

OCTOBER 1938

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NBC'S MOBILE TELEVISION STATION

In this issue

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BRAZIL BROADCASTING STATIONS—INTERNATIONAL FRIENDSHIP PROGRAMS—SPATARI, THE NEW RADIO LANGUAGE—CAMPAIGN AGAINST MAN-MADE QRM—SHORT-WAVE NOTES—SHORT-WAVE LISTS—

ten cents

INTERNATIONAL DX'ERS ALLIANCE

LRX

GSC



BILL HERZOG CENTER MORICHES, N.Y.



SAM GRAHAM, PANHANDLE, TEXAS



ELMER R. WALKER, ALDERWOOD MANOR, WASHINGTON

SHORT WAVE NOTES

Editor-in-Chief C.A.Morrison; Frequency Checking Bureau, R.B.Oxrieder, J. Larsen, and C. Hartzell; Ama-Touring Editor, Ralph Gozen.

I D A INTERNATIONAL FRIENDSHIP PROGRAMS

i, b · · · · ii i i i i i i i i	SITURE I KILITOSI III I KOOKA	IVIO	
Saturday, Oct. 22,10-11:30pm EST,	A (Guatemala, Guatemala	9685kC	TGWA
	(Guatemala, Guatemala	6040kC	TGWA TGWB
Tuesday, Nov. 22,9-11pm EST,	A Guayaquil, Ecuador	6635kC	HC2RL
Saturday, Dec. 18,	P Bucaramanga, Colombia	9630k C	HJ7ABD
Monday, Mar. 20,12:01-lam <u>EST</u> ,	K San Salvador, El Salvador	7894kC	YSD
NOTE: Programs arranged by: A-	Louis Ambrosius; P- J. Pichl	er.	

ENGLISH NEWS-CASTS COVERING CENTRAL EUROPEAN CRISIS

ENGLAND	3:50AM	GSB-GSD-GSE-GSI-GSO	GERMANY	8:15PM	DJB-DJD-DJO
(2)	8:30AM	GSF-GSG-GSH-GSJ		10:30PM	DJB-DJD-DJO
(2) (3) (4)	11:00AM	GSF-GSG-GSH-GSJ-(GSP)	CZECHO-	Daily ex,	Sat/Sun 9:50PM
(4)	1:00PM	GSD-GSI-GSG			5B, or 4A, or 4B.
	4:15PM	GSF-GSG-GSO-GSP-		7:30PM	2RO4-IRF-IQY
(5) (6)	7:40PM	GSB-GSD-GSG-GSO-GSP	FRANCE	10:00PM	TPB7-TPA4
(6)	10:30PM	GSB-GSC-GSD-GSI	U.S.S.R.	7:00PM	RAN-RKI

PARTY TO SEARCH FOR LOST PYRAMID IN AMAZONIAN JUNGLES OF BRAZIL

Bill Hungerford, ex-VP3THE, will soon leave with a party of explorers for the interior of Brazil at the headquarters of the Amazon, on the edge of the headhunters country, where the expedition will search for a mysterious pyramid, supposedly erected about 11,500 B.C., the existence of which was confirmed by native indians who were in contact with the Terry-Holden Expedition last spring. Bill will operate a 150 watt transmitter, using the call PYSTHE, on the 10, and 20 meter bands. As usual, the Globe Circler, will carry exclusive details concerning this interesting expedition, from the time it leaves New York, until it returns. (****Roger Legge)

DEADLINE for NOVEMBER GLOBE CIRCLER, Oct.15; for NOVEMBER STOP PRESS

DEADLINE for NOVEMBER GLOBE CIRCLER, Oct.15; for NOVEMBER STOP PRESS SHEET, Oct.29; for NOVEMBER AMA-TOURING, Oct. 25.

It is IMPERATIVE that all S.W. reports use one side of page only; that-lines be double-spaced; items be grouped by continents, and time used be stated. Items in order of importance are: NEW stations; exact frequencies, or changes; exact schedules, or addresses; identifying signals and unusual receptions. RUSH important items by fastest mail. FOUR STAR items denote ex ceptional merit. EACH FIVE STAR ITEM PAYS CONTRIBUTOR \$1.00.

----NORTH AND CENTRAL AMERICA----

SOS--- SOS--- All members urgently requested to be on look-out for emergency messages from WIOXAB (14.368), with MacGregor Expedition from which no communications have been received since August.

LASKA WXA (approx. 11.51), Juneau, and WXE (12.24), Anchorage, have been heard testing, and working WVD, Seattle, near 11-11:30pm (**Clein,

Amers). . K7PQ has verified after a period of nine months (CAM)

CANADA VE9HX (6.132), Halifax, is heard best Sundays 7-9pm (Horlick)

VEIIN (3.88), Bowdoin-Kent's Island Exped. heard on 9/6/38 (Amers).

CANAL ZONE

K5AH (14.28), American-Hamburgers, is new call, in C.Z. (Thomas)

TIEMT (now 10.29), "Radio El Mundo, "relaying TIEM, Apartado

Postal 1049, San Jose, signs-off at 8pm; issues attractive cd. with gold let

ters (Legge, Larsen). T12XD (11.928), "Voz del Radio Pilot", P.O.Box 1729

-San Jose, 600w, owned by John G.Daly, operates daily 10am-noon, and 4-10pm;
opening theme is "March Don Quixote", and closing theme "The Peanut Vendor"; verifies promptly with red & black on peach background card (**Magnus on, Amers). TIGPH's harmonic on 11.648 usually very loud (*Larsen)

CUBA

Tight's harmonic on 11.648 usually very loud (*Larsen)

A metereological station COG2 (4.49-6.7-13.4), has been installed in northern Camaguey. . COBC now on 9.99, and very irreg. (Larsen); COBX now on 9.195 (Larsen); COBZ now on 9.005 (Larsen). . COCA (9.095), Galiano 102, Havana, operating to 12:15am, or later, issues red & white QSL card with following slogan, "We would like to C-U-B-A constant listener of ours" (*Amers, Larsen); COCH now on 9.436 (Larsen); COCO now on 5.992 QRM'ing HJ3 ABX (Larsen); COCQ now varying between 9.705 and 9.715 (E.Roberts, Balbi, Larsen, Sawyer) COCQ opens at 6:50am with "Siboney" (Sawyer). . COCF (11.8) -usually in network with CMBQ opens at 8am (Sawyer)

D. R. HI9B, now on 6.67, signs-off at from 7:40 to 9:40pm (*Larsen)

. HI3X now using 15.28 for Sunday AM broadcasts; occasionally 17.4 (RL)

GUATEMALA Address for amateur TG5 is P.O.Box 12, Guatemala City (C.H.)

HAITI HH2S (now 5.955), is broadcasting an all-English program for residents of Jamaica, nightly 8:30-9:45pm (*Alfred, Larsen, Moore)

HAWAII KQH (14.92) tests with KEI (9.49), Saturdays from 11:30pm to mid., prior to broadcast of "Voice of Hawaii" from 12 to 12:30am (LA)

MARTINIQUE A Fort-de-France station on 5.95- not Radio Martinique- is being heard irregularly from 9 to 10:05pm (*Balbi)

MEXICO XXBR (11.826), heard at 6:10pm, on 9/5 (Larsen). The Mexical Govt. program broadcast Sundays 7-8pm, originating over XECR (7.38), is relayed by XEUZ (6.117), XEBT (6), XEXA (6.172) and XEWW (15.16)(**Alfred). XEWW (15.16) is being heard 1 to 3:30pm irreg. (Horlick). Amateur XE 1AC, member Alfonso Velasco, Mexico D.F. operates with 100w phone, on 7.149, 7.035, 14.07 and 14.298 megs. (*Steele)

PANAMA HP5G, Panama Čity, has shifted to 11.900mc (Voisch, Sawyer, Bal-PUERTO RICO WTC (13.41), calls WOJ, weekdays at 3:50pm (*Clein)

TRINIDAD Amateurs in Trinidad follow: <u>VP2GD</u> (7.001), Grenada; <u>VP2SA</u> (7), St. Vincent; <u>VP4GA</u> temporarily off air; <u>VP4TN</u> (7.177), Eric Dugt, 28 de Verteuil, Port of Spain (**Harbin-Trinidad)

Verteuil, Port of Spain (**Harbin-Trinidad)

UNITED STATES

New freqs. for U.S. stations as registered with the Berne Bureau follow: 6.17, 6.19, 9.65, 9.67, 17.83, 21.57, 21.59, 21.61, 21.63, and 21.65mc (***FCC). Explorer Lincoln Ellsworth's plane has been licensed for operation on 3.105, 6.21, and 12.42mc, with 100w power. NEW: The Bell Tel.Labs Inc., of Ocean Township, N.J. has been granted a permit for a general exper. xmtr. to operate, with 50kW power, on 1614, 2398, 3492, 4797, 6425, 8.655, 12862, 17.31, 23.1, 25.7, 26, 27.1, 30.1, 31.6 and above. ...

WGNA, a 50w relay xmtr. for WGN, Chicago, has been licensed to operate on 1.622, 2.058, 2.15, and 2.79mc (FCC)...WMI (11.37-6.425), coastal xmtr. at Lorain, Ohio, 500w, QSLs promptly (Amers, IA, Stark)...WNK (9, 355), Hialeah, Fla -works C.A. daily at 8am (Alfred). ... Amateur W3HA at Emery, Henry, Virgin ia, is again operating illegally as a broadcast station on 10.635mc, near 7 pm, and later (**Larsen). ... APEX: NEW: WCNY (41.1), 500w, to be operated by the Board of Education of New York City, at Brooklyn (FCC)... W9XB will relay programs of WGN, Chicago (FCC)... W6XCW (39.7-39.9-40.8-41.4) is being used to relay speed trials from Bonneville Salt Flats, Utah (FCC)... Apex reception as follows is being heard in Ohio: on 25.95mc: W9XUP, St. Paul, Minn, 10am-4:30, 7-9pm; W8XNU, Cincinnati, 2-6pm; W6XKG, Los Angeles, 9am-10pm. On 26.05mc; W9XTC, Minneapolis, 5-9:30pm. On 26.1mc: W9XJL, Superior, Wis, 10am 8pm. On 31.6mc: W2XDV, New York City, relays CBS 8-9pm; W9XHW, Minneapolis, 78pm (***Horlick). ... See list for revised sked for W1XL... Additional frequencies requested for W2XE: 6.18, 9.67, 17.83 and 21.57mc. See list for revised sked... New 35kW xmtr. for Boundbrook, N.J. is now in operation on 17.78mc, using call W3XL ... W3XAL has requested following additional frequencies: 6.1, 9.67 and 21.63mc... W3XAU, Philadelphia, has been granted an

additional frequency of 15.27mc (FCC). See list for revised sked... W4XB (6.04), Isle of Dreams Broadcasting Corp., Miami, Fla., 5kW, relays WIOD weekdays 1-3, and 9pm-mid, and Sun., 4-6, and 9pm-mid; English & Spanish an nouncements (*Alfred)... WSXAL, Cincinnati, is reported to have been granted an additional frequency of 11.87mc. See list for revised sked...See list for revised sked for W8XK.

SOUTH AMERICA RGENTINA (Alfred). Freq. given for LRU is 15.28, but it is actually on 15.29mc.

