moyer)
Ceylon Colombo on 11800 kcs in Tamil(?) with ads. (Drew)
Ceylon VOA Relay station at Colombo on 11835 w/Sp. Eng news. (Drew)
- 0400 Congo Radio Congo at 0430 with French talk, then local news
 at 0445 hours on 4843 kcs. (Peters)
Switzerland Berne very strong to North America at 0420-0445
 on 9655 dual 11865. Also hrd with Shortwave Merry Go Round
 at 1915 hours, featuring thanks to fellow NASAer Peter Drew.
Costa Rica Radio Reloj on 6205 kcs. at 0440 with music, mni
 commercials, frequent IDs. (Eddings)
Portugal Lisbon's Voice of West on 6185 at close 0430 (Eddings)
- 0500 Cuba Radio Havana hrd on 11865 (annced) in English with poor
 modulation. (Drew) More concerned with power than with quality,
 Peter, just like our Stateside Rock n' Rollers. Editor.
New Zealand Wellington hrd well on 15110 kcs. w/music (Stober)
- 0600 USA AFRTS Delano Calif. on 11900 at 0645 w/politics (Peters)
 Logged also carrying UN Radio at signon at 0630 on 11830 (Peters)
Ivory Coast Radio Abidjan on 11820 at 0630 signon (Eddings)
Mali Radio Bamako at 0600 signon on 4835 kcs. ID in French,
 then a program of local nature. (Peters) "Local nature" mebbe
 the Bamakoan girls, Frank? Ed.
Colombia Bogota Radio Sante Fe on 4965 kcs. w/usual pro. (Eddings)
Guinea Republic Conakry on 4910 kcs. from 0620 tune in w/music,
 French annmnts, IDs. This freq supposed to be dropped for the
 summer. (Eddings) Not according last sked, Bill.
Senegal Dakar Radio with hourly signon, then continuous music.
 On 5975 kcs. (Eddings) Very very strong. Ed.

- 0600 Dominican Repub. Radio Santo Domingo Television (was Radio Caribe before January) on 9505 kcs. with an ENGLISH program. Some interludes of light and semi-classical music. (Eddings) Dahomey Radio Cotonou on 4875 kcs. at 0625 tunein, with African music and singing. No interruptions for a full 20 minutes of logging. ID in French at 0645. (Eddings)
- 0700 Tahiti Papeete Radio on 6135 kcs. at 0705 with ID, French news, Hawaiian music and faded by 0730. Very weak signals. (Eddings) Very nice catch from Penn. Edor. They close 0730. New Zealand Wellington on the new 6080 kcs. with South Seas music and in unidentified lingo. English IDs heard. QRM'd by VOA on 6075 kcs. (Peters) Lingo possibly Maori, sez sched. Editor. Australia Brisbane with music and songs on 4920 kcs. (Stöber)
- 0800 USSR Radio Moscow logged at 0830 closedown on 11755 kcs with Pacific Coast Service to North America. (Peters) Papua Port Moresby logged 0845-0900 with program preview, music, weather, news. Fair signals. (Eddings) On 4890 kcs at later hour far stronger. Ed. Brazil Radió Nacional, Rio de Janeiro hrd from 0845-0905 on 6145 kcs. with Portuguese commercials and South American music. (Eddings)
- 1600 Germany (East) Radio Berlin International on 11920 kcs. with Portuguese news aimed at Brazil. (Peters)
- 1800 Liberia VOA Monrovia with This Week in Review on 9675 kcs. Costa Rica Faro del Caribe TIFC logged on 9645 kcs. w/spanish programs.
- 2000 Iran Radio Teheran hrd on 15125 kcs (varying, Editor) in English with news at 2030. Hrd earlier in Arabic, but then was covered by a very strong Lisbon. (all Peters)
- 2100 Spain Radio Nacional de Espana, Madrid, logged at 2125-2145 on 9360 kcs. with music, comments, and Italian language programs at 2140 hours. (Eddings)
- 2200 Germany Radio Free Europe hrd on approx. 15175 kcs. in Romanian and with strong signals. (Parsons) Freq probly closer to 15185.