OLIVIA Amateur CP1BA (14.02), Sucre, heard with good sigs at 11:30pm. ARGENTINA BRAZIL

PSH (10.22), operates weekdays 6-7pm (Sawyer*)

HILE

agricultura", Casilla 40-D, Santiago, states that both schedule, and frequency CHILE is still on an experimental basis, and that when these have been definitely

settled QSL cards will be issued (**Legge)

HJY, All America Cables Inc. of Bogota, is testing late afternoons on 18.444mc (Easterbrook*). . . HJlABE (4.802), P.O.Box 31, Cartagena, is issuing a very modernistic new red, white & Blue QSL card (**Amers)... HJ1ABG (6.0425), Emisora Atlantico, Barranquilla, relaying xmtr. on 1060kC, weekdays llam-llpm and Sun. llam-8pm, issues a white QSL card, with red print, picturing antenna towers and a landscape view (**Magnuson). . HJ3ABX (5.99), is being badly QRM'ed by COCO at present (*Larsen). . HJ6ABU on 6.023mc, announcing as "La Voz de Pereira", is being heard at 10pm (Tuff*). . HJ4ABU (8.652), "Emisora Universidad de Antioquia, "Apartado Postal 217, Medellin sends a folder veri of block & white with call in sends a folder veri of block & white with call in sends a folder veri of block & white with call in sends a folder veri of block & white with call in sends a folder veri of block & white with call in sends a folder veri of block & white with call in sends a folder veri of block & white with call in sends a folder veri of block & white with call in sends a folder were constitutions. Medellin, sends a folder veri of black & white, with call in orchid; signed by director Jose J.Sierra C. (**Amers) . . Mystery Bogota, Colombia, station on 11.975mc, still being heard irreg. 9-11:30pm. Has both men and women announcers (**Alfred). . HJ7ABD (9.63), now broadcasts an English period daily from 10:30 to 11pm called the "Bucaramanga Mild Coffee Hour", consisting of news, a talk about Colombia and reading of listeners letters. This station states they verify all correct reports and an official veri' must show the Bucaramanga post-mark, since they do not send veri's via any club attempting to commercialize the obtaining of veri's (***Ambrosius). . HJ2 ABJ, Santa Marta, is now on 4.864, and HJ5ABD, Cali, is now on 4.873mc (**Larsen). HJ4ABP (4.884), signs-off at 10:15pm with selection, "Glow Worm".

A letter from Dr. Levi of HCZRL (6.635), Guayaquil, states, "We ECUADOR send everybody cards without charging a cent, because ours is a cultural station, not a commercial station, and by this idea is known in all the world, making known only the name of our country and city in all parts of the world, without personal interest. We never help exploiting business be-

cause it is against our ideals" (**Gardner-Ohio)

ARAGUAY

Station believed to be ZP8 in Asuncion, is being heard on about 9.26mc, from around 6:30 to sign-off at 8pm (***Larsen)

<u>VENEZUELA</u> YVIRB (5.845), is being heard to 10:30pm (Larsen). . YVIRH (6.365), Maracaibo, is promptly verifying reports sent direct to the station (Plimpton**). . YV4RA, Valencia, is on 5.805mc (**Larsen). . NEW: YV5RR (5.835), Apartado 185, relaying YV5RS, Caracas, on 1320kC, issues a double-card veri', picturing several views of the studios (**Legge) -EUROPE=

BULGARIA LZA (8.465), Sofia, now being used for telegraphy only. A new 20kW government station will be broadcasting regularly early in 1939. CZECHOSLOVAKIA New N.A. sked: Mon/Tues/WED/Thurs/Fri 6:55-10pm, over OLR5A, or OLR5B, or OLR4A, or OLR4B (OLR, Reinhard **). Special programs will be broad cast over OLR from Oct.23 to 29, to celebrate the 20th anniversary of the founding of the Czech Rep. (Present situation may upset these-Ed.)

ENMARK OZH (15.165), Best heard Sundays noon to 1:30pm, issues a

white card with printing in red. Power is given as 5kW (**Magnuson, Beyer) FINLAND

SKED: OFO (15.187), broadcasts daily from mid, or 1 to 3am, and occasionally from 9am to noon, and 12:15 to 5pm; OFE (11.78), broadcasts irregularly from 1:05 to 3am, from 5 to 6:20am, and irreg. from 10am to noon; OFD (9.5), broadcasts almost daily from 12:15 to 5pm (**E.Roberts, Balbi, Gal lagher, Hartzell, Campbell, Alfred)

See list for revised sked of "Paris Mondial" RMANY Special broadcasts of interest from Zeesen: "German Alphabet on Thursdays at 8:30pm; Special "Alaska Day" broadcast on Tues, Oct.18, at 10:15pm; "Way Down in Old Louisiana" broadcast on Mon.Oct.24, at 9:15pm. . . <u>DJO</u> (11.795), is carrying the N.A. broadcast again. . <u>DZG</u> (15.36), heard with Brazilian program on Saturdays at 5pm (E. Roberts). . Anti-Nazi "Deutsche Freiheits Sender" (varying between 9.75 and 10.1), first heard in March, 1937, operates daily 4-5pm. Announces in German every quarter hour and signs-off with "Internationale" (**Sawyer)

OLLAND IMPORTANT SKED CHANGES are being made in transmissions from Huizen.Listen-in to PHI and PCJ for official announcements (**PHI/PCJ)

Unidentified station on 9.67, relays 2R04 nightly 7:30-9pm (**Larsen, Sawyer); Unidentified xmtr. on 15.18mc is relaying 2RO4 irreg.in afternoons (DeMyer, Bartholomew*); Unidentified stations relaying 2RO4 also being heard irreg. on 15.1 and 15.225 mc (*Alfred)

UXEMBOURG Long-wave "Radio Luxembourg" at Junglinster, is being equipped with a powerful S.W. xmtr. and directional antennas, and experimental

broadcasts-which will later be sponsored-will begin before January, 1938.

<u>OLAND</u>

<u>SP19</u> (15.12), and <u>SP25</u> (11.74), Warsaw, beamed on So. America, operate in parallel with <u>SPW</u> and <u>SPD</u>, daily from 6-9pm. <u>SP25</u> also reported on afternoons to 5pm (**Sawyer, Sekach, Roberts, Byrd, Reinhard, Morey, Traister)

<u>SPAIN</u>

<u>EAR</u> reported as shifted frequency to 9.86mc, and is now broadcasting <u>POLAND</u> in English, daily 4:40-5, 7:30-8, and 8:40-9pm (**Horlick, EAR). . EAQ on 9.855mc, operates 6-8pm; in English at 6:30 and 7:30pm (Sawyer). Veri from EAR, Madrid, 20kW, P.O. Box 782, is a QSL card picturing tanks advancing thru a battlefield (**Legge)

"Radio Bern" (15.365), is being verified by letters signed SWITZERLAND Schweizerischer Landessender Beromunster (*Satterthwaite)... "Radio Bern (9.535), is operating weekdays 1-2, 6:45-7:45 and 8-9pm; heard on 11.865mc

irregularly (***Reinhard)

J.S.S.R. RAN (9.6), has Spanish program daily 6-7pm (Sawyer)...IDA program of Aug.28, was broadcast over RKI and RAN (Sawyer, Tucker, CAM, Bigbee)...RNE (12), has been broadcasting in parallel with xmtr. on 15.18mc, al most daily after loam (*Amers).. The Soviet operating on 15.18, daily 3-4 pm has been definitely identified by English announcements as RV26, "Radio Center, "Moscow (***Verbrugghe; Campbell, Alfred, DeMyer). New RKI veri' shows view of Moscow Public Library, and the Metro in the foreground (WS). . . Unidentified Soviet varying from 7.32 to 7.37, is heard 2-635pm (Moore) HVJ (6.03 and 5.97), operates daily 2 to 2:15pm (*Tuff)-lop)
Amateur YU7AY (14.25), America-Yokohoma, heard at 11pm (**Sop VATICAN CITY YUGOSLAVIA

NEW: a mystery station announcing as CR5?? or CR9?? is being heard on ANARY ISLAND EASAF (7.3), and EASAB (7.5), both verify with the new EAJ43 cards featuring a picture of General Franco (**Buitekant, Legge) CANARY ISLAND TALIAN

SOMALILAND

O. RHODESIA

Amateur VQ2HC (14.31), "Vermont-Quebec-2-Honolulu-Canada," is being heard regularly with loud signals from 9:20 to 9:45am. Address is

O.RHODESIA

P.O.Box 27, N'Kana, Northern Rhodesia (**Clein)
OUTH AFRICA ZRD (6.147), Durban, lOw, is being heard 1-2pm (Tuff-England*) . . ZRK (9.61), Klipheuvel, is again being heard with good signals from 1145 to 12:45am EST (*Hartzell, Alfred). . ZS6DW has 5000 unanswered reports and

is looking for someone to fill them out (NNRC)

FANISH MOROCCO EA9AH (13.997), Tetuan, heard 7-7:45pm with musical program;

Also heard 4-5, and 9-9:30pm (**Alfred)

ANGIER INTER—
The address of CNIAF (14.285), still being widely heard 6:30

NATIONAL ZONE to 7:30pm EST, is, J.Sierra or J.Rizzo, Sources 19, Tangiers

International Zone (**Ama-Touring, E.Roberts, DeMyer, Payette)

Weri from XYO (6.007-3.488), Burma Independent Wireless, Rangoon, is on form card acknowledging correspondence Report must be accompaniate.

goon, is on form card acknowledging correspondence. Report must be accompani ed by an IRC (**Amers)

HINA Com. xmtr. XTR is now at Chungking, and operates on 9.4mc... XTS (11.44), Chungking, phones XTJ (11.69), Hankow, daily 3-10am (**Walcott)... XRJ (9.545), calls KBJ, Manila, at 7:30am (Myers)... A very powerful xmtr. on 12.06mc, call unknown, works XTJ, occasionally after 7am (**Amers)

UTCH NEW GUINEA Reports on PK6XX (14.009-14.02-14.2-14.269-14.32), may be

sent to A.R.R.L., West Hartford, Conn., where they will be acknowledged with special Exped. certificates which may in turn be sent to Hollandia, for certification. OSL cards may be printed when the exped. returns. PK6XX, 375w, is best heard 6-8am (**Clein, Will, Hartzell, Moore) F.INDO CHINA

New address for "Boy Landry" is C/o M.Chn.Gantier, Director General, Departement RADIO, Etablissements Boy-Landry, 17, place A.Foray, Sai gon (*Walcott). FZR3 (16.23), "Radioelectrique Centre de Saigon, Postale Boite 238, Saigon, phones FTK (15.89), almost daily near 10am. Uses a 5 tone easily identified distinctive company." easily identified, distinctive signal (**Amers) UAM A.Carter (ex OM2BC), is now operating portable at Agana, as K6GSB; power 500w. Will verify. Operates on 20M band (***Legge) HONG KONG ZBW3 (9.53), finally verified after 8 months (*Amers) ZBW3 (9.53), finally verified after 8 months (*Amers) COMPLETE AND ACCURATE SKED OF INDIA XMTRS: VUD2 (9.59), and VUD3 (15.16), Delhi, daily 8:30-10:30pm; VUD2 (4.995), 1:30-3:30, 6:30am-12:30 pm. VUD4 (15.29), heard testing once at 12:45pm...VUB2 (9.55), Bombay, 9:30 10:30pm; VUB2 (4.905), Bombay, 12-2, 6-11:30am...VUM2 (4.95), Madras, 6-11am...VUC2 (9.53), 1:06-3:06am; VUC2 (4.88), Calcutta, 6:06-11:06am. (***Alfred, DeMyer, Balbi, Moore, Stark, Clein, Ambrosius). VUD3 (15.16), comes on air at 8:30pm with town hall chimes and clock striking 7am (Delhi time), then the following English announcement, "Good Morning Everybody, this is VUD operating on 9.59 and 15.16mc. Broadcast will consist of Hindu musical behavior INDIA ing on 9.59 and 15.16mc. Broadcast will consist of Hindu music light and classical. News bulletin in English will be read at 10:10pm" (**Pratt, Alfred, Squire, E. Roberts) Overseas hour for E. North America, now heard daily 7-7:30am over JZJ, and 8-8:30pm, over JZK (15.16); for Australasia, daily 8-9:30am, over JZJ (*Verbrugghe,CAM,Balbi,Messer,Campbell). A new Japanese xmtr.on 9.73mc,in parallel with JVN (10.66),from 1:50am on.(**Moore); JVP (7.51), is operating irreg. 8-9:30am; JZA (7.11), is being heard with program irregularly from 8:15-10:15am. There is also an unidentified xmtr. on 12.03, that breedests irreg. that broadcasts irreg. to 7:35am (**Moore) Unknown xmtr. on 6.04mc, is operating in parallel with <u>YDB</u>, and <u>PLP</u>, from 7-10am irreg. (**Balbi). . <u>PLV</u> (9.415), Bandoeng, often works the west coast at 9:50am (*Alfred). . <u>PLQ</u> (10.69), phones YBG (10.43), Medan Sumatra, near 6:40-7am irreg. (*E. Roberts)

MNCHUKUO

MTT (13.53), Manchuria Telephone and Telegraph Co., Radio JAVA House, Hsinking, Manchukuo, 20kW, transmits 10:30-11:30pm (***E. Roberts)

WW GUINEA

VK9XX (14.285), "Xray-Xray, Rabaul, heard at 6:30am (**Soplop)

ZME (HF end of 40M band), a govt. Land station on Sunday Island transmits irregularly (**Forrest). ZLT. Wellington, operated by Posts, NEW GUÍNEA NEW ZEALAND and Telegraph Dept., will postively not verify any reports (**Amers)
APUA NEW: VIG (7.31), relays broadcast station VK4PM of <u>PAPUA</u> Moresby, quite often on the first and third Saturday of each month from 3-5 am (***NRC, Radio Guia). . . Amateur VK4HN (14.32), Port Moresby, heard working a W3 at 6:45am (**Alfred) VR6AY (14.346),60w, is again on the air and was heard work-<u>PITČAIRN</u> ing W9NDA at 5:25am (**Messer)
PHILLIPPINES Sked for KZRM Sked for KZRM (9.57), "Radio Manila, "Insular Life Bldg.Manila,is Mon.to Fri. 5-9am,and 4:30-6pm; Sat 5-10am, and 4:30-6pm; Sun 4-10am (**Alfred). KBJ (13.22), Manila, calls KWU often near 10:30am (**Amers)

IAM Bangkok now broadcasts Mondays on 19.02mc,under call HS6PJ (**Walcott) . . Bangkok (6.11), heard signing-off on Wed.at 10:15am (*Moore) PURKEY

TAO (9.465), Ankara, operates daily 6:30-7am. Oriental and classical musical selections are featured but no identification is given (***Bigbee). . . TAO (15.195), Ankara, operates daily from 1:20 to 5pm, or later, but after 4:40pm, the station is blotted out by DJB's (15.2) carrier* wave coming on the air. Oriental type of music on string instruments similar to that broadcast by the India stations is often featured, but after 4pm American recordings are often used. At times this station is believed to relay 2ROA Rome Italy and at those times the announcement is simply "2ROA" TURKEY lay <u>2R04</u>, Rome, Italy, and at these times the announcement is simply "2R04". The announcer is Mademoiselle Hadjimihal, who speaks fluently in Turkish, Ger man, French, and English. The new short-wave transmitters which relay a 60kW long-wave station (1629 meters), will be formally opened on October 29, to celebrate the 15th anniversary of the Turkish Republic (***E.Radio, Radio Guia, Reinhard, NNRC, Com.Bul, DeMyer, Alfred, CAM)

NOTE: The Short-Wave Section contains notes from 61 countries this month-Ed.

SHORT-WAVE BROADCASTING- STATIONS

				ge; S- Change in sked; B- Fre-
quency cal	ihration	S ACCO	ording to Oxrieder-II	A Frequency Bureau; J- stations
persisting	in hope	ing ab	out: V- varving in	frequency; Y- does not verify;
X- does not	verify	direc	t; * See short-wave	notes: U- frequency in doubt.
DIAL METERS	MEGS.	CALL	STATION	TIME EASTERN STANDARD.
S13.92			Pittsburg, Penna.	6:45-9am.
Y13.93	21.53	GSJ	Daventry, England	5:45-noon. (13M)
<u>S</u> 13.94	21.52	W2XE	Wayne, New Jersey	7:30-10am; Sat & Sun 8am-1pm.
<u> </u>	21.50		Schenectady, N.Y.	8am-noon directed to S.A.
<u>SY</u> 13.97	21.47	GSH	Daventry, England	5:45am-noon.
13.99	21.45	DJS	Zeesen Germany	12:05-llam to Asia
<u>C15.77</u>	19.02	HS6PJ	Bangkok, Siam	Mondays 8-10am.
16.23	18.48	HBH	Geneva, Switzerland	
16.84	17.82	2R06	Rome, Italy	Tests 8, or 9 to 10am irreg. (16M)
16.85	17.83	TPB3	Essarts, France	8:30-10am
SY16.86 SC16.87	17.79	GSG W3XL	Daventry, England	5:45am-noon,12:20-6,6:20-8:30p
	17.78 17.77		Boundbrook, N.J.	9am-5pm to Europe; 5-9pm to SA.
<u>S</u> 16.88	±1 ⋅ 1 1	PHI2	Huizen, Holland	Sun 6:25-9:40am; M/W/F/S. 7:25-8:25am; Tues/Thurs 7:25-8:40am
16.89	17.76	DJE	Zeesen, Germany	12:05-10am; Sun 11:10-12:25pm.
S17.36	17.28	FZE8		nd Nov 3/Dec. 1,8-8:30am.
19.52	15.37	HAS3	Budapest, Hungary	Sundays 9-10am.
19.53	15.365	111100	Bern, Switzerland	Testing 6:45-7:45pm.
19.56	15.34	DJR	Zeesen, Germany	8-9am, 4:50-10:45pm to C.A.
S19.57	15.33		Schenectady, N.Y.	12:15-7pm.
$\overline{S}_{19.58}$	15.32	OLR5B	Prague . Czechoslovak	ia M/T/W/T/F 7:55-10:55pm;S/S
			3 ,	5-5:15pm;Sun 5:55-8:55.
Y19.60	15.31	GSP	Daventry, England	4:15-6, 6:20-8:30pm.
19.61	15.30	YDB	Soerabaja, Java	7:30pm-2am.
19.61	15.30	2R05	Rome, Italy	12:10-2, 7:30-9pm & irreg.
19.62	15.29	VUD4	Delhi, India	Heard testing 12:45-1:15pm *
19.62	15.29	LRU	Buenos Aires, Argent	
19.63	15.28	DJQ	Zeesen, Germany	12:05-5:50am,4:50-10:45pm.
19.63	15.28	HI3X	Trujillo City, D.R.	Sunday mornings irreg. *
<u>S</u> 19.64	15.27	W2XE	Wayne, N.J.	1-6pm; Sat/Sun 2:30-6pm.
SY19.66	15,26	GSI	Daventry, England	2-4:15am,12:20-4,9:20-11:30pm.
S19.67	15.25	TAXIV	Boston, Mass.	Tues/Thurs 4:30-6:30pm.
<u>519.68</u>	15.243	OT DE Á		6-llam.
19.70 S19.71	15.23 15.22	PCJ2		ia Same as OLR5B (15.32)
	10.66	1002	Huizen, Holland	6:15-6:45pm;Tu 2-2:30am; Wed - 9:30-11:30am;Sat 7:15-7:45pm*
S19.72	15.21	W8XK	Pittsburgh, Penna.	9am-7pm.
19.74	15.20	DJB	Zeesen, Germany	12:05-11am, 4:50-10:50pm.
<u>C</u> 19.74	15.195		Ankara, Turkey	1:20-5pm. *
SC19.75	15.19	OFO	Lahti, Finland	1-3am; 9am-nnon & 12:15-5pm ir
SC19.76	15.18	RV26	Moscow, U.S.S.R.	9am-noon, 3-4, and 9-10pm *
\overline{SY} 19.76	15.18	GSO	Daventry, England	2-4:15am,4:15-6,6:20-8:30pm.
19.78	15.17	TGWA	Guatemala, Guatemala	
<u> </u>	15.165		Skamlebak, Denmark	Sundays 8am-1:30pm. (-8:30pm.*
<u>S1</u> 9.79	15.16	JZK	Tokio, Japan	12:30-1:30,2:30-4,4:30-5:30,8-
<u>SC19.79</u>	15.16	VUD3	Delhi, India	8:30-10:30pm. *
$\frac{\overline{S}}{19.79}$	15.16	XEWW	Mexico D.F., Mexico	1-3:30pm irreg. *
19.80			Stockholm, Sweden-	llam-5pm; Sundays 9am-5pm.
19.80	15.15	YDC	Bandoeng, Java	4:30-10:30am; 6-7:30pm ex.Sat;
777.0 00	7.6	000	<u>_</u>	10:30pm-2am;Sat 7:30pm-2am.
<u>Y19.82</u>	15.14	GSF	Daventry, England	5:45am-noon, 4:15-6pm.
<u>S19.83</u>	15.13	TPB6	Essarts, France	7-9:15pm.
19.84	15.12	SP19	Warsaw, Poland	6-9pm. *
19.84	15.12	HVJ	Vatican City, Italy	10:30-10:45am ex. Sundays.
19.85	15.11	DJL	Zeesen, Germany	12-2,8-9,10:40am-4:25pm.
19.89 20.11	15.08	RKI	Moscow, U.S.S.R.	3-4, 7-9:15pm; Sun 6:30am etc*
S20.55	14.92 14.60	KQH .TVH	Kahuku, Hawaii	Sundays 12-12:30am, 6-6:30pm *
	T#•00]	LOAII	Nazaki, Japan	10-11pm, and irreg.