Many thanks to our reporters this month;

Frank Peters of Chicago

Paul Moyer, Ontario

Peter Drew of Australia

Bill Eddings; Pennsylvania

Fred Parsons; Ontario

August Balbi, California

Louie Stober, Oregon

Ye Ed., New York

Specials

- 0200 USA KGEI Radio California has replaced 9590 with 11710 kcs. For the broadcast from 0230-0430. (Balbi) Liberia Monrovia VOA Relay station has evidently made some changes in their May third schedule. Logged 0300-0800 on 7120, 7195, 6035 and 9660 kcs. Also hrd at 1830 closedown on 15315 kcs. (Balbi)
- 0400 Omdurman Sudan, Radio Omdurman logged at sign-on, on new frequency of 9480 kcs. with clock pips indicating 6 AM their time, and Arabic ID. (Balbi)
- 0600 Bolivia CPL5, Radio El Condor at La Paz hrd on a Saturday on 6125 kcs. w/request program of Bolivian songs. Good strength, but modulation is distorted. VOA Greenville covers this frequency during the week. (Peters) Mozambique Lourenco Marques Radio hrd irregularly on 11780, not on 11760 or 11820, as reported elsewhere. Hrd 0630-0700. (Balbi)
- 0700 Papua is now closing down on 9520 kcs. at 0715, not 0645. (Balbi)

Specials, continued...

- Philippines FEBC Manila is TESTING from 0600-0800 hours on 17810, 15300, and 11740 kcs. Programs consist mainly of music. IDs in English, and the frequencies are announced. (Balbi)
- 1300 Vietnam Saigon with English News on the hour until 1400, hrd on 7260 kcs. (Balbi)
- Borneo Brunei Radio is finally being heard in California; August Balbi reports this logged programming: At 1300 BBC news, at 1315 ID as Radio Brunei and time pips indicating 9:15 their time. Then, ten minutes of local news, followed by another BBC Program. Closedown at 1430, with anthem and God Save The Queen. Frequency 4865 kcs. (Balbi)
- 1800 Unidentified station hrd for many months on 11696 kcs. in Arabic. No identification audible. (Peters) Probably Radio Free Iran, which signs on about 1400, Frank. Sources say it's located Bulgaria, though this not much more than a guess. Hrd here also on 11400 kcs. this time. Editor.
- 1900 Armenia Radio Yerevan, The Voice of Armenia, broadcasts to South and Central America as follows: Saturdays and Sundays from 1930-2030 on 11690, 11755, 9725 kcs; English hrd 2020-2030. Heard well in California. (Balbi)
- 2000 Bulgaria Radio Sofia on new 11850 kcs. w/English till 2025. (Balbi)
- Belgium Brussels Radio is noted apparantly on-the-move around 9745 kcs. Has been heard on 9743, then on 9747 kcs. (Peters)

Last-minute DX News and Information:

As we noted, August Balbi notes new frequencies et. in use by VOA's Monrovia, Liberia Relay Station. According to his expert loggings, here's the new schedule....

0430-0600, 1400-2100 on 15315 kcs. (no change)

0300-0800 on 7195 kcs. (new)

0300-0700 on 7120 kcs. (listed for 7150)

0300-0800 on 6035 kcs. (listed for 6075)

0715-0800 on 9660 kcs. (no change)

Correct your copies
of this schedule!

Schedule in effect until September 1, 1964, supposedly.

From Fred Parsons, Welland, Ontario, Canada:

Latest schedule from Beirut Radio, Lebanon...

Transmission to North America on new frequency of 9625 kcs.

French to NA 0130-0200

Arabic to Western NA 0300-0330

Arabic to NA 0200-0230

Spanish to SA 0330-0400

English to NA 0230-0300

(All transmissions on 9625 kcs.)