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20.64
           14.535 HBJ
                          Geneva, Switzerland Sun 1:45-2:30pm; Mon 1:30-1:45
                   Malaga, Spain
HClJB Quito, Ecuador
  20.78
           14.44
                                                  5:40-8:40pm (am, 6:45-8:30pm.
  20.79
           14.43
                                                 Sun 9-9:30pm & irreg.
<u>75</u>21.40
           14.02
                   PK6XX Hollandia, New Guinea 6-8am irreg.
 S21.43
           13.997 EA9AH Tetuan, Span. Morocco 4-8, 9-9:30pm.
  22.00
           13.635 SPW
           13.635 SPW Warsaw, Poland
13.000 CR6AA Lobito, Angola
                                                  6-9pm.
  23.06
                                                 Wed/Sat 2:45-4:30pm.
  24.03
           12.486 HIN
                          Trujillo City, D.R.
                                                  7:10-10:10pm.
 C24.08
           12.46
                   HC2JB Quito, Ecuador
                                                  8-10:30pm ex.Mondays.
           12.235 TFJ
  24.52
                          Reykjavik, Iceland
                                                 Sundays 1:40-2:30pm.
  25.00
           12.00
                   RNE
                                                  8:30-9:15,10:15-11pm,3-6pm;Sun
                          Moscow, U.S.S.R.
                                                 6-7,10-llam; Wed. 6:30-7:30am.
                   CB1180 Santiago, Chile HI2X Trujillo City, D.R.
 <u>F</u>25.02
           11.99
                                                  7-lipm.
  25.06
           11.97
                                                 Tues/Fri 8:10-10:10pm.
 <u>5</u>25.15
           11.928 TI2XD San Jose, Costa Rica
                                                 10am-noon, 4-10pm.
  25.19
           11.91
                   CDll90 Valdivia, Chile
                                                 Lam-lpm, and 7-10pm. Daily to 9:30am.
  25.21
           11.90
                          Hanoi, F. Indo-China
 F25.21
           11.90
                   HP5G
                          Panama City, Panama
                                                 8-11pm.
  25.21
           11.90
                   XEWI
                          Mexico D.F, Mexico
                                                  7:30pm-mid;Sun 12:30-2pm.
  25.21
           11.90
                   HP5I
                          Aguadulce, Panama
                                                 7:30-9:30pm.
 \overline{S}25.23
           11.885 TPA3
                          Pontoise, France
                                                 2-5,11:15am-6,7-9:15pm.
 \overline{S}25.23
           11.885 TPB7
                          Essarts, France
                                                 9:30-Midnight to N.A.
 S25.27
           11.87
                   W8XK
                          Pittsburgh, Penna.
                                                 7-llpm.
  25.28
           11.865
                          Bern, Switzerland
                                                 Testing 8-9pm for N.A. irreg *
<u>SY</u>25.30
           11.86
                   GSE
                                                 2-4:15am.
                          Daventry, England
  25.31
           11.855 DJP
                          Zeesen, Germany
                                                 7:15-10:50pm for N.A. Irreg.
  25.32
           11.85
                   CB1185 Santiago, Chile
                                                 Relays CB138 nightly.
 S25.34
           11.84
                   OLR4A Prague, Czechoslovakia M/T/W/T/F 7:55-10:55pm; Daily
                                                 1:55-4:30pm; Sunday 5:55-8:55p
 S25.36
           11.83
                   W2XE
                          Wayne, N.J.
                                                 6:30-llpm to S.A.
  25.37
           11.826 XEBR
                          Hermosillo, Mexico
                                                 9:30-llam, 1-4, 9pm-Mid.
  25.40
           11.81
                   2R04
                          Rome, Italy
                                                 5am-9pm.
  25.42
           11.80
                   COGF
                                                 6-llpm.
                          Matanzas, Cuba
                                                                           *(5:30p*
 S25.42
           11.80
                   JZJ
                                                 7-7:30,8-9:30am,2:30-4,4:30-
                          Tokio, Japan
 S25.44
                   DJO Zeesen, Germany
WlXAL Boston, Mass.
           11.795 DJO
                                                 7:15-10:50pm to N.A.
\frac{\overline{S}}{25.45}
           11.79
                                                 M/W/F. 4:30-6:30pm; Sun 3-5:30p
                                                 M.to F 9am-5pm; Sat to 5:30pm.
                          Vienna, Germany
Lahti, Finland
           11.79
                   OER3
 S_{25.47}
           11.78
                   OFE
                                                 1-3, 5-6:20amd 10am-noon irreg
  25.49
           11:77
                   DJD
                          Zeesen, Germany
                                                 10:35am-4:35pm, 4:50-10:50pm.
 <u>$</u>25.50
           11.76
                   OLR4B Prague, Czechoslovakia See OLR4A (11.84)
  25.50
           11.76
                                                 Noon-3:30pm.
                  XETA
                          Monterrey, Mexico
                                                                    (9:20-11:20pm
\overline{SY}25.53
           11.75
                                                 2-4:15am, 12:20-4,6:30-8:30,-
                  GSD
                          Daventry, England
                  SP25 Warsaw, Poland
COCX Havana, Cuba
WlXAL Boston, Mass.
 F25.55
           11.74
                                                 6-9pm.
           11.74
 25.55
                                                 8am-lam.
           11.73
11.72
 $25.58
                                                 9-llpm irreg.
                   CJRX Winnipeg, Canada
 <u>$</u>25.60
           11.72 CJRX Winnipeg, Canada Saturdays only irreg.
11.718 CR7BH Laurenco, Mozambique 12-1,4-6:30,9-11am,12:10-4pm;
 25.60
                                                 Sundays 5-7am, 10am-2pm.
 S25.61~
           11.713 TPA4
                                                 7-9:15, 9:0-12 mid. to N.A.
                          Pontoise, France
 <sup>-</sup>25.62
           11.71
                   YSM
                          San Salvador, El Salvador 1-2:30pm.
  25.62
                          Saigon, F. Indo-China 7:30-9:15am.
           11.71
 25.63
           11.705 SBP
                                                 1:20-2,6-9,11am-4:15pm;Sun-
                          Motala, Sweden
                                                 3am-4:15pm;W/Sat 8-9pm.
S25.64
           11.70
                   HP5A
                          Panama City, Panama
                                                 10am-1pm,5-10pm;Sun 6-10pm.
\overline{X}25.64
           11.70
                   CB1170 Santiago, Chile
                                                 10am-2pm, 3:30-11pm.
  25.66
                          Hankow, China
Rome, Italy
           11.691 XTJ
                                                 Mid-12:30am, 7-7:30am.
  25.69
           11.676 IQY
                                                 7:30-9pm and irreg.
  26.01
           11.535 SPD
                          Warsaw, Poland
                                                 6-9pm.
                                                                  *6:45-8:30pm
 26.32
           11.402 HBO
                          Geneva, Switzerland
                                                 Sun 7-7:45pm; Mon 1-1:15am,
 27.17
           11.04
                   CSW2
                                                 2:15-4:15pm.(am ex.Sat;Sa 7pm-
                          Lisbon, Portugal
  27.27
           11.00
                  PLP
                                                 4:30-10:30am,6-7:30,10:30pm-2
                          Bandoeng, Java
  27.40
           10.95
                          Tananarive, Madagascar 12:30-12:45,3:30-4:30,10-11a
  28.14
           10.66
                   JVN
                          Tokio, Japan
                                                 1:50-7:40am.
 28.30
           10.60
                   ZIK2
                          Belize, Brit. Honduras Tu/Th/Sa 1:30-2,8:30-9pm.
 28.48
           10.535 JIB
                          Taihoku, Taiwan
                                              | Relays JFAK 9:05-9:55am.
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28.79				9
28 79	10.42	XGW	Shanghai, China	Daily to 9, or 10am.
28.85	10.40	YSP		.7:30-8:30am, 1:30-11pm.
28.93	10.37	EAJ43	(Tenerife Canarias	1:15-3:30,4-6,6:45-7:45,8-8:45
	10.57	PHOTO		
			(Salamanca, Spain	pm to N.A.
29.04	10.33	ORK	Ruysselede, Belgium	12:30-2pm to Belgian Congo.
				Cot E E. 20mm l innom
29.15	10.29	DZC	Zeesen, Germany	Sat. 5-5:30pm & irreg.
SF29.15	10.29	TIEMT	San Jose, Costa Rica	4:30-8pm. *
29.21	10.27	JZ0	Tokio, Japan	8-9:30am; or later irreg.
29.24	10.26	PMN	Bandoeng, Java	4:30-10:30am,6-7:30,10:30pm-
20.04	10.00	11/11	Pariatorie, tava	
				2am ex.Sat;Sat 7:30pm-2am.
S29.35	10.22	PSH	Rio de Janeiro Braz	il 6-7pm; Mondays 8-8:30pm. *
		1 21		g 3 4 5
J29.70	10.10		Deutsche Freiheits	Sender 4-5pm. **
J30.03	9.99	COBC	Havana, Cuba	6:55am-lam, **
	0.00		navana, oaba	
F30.24	9.92	JDY	Darien, Kwantung	7-8am, or later.
30.33	9.892	CPl	Sucre, Bolivia	llam-noon, 7-9pm.
SV30.45	9.855	EAQ	Madrid, Spain	3:45-4:05am,3:45-4:05,7:30-8,-
			, <u>+</u>	8:45-9:10pm.
				0.40-0.10pm.
30.52	9.83	IRF	Rome, Italy	Relays 2RO4, 6-9pm & irreg.
				8am-12:30am.
FJ30.60	9.805	COCM	Havana, Cuba.	
30.74	9.76		Saigon, F. Indo-China	7:30-9:15am.
		O OTHER		
FV30.82	9.735	CSW3	Lisbon, Portugal	Noon-2, 5-6, 6-8pm for N.A. *
N30.83	9.73		TOKIO, JAPAN	In parallel with JVN from 1:50
		0000		
FJ30.88	9.715	COCQ	Havana, Cuba	6:55am-lam. (am.
V30.93	9.70	-	Fort-de-France Mart	inique, 6-8pm, or later
			TOTO de l'Idiloe, mai e	m m /m / c l O 70
V30.95	9.695	TIANRE	l Heredia,Costa Kica	Tu/Th/Sat 9-10pm; Sun 7-9am.
			Buenos Aires, Argen.	Mon.to Th 6-9pm; Fri 4-9pm,-
F30.95	9.695	LRA		Mon. co in o-opm, rii 4 opm,
30.96	9.69	ZHP	Singapore, S.S.	5:45-9:45am.(Sat/Sun 7-9pm.
			Cuntomala Cuntomala	10-11:30pm ex.Sun;Sun 7-11:30p
30.98	9.685	TGWA	Gua cemara, Gua cemara	TO-II: Sohii ex pair pair /-II: Soh
30.99	9.68	CSW7	Lisbon, Portugal	Reported operating here irr.
	9.67		Italian station.	7:30-9pm. *
N31.02				
31.06	9.66	LRX	Buenos Aires, Argen.	9:30am-10:30pm;Sat to mid.
SJ31.09				Tues/Thurs/Sat. 4-7pm.
	9.65		Lisbon, Portugal	
31.11	9.645	HH3W	Port-au-Prince, Hait	i 1-2. 7-9pm.
V31.12	9.64		Colonia, Uruguay	Relays LR3 7am-mid.
31.13	9.636	JFO	Taihoku, Taiwan	4010:30am.
31.13 S31.15	9.636 9.63	JFO HJ7ABD	Taihoku, Taiwan Bucaramanga, Colom	4010:30am. .5:45-6:30,11:30am-1,6-11pm. *
31.13 S31.15	9.636 9.63	JFO HJ7ABD	Taihoku, Taiwan Bucaramanga, Colom	4010:30am. .5:45-6:30,11:30am-1,6-11pm. *
31.13	9.636	JFO HJ7ABD	Taihoku, Taiwan Bucaramanga, Colom	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * . Weekdays 9am-1:30pm,4:30-10pm;
31.13 31.15 31.20	9.636 9.63 9.618	JFO HJ7ABD HJ1ABF	Taihoku, Taiwan Bucaramanga, Colom Cartagena,Colombia	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * . Weekdays 9am-1:30pm,4:30-10pm; . Sun 4:30-9pm.
31.13 31.15 31.20	9.636 9.63 9.618	JFO HJ7ABD HJ1ABF	Taihoku, Taiwan Bucaramanga, Colom Cartagena,Colombia	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * . Weekdays 9am-1:30pm,4:30-10pm; . Sun 4:30-9pm.
31.13 S31.15	9.636 9.63	JFO HJ7ABD	Taihoku, Taiwan Bucaramanga, Colom Cartagena,Colombia	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-
31.13	9.636 9.63 9.618 9.61	JFO HJ7ABE HJ1ABF ZRK	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. *
31.13	9.636 9.63 9.618 9.61	JFO HJ7ABE HJ1ABF ZRK	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. *
31.13	9.636 9.63 9.618 9.61 9.604	JFO HJ7ABE HJ1ABF ZRK HP5J	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. * Noon-1:30pm,6:30-10:30pm.
31.13	9.636 9.63 9.618 9.61 9.604 9.602	JFO HJ7ABE HJ1ABF ZRK	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. * Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. 31M
31.13	9.636 9.63 9.618 9.61 9.604 9.602	JFO HJ7ABE HJ1ABF ZRK HP5J	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. * Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. 31M
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60	JFO HJ7ABI HJ1ABF ZRK HP5J XEYU	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. * Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. iia 1-2pm.
31.13	9.636 9.63 9.618 9.61 9.604 9.602	JFO HJ7ABE HJ1ABF ZRK HP5J	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R.	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. * Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. *
31.13	9.636 9.63 9.618 9.61 9.61 9.604 9.602 9.60 9.60	JFO HJ7ABI HJ1ABF ZRK HP5J XEYU RAN	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R.	4010:30am. .5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. * Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. *
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60	JFO HJ7ABI HJ1ABF ZRK HP5J XEYU	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop	4010:30am5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues
31.13	9.636 9.63 9.618 9.61 9.61 9.604 9.602 9.60 9.60	JFO HJ7ABI HJ1ABF ZRK HP5J XEYU RAN	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R.	4010:30am5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715
31.13	9.636 9.63 9.618 9.61 9.61 9.604 9.602 9.60 9.60	JFO HJ7ABI HJ1ABF ZRK HP5J XEYU RAN	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R.	4010:30am5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715
31.13 S31.15 31.20 31.22 31.24 31.25 U31.25 31.25 S31.28	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.60 9.59	JFO HJ7ABI HJ1ABF ZRK HP5J XEYU RAN PCJ	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. pia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm.
31.13 	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59	JFO HJ7ABI HJ1ABF ZRK HP5J XEYU RAN	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R.	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. pia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am.
31.13 	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. pia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am.
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. iia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,-
31.13 	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. iia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,M/Th/Sa 1pm-1am; Tu/F/Su mid-
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. iia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,M/Th/Sa 1pm-1am; Tu/F/Su mid-
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.60 9.59 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D. F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,M/Th/Sa 1pm-lam; Tu/F/Su mid- lam; Wed 10pm-lam, (irreg
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.60 9.59 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D. F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. iia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,M/Th/Sa 1pm-1am; Tu/F/Su mid-
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,-M/Th/Sa 1pm-lam; Tu/F/Su mid-lam; Wed 10pm-lam. (irreg 8:30-10:30pm; 6:30am-12:30pm-
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2 GSC	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,M/Th/Sa 1pm-lam; Tu/F/Su mid- lam; Wed 10pm-lam, (irreg 8:30-10:30pm; 6:30am-12:30pm- 12:17-1:15,9:20-11:20pm.
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England Melbourne, Australia	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,-M/Th/Sa 1pm-lam; Tu/F/Su mid-lam; Wed 10pm-lam. (irreg 8:30-10:30pm; 6:30am-12:30pm-12:17-1:15,9:20-11:20pm. a 9:35pm-2am,weekdays 3:30-8:30a
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2 GSC VLR	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England Melbourne, Australia	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,-M/Th/Sa 1pm-lam; Tu/F/Su mid-lam; Wed 10pm-lam. (irreg 8:30-10:30pm; 6:30am-12:30pm-12:17-1:15,9:20-11:20pm. a 9:35pm-2am,weekdays 3:30-8:30a
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59 9.59	JFO HJ7ABE HJ1ABE ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2 GSC VLR W1XK	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England Melbourne, Australi Springfield, Mass.	4010:30am5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,M/Th/Sa 1pm-lam; Tu/F/Su mid- lam; Wed 10pm-lam. (irreg 8:30-10:30pm; 6:30am-12:30pm- 12:17-1:15,9:20-11:20pm. a 9:35pm-2am,weekdays 3:30-8:30a 6am to 1 a.m.
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59 9.59	JFO HJ7ABE HJ1ABE ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2 GSC VLR W1XK	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England Melbourne, Australi Springfield, Mass.	4010:30am5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,M/Th/Sa 1pm-lam; Tu/F/Su mid- lam; Wed 10pm-lam. (irreg 8:30-10:30pm; 6:30am-12:30pm- 12:17-1:15,9:20-11:20pm. a 9:35pm-2am,weekdays 3:30-8:30a 6am to 1 a.m.
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59 9.59	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2 GSC VLR	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England Melbourne, Australia	4010:30am5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20- 7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,M/Th/Sa lpm-lam; Tu/F/Su mid- lam; Wed 10pm-lam. (irreg 8:30-10:30pm; 6:30am-12:30pm- 12:17-1:15,9:20-11:20pm. a 9:35pm-2am,weekdays 3:30-8:30a 6am to 1 a.m. Weekdays 4:30-6pm;Mon.to Fri 5
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59 9.59 9.58 9.58 9.57 9.57	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2 GSC VLR W1XK KZRM	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England Melbourne, Australi Springfield, Mass. Manila, Philippines	4010:30am5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm; Tues 1:45-3:40,7:15-10:30pm; Wed 715-8:30pm, Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,-M/Th/Sa 1pm-1am; Tu/F/Su mid-1am; Wed 10pm-1am. (irreg 8:30-10:30pm; 6:30am-12:30pm-12:17-1:15,9:20-11:20pm. a 9:35pm-2am, weekdays 3:30-8:30a 6am to 1 a.m. Weekdays 4:30-6pm; Mon.to Fri 5-9am; Sat 5-10am; Sun 4-10am. *