From Balbi again; Complete sked for West Australia, Perth:

0015-1015 on 15425, 9610 kcs.

1030-1607 on 9610, 6140 kcs.

2200-0000 on 9610, 6140 kcs.

And, the Complete and latest sked for Papua's Port Moresby;

2000-2200 on 3925, 4890 kcs.

2215-0715 on 9520, 4890 kcs.

0730-1400 on 3925, 4890 kcs.

August doesn't bother with printed, and oftentimes out-of-date, skeds. He monitors himself, often for hours and hours, and determines the correct transmission schedules thataway. Excellent job, August.

transmission schedules, cont.

FEBC, Manila

Broadcasts in English as follows:

2155-0030 on 17810 kcs.	0900-1230 on 15385 and 17810 kcs.
2155-2330 on 15300 kcs.	1230-1400 on 9555 and 15385 kcs.
2330-0030 on 15385 kcs.	1230-1330 on 15230 kcs.
0100-0200 on 15385 kcs.	1530-1630 on 9555 kcs.

Weekdays from 0200-0300 on 9555; 11740; 15385; 17810 kcs.

Weekdays from 0830-0900 on 9555, 11920, 15385, 17810 kcs.

Sundays only 0200-0900 on 9555, 11740, 15385(15300 from 0230), 17810.

Cuba Radio Havana's summer schedule:

To Europe: French 1900-2010, English 2010-2140 on 15155 kcs.
 To North Africa; Arabic 2030-2110, French 2110-2140 on 17855 kcs.
 To North Africa: Spanish 0630-0730 on 11735, 1900-2030 on 17855 kcs.
 To North America: English 0300-0600, (French 0430-0500) on 11865 kcs.
 To South America: English 2050-2150 on 15135, Portuguese from 2300-0000 on 15340 kcs, Creole from 0200-0300 on 6060 kcs.
 To West Indies: Spanish 1100-1230, 2200-2300, 0000-0050 on 15340 kc, 1100-1830 on 11760 kcs, 1100-2200 on 15135 kcs, 1240-1830 on 17855 kc, 2200-0600 on 9525 kcs, 2200-0300 on 11865 kcs, 0100-0600 on 11970 kc, 0300-0600 on 6060 kcs.

Czechoslovakia Radio Prague's latest North American English sked:

0100-0155 and 0330-0425 on 7345, 9550, 9795, 11990, 15285 kcs.

Afghanistan's latest sked from Kabul:

To Far East: English 1030-1100 on 15225 kcs.
 To SE Asia and Australia: 1100-1130 on 15125 kcs.
 To India: Urdu 1330-1400, English 1400-1430 on 4775 kcs.
 Northern Areas: Russian 1730-1800 on 4775 kcs.
 To Middle East; Arabic 1800-1830 on 11735 kcs.

United States WINB International, Red Lion, Pennsylvania:

1700-2000 hours on 17720 kcs.

2005-2200 hours on 11795 kcs.

Transmissions IN English, 7 days a week. QSL address: Box 88, Red Lion

(Rumors had circulated to the effect that WINB had curtailed its operations, or was perhaps planning on such a move. The SW Dept. is in receipt communication from Victor Parker, External Services Director of WINB, stating that no such action has been taken. The rumors are false.) Frendx is informed that WINB will carry a Courtesy Program for NASA soon. Details upcoming.

News item: Two children suffered serious injuries in . . . , Ohio, when they ran into a neighbor's guywires, supporting a "shortwave antenna". One child reported in good condition at a local hospital with neck lacerations, the other suffering partial blindness in one eye. The tendency these days is to make the guywire as "socially acceptable" as possible, through invisibility. We think, though, that there's much to be said for the old-fashioned method of painting the guys white, or of tying white cloths to them at intervals of several feet.

Untill next month, then, that cleans us of news. Keep the reports and information coming, and keep smiling..it's lets easier.