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59 9.59 9.58 9.58 9.57 9.57	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2 GSC VLR W1XK KZRM	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England Melbourne, Australi Springfield, Mass. Manila, Philippines	4010:30am5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm; Tues 1:45-3:40,7:15-10:30pm; Wed 715-8:30pm, Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,-M/Th/Sa 1pm-1am; Tu/F/Su mid-1am; Wed 10pm-1am. (irreg 8:30-10:30pm; 6:30am-12:30pm-12:17-1:15,9:20-11:20pm. a 9:35pm-2am, weekdays 3:30-8:30a 6am to 1 a.m. Weekdays 4:30-6pm; Mon.to Fri 5-9am; Sat 5-10am; Sun 4-10am. *
31.13	9.636 9.63 9.618 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59 9.59 9.58 9.57 9.57 9.562	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2 GSC VLR W1XK KZRM	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England Melbourne, Australi Springfield, Mass. Manila, Philippines Lima, Peru	4010:30am5:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. * Sun 3:20-4:30,7:15-9:30pm; Tues 1:45-3:40,7:15-10:30pm; Wed 715-8:30pm, Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,-M/Th/Sa 1pm-1am; Tu/F/Su mid-1am; Wed 10pm-1am. (irreg 8:30-10:30pm; 6:30am-12:30pm-12:17-1:15,9:20-11:20pm. a 9:35pm-2am, weekdays 3:30-8:30a 6am to 1 a.m. Weekdays 4:30-6pm; Mon.to Fri 5-9am; Sat 5-10am; Sun 4-10am. * 7-8.11:30am-1:30pm,4-6:15pm.
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31.13	9.636 9.63 9.61 9.61 9.604 9.602 9.60 9.59 9.59 9.59 9.59 9.59 9.59 9.58 9.57 9.57 9.562 9.56 9.55	JFO HJ7ABE HJ1ABF ZRK HP5J XEYU RAN PCJ VK6ME VK2ME W3XAU VUD2 GSC VLR W1XK KZRM OAX4T DJA	Taihoku, Taiwan Bucaramanga, Colom Cartagena, Colombia Klipheuvel, S. Afric Panama City, Panama Mexico D.F., Mexico Addis Ababa, Ethiop Moscow, U.S.S.R. Huizen, Holland Perth, W. Australia Sydney, Australia Philadelphia, Penna Delhi, India Daventry, England Melbourne, Australi Springfield, Mass. Manila, Philippines Lima, Peru Zeesen, Germany	4010:30am. 15:45-6:30,11:30am-1,6-11pm. * Weekdays 9am-1:30pm,4:30-10pm; Sun 4:30-9pm. a 11:45pm-12:45am ex.Sat; 3:20-7:20,9-11:45am. Noon-1:30pm,6:30-10:30pm. 3:40-4:30,8pm-midnight. ia 1-2pm. 6-7; 7-9:10pm for N.A. Sun 3:20-4:30,7:15-9:30pm;Tues 1:45-3:40,7:15-10:30pm;Wed 715-8:30pm,Fri. 8-9pm. Weekdays 6-8am. (9:30-11:30am. Sundays 12:30-2:30,4:30-8:30,-M/Th/Sa 1pm-lam; Tu/F/Su mid-lam; Wed 10pm-lam, (irreg 8:30-10:30pm; 6:30am-12:30pm-12:17-1:15,9:20-11:20pm. a 9:35pm-2am,weekdays 3:30-8:30a 6am to 1 a.m. Weekdays 4:30-6pm;Mon.to Fri 5-9am;Sat 5-10am;Sun 4-10am. * 7-8,11:30am-1:30pm,4-6:15pm. 12:05-11am,4:50-10:45pm.
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31.45 9.54 9.58 S31.46 9.58 S31.47 9.586 Sern, Switzerland S31.48 9.58 WZMF Schenectady, Nr. Fij's Schenectady, Nr. Simology Schenectady, Nr. Schene	X31.41	9.55		7:10-11pm to S.A. 7:20pm vidnight
Signature Sign				1.50 10.50 mm + c C - A
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S31.48	S31.47	9.53		3:30-/am ex. bundays.
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31.49 9.526 LKC Jeloy, Norway 4.39-10:30am; Sun 2:S0-10:30am Sl.				
31.50 9.526 ZBW3 Hong Kong Hong Kong 4-11an; Sun 3-9:30am etc. SEDG Gadalajara, Mexico Kong-4:30pm, 8-11:30pm, 31.50 9.523 ZRH Roberts Heights, S. Africa 11.45pm-12:45, 5-7:30am. 31.51 9.52 Skamlebak, Denmark Sundays 4-5am etc.				
X31.50 9.526 XEDG Guadalajara_Mexico Noon-4:30pm, 8-11:30pm.	31.50			4:30-10:30am; Sun 2:30-10:30am
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Signature Sign	31.51	9.52	HJ6ABH Armenia Colombia	Sallow 6.10pm
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SG31.70	SV31.62		EAR Madrid Spain	
Silight School	SC31.70			6·30-7am
31.79 9.436 COCH Havana, Cuba Sam-llpm; Sun Sam-lOpm.	31.77	9.445		8:15-10:15pm ex Sundara
Tananarive, Madagascar 12:30-12:45,9-10am,3:30pm	31.79			
V32.07 9.354 HCLETC Quito, Ecuador S-llpm Saturdays.				car 12:30-12:45 Q 10-2:20-
HBL Geneva, Switzerland Sundays 8-6:45pm. Noon-3, and 5pm-midnight. Sendays	V32.07		HCLETC Quito, Ecuador	8-11m Saturdam
Moon-3, and 5pm-midnight. S-9:05am. (4:40pm. G:40-8:40,11:40am-2:10,3:40-8:40,3:40-9:26 Moon-3, and 5pm-midnight. S-9:05am. (4:40pm. G:40-8:40,11:40am-2:10,3:40-8:40,3:40-9:26:30 Moon-3, and 5pm-midnight. S-9:05am. (4:40pm. G:40-8:40,11:40am-2:10,3:40-8:40-8:40,3:40-8:40,3:40-8:40,3:40-8:40,3:40-8:40,3:40-8:40,3:40-8:40,3:40-8:40,3:40-8:40,3:40-8:40-8:40-8:40-8:40-8:40-8:40-8:40-8	32.11		HBL Geneva. Switzerland	Sundays 8-8.45pm
FJ32.26	$\underline{\mathbf{X}}$ 32.12			Noon-3 and 5pm-midnight
N32.29 9.29 HIG Trujillo City, D.R.		9.30		8-9.05am (4.40-m
N32.46		9.29		
V32.63 9.195 COBX Havana, Cuba HC1GQ Quito, Ecuador H2CW Guayaquil, Ecuador H2CW	N32.40	9.26		6.30 to 8pm
V32.66 9.185 HC1GQ Quito, Ecuador HC2CW Guayaquil, Ecuador HC2CW Guayaquil, Ecuador HAT4 Budapest, Hungary COCA Havana, Cuba COCA Havana, Cuba COCA Havana, Cuba COCK Gock Havana, Cuba COCK Gock Goc	V32.63	9.195		
J32.74 9.165 HC2CW Guayaquil, Ecuador 32.87 9.125 HAT4 Budapest, Hungary COCA Havana, Cuba Sun/Wed 7-8pm; Sat 6-7pm. Sun/Wed 7-10:30pm. Sun/Wed 7-10:30pm	V32.66			Mon Wed / Set 9-11 nm
Sun/Wed 7-8pm; Sat 6-7pm. Sun/Wed 7-8pm; Sun 10:36pm-12:36pm Sun/Wed 7-10pm; Sun 10:36pm Sun/Wed 7-8pm; Sun 10:36pm Sun/Wed 7-8pm; Sun 10:36pm S	J32.74			7-11:30nm: Sun 3:30-6nm
SV32.99 9.095 COCA Havana, Cuba Tolm, Sat 0-7pm.	32.87			Sun (Wed 7-8pm. Co+ 6 7-
J33.00 9.09 XGX Hankow, China 5-10am.	<u>SV</u> 32.99	9.095	COCA Havana, Cuba	Noon-12.15om on leten
FV33.32 9.005 FV34.67 8.652 FV34.67 8.665 FV34.68 8.96 FV32.60 FV34.80 FV34.80 FV34.28 6.775 FV33.32 9.005 FV34.36 6.763 FV34.37 FV34.36 6.763 FV34.38 6.76 FV3	J33.00		XGX Hankow, China	5-10am
Ty33.32		9.09	PJC2 Curacao, D.W.I.	6:36-8:36pm·Su 10:36cm-12:26-m
33.48 8.96 33.80 8.875 34.66 8.665 V34.67 8.652 A4.97 8.58 A5.90 7.894 A5.90 7.854 A5.90 7.51 A5.90 7.51 A5.90 7.128 A5.90 7.1			COBZ Havana, Cuba	7:45am-1:15am
Mogadiscio,Ital.Somaliland, Sundays 8:30-9:30am.	33.48		COKG Santiago, Cuba	506, 9:30-10:30pm
V34.67	33.80		Mogadiscio, Ital. Son	naliland. Sundays 8.30-9.30cm
34.97	34.66		l con camaguey. Cuba	11:30am-12:30pm 3:30-6 8-9pm
37.13			HJ4ABU Medellin, Colombia	Weekdays 7-10pm
S7.13 8.08 7.894 7.894 7.894 7.894 7.87 83.12 7.87 83.20 7.854 7.51 39.95 7.51 40.27 7.45 40.49 7.41 40.65 7.38 41.55 7.22 41.80 7.177 42.09 7.128 42.25 7.10 43.01 6.975 44.18 6.79 V44.28 6.775 V44.36 6.763 44.38 6.76 44.51 6.	34.97		YNPR Managua, Nicaragua	1 12:45-2·15 6·45-10·15
San Salvador, FI Salvador 7-10:30pm.	37.13		VHPM Port Moresby, Papua	U Heard Testing 5:30-6:3ბილ
State	38.00	7.894	ISD San Salvador.El Sal	vador 7-10:30pm.
1	38.12		noing Quito, Ecuador	8:30-11:30pm.
Tokio, Japan Tizrs San Jose, Costa Rica Tizrs Tizrs San Jose, Costa Rica Tizrs San Jose, Costa Rica Tizrs Tizrs Tizrs Tizrs San Jose, Costa Rica Tizrs Tizrs Tizrs Tizrs Tizrs San Jose, Costa Rica Tizrs T	38.20		HCZJSB Guayaquil, Ecuador	llam-2pm,4-11pm
T12RS San Jose, Costa Rica T-11pm.	39.95		JVP Tokio, Japan	8-9-30am irreg
Total Point			TIZRS San Jose, Costa Rica	7-11pm.
M41.01 7.31 XECR Mexico D.F., Mexico Sundays 6-8pm. (3-5am.* 1st & 3rd Sat.of each month- 1st & 3rd Sat.of e			IDA Batavia, Java	10:30pm-2am:Sat 7:30pm-2am
N41.01 7.31 7.31 41.55 7.22 41.80 7.177 CR6AA Lobito, Angola YN3DG Leon, Nicaragua F08AA Papeete, Tahiti Wellington, N.Z. 42.05 7.10 Y4.18 6.79 Y44.28 6.775 HIH San Pedro, D.R. YN4.36 6.763 HIP Trujillo City, D.R. YNLF Managua, Nicaragua 10-11:45pm. San 9:40-10:40pm. 10-11:45pm.			XECR Mexico D.F., Mexico	Sundays 6-8pm (3-5cm 4
## 41.85			VIG PORT MORESBY, PAPUA	1st & 3rd Sat. of each month
## 42.09		7.22	Malaga, Spain	9-10am, 4-5:30nm
10			CR6AA Lobito, Angola	Wed/Sat 2:45-4:30pm
Tues/Fri llpm-l2:30am. Tues/Fri llpm-l2:30			INSDG Leon, Nicaragua	2-2:30. 8:30-9:30pm av gundar
#3.01 6.975 Wellington, N.Z. Testing. #4.18 6.79 PZH Paramaribo, D. Guiana Wellington, N.Z. Testing. #6.775 HIH San Pedro, D.R. #7:40-9:10pm; Sun 5:20-6:40pm. #7:10-8:40pm; Sun 9:40-10:40pm. #7:10-8:40pm; Sun 9:40-10:40pm. #7:10-8:40pm; Sun 9:40-10:40pm.		7.10	FOSAA Papeete, Tahiti	Tues/Fri llnm-12.20cm
PZH Paramaribo, D. Guiana Mon/Wed/Fri 5:41-8:41pm. Y44.28 6.775 HIH San Pedro, D. R. Trujillo City, D. R. Y438 6.763 HI7P Trujillo City, D. R. Trujillo City, D. R. Y10-8:40pm; Sun 9:40-10:40pm. Y10-11:45pm. Y10-11:45pm.			Wellington, N.Z.	Testing.
V44.26 6.775 HIH San Pedro, D.R. 7:40-9:10pm; Sun 5:20-6:40pm. V44.36 6.763 HI7P Trujillo City, D.R. 7:10-8:40pm; Sun 9:40-10:40pm. 44.38 6.76 YNLF Managua, Nicaragua 10-11:45pm.	44.18		PZH Paramaribo, D. Guiana	Mon/Wed/Fri 5.41_8.41
44.38 6.76 HIVP Trujillo City, D.R. 7:10-8:40pm; Sun 9:40-10:40pm. 44.38 6.76 YNLF Managua, Nicaragua 10-11:45pm.	<u></u>		HIH San Pedro, D.R.	
14.50 0.76 INLE Managua, Nicaragua 10-11:45pm.	V44.36		HI7P Trujillo City.D.R.	7:10-8:40pm; Sun 9:40-10:40pm.
			YNLF Managua.Nicaragua	10-11:45pm.
T	44.51	6.74	HC1TQ Quito, Ecuador	Sundays 5-7pm.
	-	.I.	-	F

	-	_	-	
44.60	6.727	PMH	Bandoeng, Java	4:30-llam;Sun 8:30pm-1:30am.
V44.86	6.687	TIEP	San Jose, C.R.	7-10:30pm.
F44.98	6.67	HI9B	Santiago, D. R.	6:40-8:40pm.
45.08	6.655	HI5G	La Vega, D. R.	to 6:10pm ex. Sundays.
B45.22	6.635	HC2RL	Guayaquil, Ecuador	Sun 5:30-7:30pm; Tu 9-11pm.
			Trujillo City, D.R.	12:10-1:40pm,4:40-8:40pm.
<u>X45.25</u>	6.63	HIT	Trujitio Otoy, D.R.	TESTO-1,40pm,4,40-0,40pm,
B45.29	6.625		Riobamba, Ecuador	Thursdays 9-11pm.
XV45.39	6.61	YNLG	Managua, Nicaragua	1:30-2:30,6-10:15pm.
45.45	6.60	HI6H	Trujillo City, D.R.	Signs-off at 10pm.
		HITCD	Distante Distante	
45.70	6.565		Puerto Plata, D.R.	5:40-7:40, 9:40-11:40pm.
45.80	6.55	TIRCC	San Jose, C.R.	Tu/Th/Sa 6-7pm;Sun 8-10pm.
X45.84	6.545		Bolivar, Venezuela	6:30-9:30pm ex. Sundays.
<u>V46.01</u>	6.52		Valencia, Venezuela	10:30am-1:30pm.5-9:30pm.
J46.11	6.507	YNlGG	Managua, Nicaragua	1-2:20, 8-10pm ex. Sundays.
46.15	6.50	HIL	Trujillo City, D.R.	12:30-2, 6-8, or 9pm ex.Sundays
46.26	6.485			R.Weekdays 5:30-9:30pm.
_46.41	6.465	YV3RD	Barquisimeto, Venez.	11:30am-1:30pm,5:30-9:30pm.
46.44	6.455		S.F.de Macoris, D.R.	
J46.58	6.44	TGQA	Quezaltenango, Guat.	9-11pm ex.Sat/Sun;Sat 9pm-lam;
	1			Sun 1-3pm.
46.66	6.43	HILS	Santiago, D.R.	5:40-7:10pm ex. Sundays.
			Bolivar, Venezuela	10.20- 1.20- 4.20 0.20-
46.77	6.416	TAOUG	DOLL VAL VEHEZUELA	
46.80	6.41	TIPG	San Jose, C.R.	7-9:30am,12-2,4-11:30pm.
46.88	6.40	YV5RH	Caracas, Venezuela	5-9:30pm ex. Sundays.
46.99	6.384	VP2IO	Basseterre, St. Kitts	
47.02	6.38		Caracas, Venezuela	llam-lpm,5:30-9:30pm ex. Sun.
J47.06	6.375	TIWS	Puntarenas, C.R.	5-7,7:30-10; Sun 5-6pm.
47.14	6.365	YVIRH	Maracaibo, Venezuela	
47.20	6.357			uras 7:45-10pm ex.Sundays.
47.32	6.34	HILX	Trujillo City, D.R.	Tues/Fri 8:10-10:10pm.
47.36	6.334	AFXAO	Chiclayo, Peru	8-11pm.
47.43	6.324		Havana, Cuba	6:55-lam; Sun 9:55am-10pm.
	0.024			
47.51	6.315	HIZ	Trujillo City, D.R.	5:10-7:40pm ex.Sundays.
47.62	6.30	YV4RD	Maracay, Venezuela	6-11pm except Sundays.
47.66	6.295		Lima, Peru	7pm-midnight. (9:40pm.
$\underline{VX47.74}$	6.285	HIG	Trujillo_City,D.R.	6:40-8:40,11:40am-2:10,3:40-
V47.85	6.27	YV5RP	Caracas, Venezuela	4:30-9:30pm, or later.
47.96	6.255		Caracas, Venezuela	5:30-8pm.
VV/40 05			mmiillo City D D	5:25-10:10pm or later.
XV48.05	6.243	HIN	Trujillo City, D.R.	
48.08	6.24	ZGE	Kuala Lumpur, FMS.	Sun/Tues/Fri 6:40-8:40am.
48.11	6.235	HRD	La Ceiba, Honduras	8-11pm; Sun 4-6pm.
F48.15	6.23			11:30am-1pm,5:45-8:45pm.
		1 4 7 1 1 1 1		
V48.31	6.21		Saigon, F. Indo-China	7:30-9:15am.
48.35	6.205	YV1RI	Coro, Venezuela	6:30-9:30pm ex.Sundays.
48.43	6.195	HI2D	Trujillo City, D.R.	
FV48.47		TG2	Custamala Gustamala	6-11pm ex.Sat/Sun; Sat 6pm-lam;
TV40.4/	6.19			1 10 40 1 40 C-40 0 - 40
<u>V</u> 48.47	6.19	HILA	Santiago, D.R.	10:40am-1:40pm,6:40-9:40pm.
48.60	6.172	XEXA	Mexico D.F., Mexico	8:30-10:30am,2:40-4:30,7pm-
	, _ ,			midnight, or later.
סמ סעם	0 150	MILLIA	Company Warrantal	
848.73	6.156		Caracas, Venezuela	3:30-10pm;Sun 8am-10:30pm.
X48.78	6.15	HI5N	Moca City, D.R.	6-7am, Noon-2pm, 6-9:30pm.
48.78	6.15		Colombo, Ceylon	7-llam, or later.
				4-6pm.
48.78	6.15		Villarica, Paraguay	
<u>V48.78</u>	6.147	CJRO -	Winnipeg, Canada	Saturdays only irregular. *
48.82	6.145	HJ4ABF	Medellin, Colombia	9:30am-lpm, 5-11:30pm.
S48.86	6.14			llpm-lam.
		WOVI	Pittsburgh, Penna.	
48.86	6.14		reoboranitre Rerais	in Congo, Sundays 5:35-7am.
48.88	6.137	CR7AA	Laurenco Marques, Mo	oz. 12-1,4-6:30,9:30-11am.
<u>\$48.93</u>	6.132	AESHA	Halifax N.S. Canada	Heard best Sundays 7-9pm.
		MUCGA	Conmotown D Cuione	9-10am 2-15-6-30nm-Cun 5-20
$_{1}$ $_{1}$ $_{1}$ $_{2}$ $_{3}$ $_{4}$ $_{4}$ $_{4}$ $_{4}$ $_{5}$ $_{4}$ $_{4}$ $_{5}$ $_{4}$ $_{4}$ $_{5}$ $_{4}$ $_{5}$ $_{4}$ $_{5}$ $_{4}$ $_{5}$ $_{4}$ $_{5}$ $_{4}$ $_{5}$ $_{4}$ $_{5}$ $_{5}$ $_{6}$ $_{7}$	6.13	vrabu	deorge comit, D. Garana	9-10am,2:15-6:30pm;Sun 5:30-
	9	-		11:30am, and 3-05pm.
48.94	6.13	LKJ	Jeloy, Norway	10:30am-5pm.
48.94	6.13	COCD	Havana, Cuba	10am-11pm; Sun 10am-9pm.
				Commerce O TO
V48.98	6 195	CXA4	Montevideo, Uruguay	oam-noon, Z-LUpm.
	6.125			
49.00	6.122	*****		a Tues/Sat 3-4:30am.

```
V49.00
             6.122
                           Panama City, Panama 6-10pm; to mid. irreg.
                    HP5H
   $49.02
             6.12
                     W2XE
                           Wayne, N.J.
                                                 11:30pm-12:30am to S.A.
    49.02
             6.12
                           Helsinki, Finland
                                                 12 mid-5pm.
   B49.04
             6.117
                    XEUZ
                           Mexico D.F., Mexico
                                                 9am-lpm, 7pm-2am.
   S49.10
             6.11
                           Bangkok Siam
                                                Wednesdays 6:30-10:15am.
    49.11
             6.108
                    HJ6ABB Manizales, Colombia 5:30-10pm ex. Sun; Sat to 11pm.
   S49.18
             6.10
                    W3XAL Boundbrook, N.J.
                                                 9pm-lam. to S.A.
   $49.18
             6.10
                    W9XF
                           Chicago, Illinois
                                                 1-2am.
                           Belgrade, Yugoslavia 1-3,6:30-8:30am, Noon-6:30pm.
   ₹49.18
             6.10
                    YUA
    49.20
             6.097
                    ZRK
                           Klipheuvel, So. Africa 11:45am-4pm; Sun Nn-3:20pm.
    49.20
             6.087
                    ZRJ
                           Johannesburg, So. Africa 11:45pm-11:30am.
  XJ49.30
             6.085
                    XECU
                           Guadalajara, Mexico | Evenings irreg.
    49.32
            6.083
                    VQ7LO Nairobi, Kenya
                                                6-6:30am,11:45am-2:45pm etc.
    49.33
            6.081
                    YVIRD Maracaibo, Venezuela 5-10pm.
    49.37
            6.077
                    OAX4Z Lima, Peru
                                                 7pm-1:30am ex.Sundays.
   49.39
            6.073
                    HJ3ABF Bogota, Colombia
OER2 Vienna, Germany
                                                 7pm-Mid. except Sundays.
   49.40
            6.072
                                                 9am-5pm; Sat to 5:30pm.
   49.42
                    CFRX
                          Toronto, Canada
Motala, Sweden
            6.07
                                                 6:30am-llpm; Sun 10am-llpm.
   49.46
            6.065
                    SBO
                                                 4:15-5pm.
  S49.50
                    W3XAU Philadelphia, Penna.
            6.06
                                                 Tues/Fri/Sun lpm-mid; Wed 1-10p
  $49.50
            6.06
                    W8XAL Cincinnati, Ohio
                                                 6:45-8pm;11pm-2am;Su 8am-8pm.
   49.53
            6.057
                    ZHJ
                           Penang, S.S.
                                                 6:40-8:40am ex. Sundays.
   49.56
            6.053
                    HJ6ABA Pereira, Colombia
                                                 9am-noon,6:30-10pm.
            6.045
   49.63
                    XETW
                          Tampico, Mexico
                                                 7-11pm.
                    HJlABG Barranquilla, Colombia llam-llpm; Sun llam-8pm.
 SV49.65
            6.042
  S49.67
            6.04
                    WIXAL Boston, Mass.
                                               Mon/Wed/Fri 7-8:45pm.
   49.67
                    TGWB Guatemala, Guatemala
            6.04
                                                7:40-8:40am,12:45-3:30,7pm-
                                                12:30am;Su 10:30am-12:15am.
  S49.67
            6.04
                    W4XB
                          Miami, Florida
                                                 1-3,9pm-mid;Sun 4-6,9pm-mid.
  <u>B</u>49.73
            6.033
                    HP5B
                          Panama City, Panama |
                                                10:30am-2, 6-10pm.
   49.75
            6.03
                   VE9CA Calgary, Alta, Canada 10am-2am.
   49.75
            6.03
                   HVJ
                          Vatican City, Italy
                                                2-2:15pm.
   49.75
            6.03
                   RV59
                          Moscow, U.S.S.R.
                                               | 5-6, and 10-11pm irreg.
  S49.75
                   OLR2B Prague, Czechoslovakia Wed/Thurs 4:40-5:10pm.
            6.03
   49.81
            6.023
                   XEUW Veracruz, Mexico
                                                10pm-lam.
   49.83
            6.02
                   DJC
                          Zeesen, Germany
                                                10:40am-4:25pm to Africa.
 VX49.86
           6.017
                   HI3U
                          Santiago, D.R.
                                                4:40-9:40pm ex. Sundays.
  X49.88
           6.015
                   PRA8
                          Pernambuco, Brazil
                                                4-9pm.
   49.90
           6.012
                   ZHO
                          Singapore, S.S.
                                                5:40-9:40am; Sat 5:40-9:10am.
  S49.92
           6.01
                   OLR2A Prague, Czechoslovakia Same as OLR2B (6.03)
   49.92
           6.01
                   CJCX
                          Sydney, Nova Scotia
                                                7am-1:30,4-8:30pm.
  S49.92
                                                                           (week.
           6.01
                   9MI
                          S.S. Kanimbla
                                                7-7:30am two or three times a-
  49.94
           6.007
                   OYX
                                              Heard 9-9:45am irreg.(am-3:30p
                          Rangoon, Burma
  49.94
           6.007
                          Roberts Heights, S. Afr. 11:45pm-12:45am, 5-7:30am, 10
                   ZRH
  49.94
           6.007
                   ZRJ
                          Klipheuvel, Šo. Africa 3:30-4pm.
 V49.95
           6.005
                   CFCX
                         Montreal, Canada
                                                6:45am-mid; Sun 10am-11pm.
 <u>₹</u>49.95
           6.005
                   HP5K
                         Colon, Panama
                                                7-9am, 12-1pm, 6-11pm.
  49.99
           6.002
                   CXA2
                         Montevideo, Uruguay
                                                7:30-10:30pm.
  50.00
           6.00.
                   XEBT
                         Mexico D.F., Mexico
                                                10am-1:45am.
<u>FJ</u>50.08
           5.992
                   COCO
                         Havana, Cuba
                                                7:55am-midnight.
 X50.08
           5.99
                   HJ3ABX Bogota,_Colombia
                                                5:30-11:30pm; Sun 6-11pm.
  50.20
           5.977
                   CS2WD Lisbon, Portugal
                                               2:30-5:30pm;Sun/Thur 6-7am.
  50.21
           5.975
                   OAX4P Huancayo, Peru
                                               9-11pm.
  50.25
                                                                        (9:30pm.
           5.97
                   YV5RC Caracas, Venezuela
                                              4-10pm;Sun 8:30-11:30pm,3:30-
FJ50.38
           5.955
                         Port-au-Prince, Haiti 7-llpm ex. Sundays
                   HH2S
  50.51
           5.94
                   TG2X
                         Guatemala, Guatemala 4-6, 10pm-midnight.
  50.55
                  YVIRI Maracaibo, Venezuela llam-lpm. 4:30-10:30pm. YV4RH Valencia, Venezuela | 5-9:30pm.
           5.935
  50.73
           5.913
5.905
  50.81
                  TILS
                         San Jose, C.R.
                                              Noon-2:30pm, and 6-11pm.
  50.85
           5.90
                  ZNB
                         Mafeking, Bechuanaland 1-2:30pm; 6-7:30am ex. Sunday
 V50.89
           5.895
                  YV3RA Barquisimeto, Venez. 5:30-9:30pm ex. Sundays.
<u>SX</u>51.07
           5.875
                         Tegucigalpa, Honduras 7-10:30pm.
                  HRN
  51.24
           5.855
                  HILJ
                         San Pedro, D.R.
                                              | 11:40am-1:40pm,6:10-8:40pm.
SX51.32
                  YV1RB Maracaibo, Venezuela 10:45-12:40pm, 4:30-10:30pm- *YV5RR Caracas, Venezuela 6:30-7:30, 10:30am-1:30-3:30-10
           5.845
C51.41
           5.835
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BROADCAST STATION NEWS

AUSTRALIA NEW: 2MG (1450), 100w, Mudgee, NSW, now on regular sked. ABC xmtr. 2CY (850), will be on air in Oct; 5RM will then move to 810kC...3GL (1350), Geelong, will soon increase power to 500w. CANADA CBC's 4th 50kW xmtr., near Watrouwer. Sask., will soon be on the air. The 5th 50kW xmtr. will be located on <u>Lulu Isl.</u>, near Vancouver, B.C. <u>CHINA</u> <u>NEW: XOHK (1380)</u>, 100w, Shanghai...Be lieved to be off air: <u>XHHV</u>, <u>XHHX</u> and <u>XLHM</u>...XOJD (900), 10kW, Shanghai, closes down at 9:15am EST.

NEW: To be on the air soon: CMHO (1250),500w,Sagua la Grande; CMBF (1090),lkW,Havana,and CMKZ (1480),125w, Palma Soriano...Power of CMHB (1240), is to be raised to 200 watts.

NEW: YSP (780),50w,"La Voz de Cuscat-lan, now on the air. VADOR

VALUE TO THE PROOF THE PRO



A 125kW station to operate on 722kC, will be erected by the government, near <u>Jaarsveld</u>. This will be one of the most modern xmtrs.in Europe <u>ICELAND</u> "Radio Reykjavik" (208), is now radiating a power of 100kW.

INDIA Stations in operation: <u>VUD</u> (886),20kW,Delhi,operates daily 1:30 -3:30,7;30am-12:30,8:30-10:30pm...<u>VUB</u> (1231),12kW,Bombay...<u>VUM</u> (1420),250w, -3:30,7;30am-12:30,8:30-10:30pm... VUB (1231),1½kW,Bombay... VUM (1420),250w, Madras... VUC (810),1½kW,Calcutta... VUL (1086),5kW,Lahore,and VUW (1022),5kW Lucknow,operate daily 8am-12:30pm EST.. VUP (1500),250w,Peshawar. -(NRC) MEXICO NEW: XEQ, "Radio Americana, "Mexico D.F. will be on the air soon N.Z. NEW: 4YZ (680),5kW,inaugurated at Invercargill, on Aug. 2... 2YH (820),5kW,is testing. ... 1ZB (1070), Auckland, has a special dx broadcast the first Friday in each month at 8:30am EST. (Oct.7-Nov.4-Dec.2,etc.).Re ports are urgently requested from all overseas listeners (Forest,Niven) POLAND NEW: The new 50kW xmtr. at Baranowicze (520), is testing.

SIAM HS7PJ (825),Sala Daeng, Bangkok,closes down daily at 10am; English news session Sundays 8:45-9am EST (Forest, Breen, Niven) (Saito. TAIWAN A new high-nower station is under construction at Tajhoku (A.

NAWI AT A new high-power station is under construction at Taihoku (A. LAWAN

A new high-power station is under construction at Tainoku (A. U.S.A.

NEW: WGKV (1500),100w,Charleston,W.Va...WSTP (1500),100w,Salis bury,N.C...WJHL (1200),100w,Johnson City,Tenn...WRAL (1210), 100w, Raleigh, N.C...KWEW (1500),100w,Hobbs,N.M....CHANGE IN CALLS: WGVA (formerly WIBC) Indianapolis,Ind...KOME (formerly KTFL),Tulsa, Okla...KSAN (formerly KGGC), San Francisco,Calif....CHANGE IN FREQUENCY: WDAE, Tampa, Fla. to 780kC...

WRBL,Columbus,Ga. to 1330kC...WKAT (1500),Miami Beach, Fla. to 250w...

After 4 weeks of tests the new 50kW xmtr. of KNX,at Torrance,Calif.,was officially inaugurated on Sant 16. This is one of the finest installations in ficially inaugurated on Sept.16. This is one of the finest installations in the world and is directly linked with $\underline{KNX's}$ new \$1.750,000 studios.

"PARADE OF THE STATES"

For the first time in the history of dx'ing, radio fans throughout the country will have an opportunity, dur ing the 1938-39 season, to tune for special programs from broadcasting stations of their own selection, under a plan sponsored by the publishers of RADEX.

This plan, known as the "Parade of the States", provides that all dx'ers the States", provides that all dx'ers submit their votes for the most desired station in each state and territory. The stations receiving the greatest number of votes will be ask

ed to broadcast and interfering stations will be asked to stand by . Send a postal card now to The Radex Publishing Co., 289 Queen Anne Road, Teaneck, N.J., showing your choice of sta tions.

BROADCAST BAND RECEPTION IMPROVING

"Looks like a good season ahead", says L.Sawyer of Woodstock, N.H. "WKAQ and WNEL can be heard as early as 6:30pm EST.On Sept.6, at 4:45am, a sta tion on 1500kC, was heard with a dx program but QRM was so bad from WJBK I couldn't get call. Who can identify

International

Published Monthly Excepting July



Ax'ers Alliance

CHARLES A. MORRISON

Volume 6

October, 1938

Number 9

EDITORIAL

Time marches on: The Globe Circler has had its face lifted. We hope you like the new cover, and size. Further improvements are planned. Can't tell you yet, its a secret; but we are work ing hard to give you a more snappy, attractive, useful magazine. Are YOU working hard to line up those new IDA members. I've got a whole extra box full of Globe Circlers here, that are yours for the asking-as long as they last- to send to your radio cor respondents and friends whom you would like to see in IDA, or if you give us the names we will mail them out for you.

WANTED AT ONCE: a new editor for Ama-Touring to replace capable Ralph Gozen who is forced to relinquish this post due to business pressure.

--The Editor--

NEW MEMBERS

E.Payette, Monroe, Mich...W. Ansell, Brisbane, Qsld., AUSTRALIA...E.Danielson Jr., Pawnee City, Neb...R. Dissinger, Lawrence, Kans...M. Horlick, Youngs town, Ohio...A. Bowen Jr., Center Line, Mich...R. Baker, London, ENGLAND...K.G. Schram, Ripon, Wis...J. Thewlis, Los Angeles, Calif...E. Page, Los Angeles, Calif...M. Daskam. Los Angeles, Calif...Amateur WGOI, D. Crabtree Jr., Martinez, Calif...Amateur WGIKQ, F. Caldera, Oakland, Calif...R. Ritchie, Beverly, Mass.....Miss J.M. Neilson, Baltimore, Maryland.

IN MEMORIAM

In a North Bay, Ontario, hospital for more than six years with a broken back, IDA member <u>D.Cantwell</u>, died Sept.9. Although injured in a rock slide while working on the trans-Can ada highway near Bonfield in April, 1932, and from that time on paralyzed from the waist down, he was until the last an active and cheerful dx'er, whose courage and grit could well be an example for all of us to try and live up to.

<u>L.Harbin</u> of Chaguanas, has been appointed <u>IDA</u> Rep. in TRINIDAD, B.W.I.



CHAPTERS

REGINA JUBILEE (Regina): August social meeting was held at home of Mrs L.Baird, and plans were made for starting a dx competition, and member ship contest in Sept...On Monday, Sept.5, extensive aerial tests were conducted by members at the home of Wm.Ansell. The following types were tested: vertical, inverted L, half-wave doublet, G.E.Doublet, V doublet Carl Whitehouse, revolving type, selective beam and the T type.

SO.CALIF.CHAPT. (Los Angeles): 20 were present at the Aug.27, meeting at the home of Aug.Balbi.An Executive Committee consisting of A.Balbi, chairman; G.Daskam, and W.Britting was elected. Since the chapt. has grown so large it was decided to arrange for permanent meeting quarters. SCC has decided to join the NAPRI as a body. The SCC Singleton/Eliminator Contest is going along nicely.

Contest is going along nicely.

WINDY CITY CHAPT. (Chicago); Meetings are being held on the 2nd Wednesday of each month, at 8pm, at the Central YMCA, 19 S. La Salle. All dxers in the area are not only cordially invited, but urged to attend these interesting meetings. An active campaign for members has been started.

BETA (New York): Contact Ed. Goss, 812 Prospect Place, Brooklyn, for news concerning dates of fall meetings.

RETURN POSTAGE BUREAU

Mint stamps now available from the Return Postage Bureau, 85 Francisco Ave., Rutherford, N.J., to be used in prepaying return postage on QSL, or SWL cards are as follows:

3¢ ea: Canada, Cuba, Mexico, D.R.

4¢ ea: Belgium, Chile, England, IFS, North Ireland, Scotland, Wales, Switzerland.

5¢ ea: Antigua, Barbados, Colombia, Lab rador, C.R., D.E.I., Egypt, Haiti Jamaica, Newfoundland, Panama, Philippines, Salvador, Trinidad Uruguay.

6¢ ea: Br. Honduras, Denmark, Roumania,

New Zealand, Poland.

I. D. A. EXCHANGE CORNER

J.P.Gawal, 96 Jewett Pkwy, Buffalo, N.Y. (swap SWL cards and photo's 100 %)....K.Nelson Jr., Haddonfield Road, Palmyra, N.J. (swap SWL cards-especially foreign; will pay cash for a good buy in a 1937 or 38 model Sky Buddy)...L.Harbin, Chaguanas, Trinidad, B.W.I. (swap letters, stamps, post card views, and SWL cards 100%)...W.H.Stark, 2117 N.62nd St., Wauwatosa, Wis. (swap letters)...J.S. Rossignaud, 60 Ridolfo St., Sliema, Malta (swap SWL cards).

INTERNATIONAL ROUND TABLE

If you like to write to dx'ers in foreign countries you will want to join the Pen Knights of the International Round Table, organized by member W.H.Stark of 2117 N.62nd St., Wauwatosa, Wis. There are no dues, nor obligations, just a friendly club of dx'ers who enjoy exchanging views, dx notes, photographs, magazines, SWL cards. etc.

FORWARD AGAINST MAN-MADE INTERFERENCE

Doesn't it always happen: after waiting patiently for an hour to identify that mystery station, and the announcement is about to be given in English, that blasted oil burner, heating pad, Xray machine, or vacuum clean er starts up and completely blots out the station.

How long are we radio listeners (the dx group alone numbering countless thousands) going to allow our hobby to be spoilt, our tempers to be ruined, our expensive equipment to be rendered practically worthless?

The <u>NAPRI</u> (National Association for the Prevention of Interference), IDA local chapters, and other groups have contributed noble efforts in eliminating the QRM menace in many

metropolitan areas, but how about the listener in the remote town, or the isolated district? The time come for us to act as a body, for us to throw off the tentacles of this octupus that threatens not only our hobby, but almost the whole industry. We will get nowhere if we "wait for George to do it". IDA members, other dx'ers, journalists, manufacturers lets eliminate this NUISANCE from the U.S.A. WRITE, and get all of your friends to write, to your Congressman and to your Senator and urge passage of the National Bill for the Prevention of Interference, which shelved session of Congress will be brought up again this session. Show your further displeasure by squawking verbally- and in writing- to your local city council, Utilities Company and radio station.

LETS DO SOMETHING ABOUT THIS.

"SPATARI"—THE NEW

RADIO LANGUAGE

Already in use by many Latin stations- "SPATARI", a new, unique, and effective radio language may soon be used universally by short-wave stations, amateurs in foreign QSO's, dx'ers in writing foreign stations, and by countless others who have tried in vain to communicate with some one speaking in an unfamiliar tongue.

SPATARI is a simple and ingenious code language, each phrase of which expresses a complete thought of manywords. SPATARI is not 'learned' nor memorized. It is a spoken code language with which anyone can, after a few minutes of intelligent study, receive and transmit messages covering the entire range of daily activities

SPATARI is based upon the 8 names for the notes of the musical scale, namely,DO, RE, MI, FA, SO, IA, SI, and BO, which pronounced the same in practically every language have been combined into countless word forms, each in a very definite, logical and yet absurdly simple sequence. You should become acquainted with SPA TARI as it will be daily becoming more prominent. Such stations as H14V YV3RD, YV6RB, YV2RA, PRADO, HC2CW, HJ1ABE and TG2 are using it experimentally. IDA broadcasts will feature messages in SPATARI.

The creator, modest music teacher, and IDA member, Prof. Carlo Spatari of 27-20 25th Ave., Astoria, N.Y., will gladly furnish anyone writing him in formation about SPATARI, or the SPA

TARI code book.

BROADCASTING STATIONS OF BRAZIL

KCS	WATTS	CALL LOCATION	KCS	WATTS	CALL	LOCATION
580		PRC3 Pelotas	1170	500	PRC9	Campinas
580	950	PRG5 Santos	1170	500	PRE5	Uberaba
590	250	PRG7 Jahu	1200	000	PRB6	S.Paulo
6 0 0 ·	25000	PRH2 P. Alegre	1220	25000	PRA8 .	.Rio de Janeiro
630	250	PRD6 Piracicaba	1260	5000	PRA5	S. Paulo
670	500	PRA7 R. Preto	1280	25000	PRG3 .	Rio de Janeiro
670	2000	PRC5 Belem	1300	3000	PRH6	B. Horizonto
680	5000	PRC2 P. Alegre	1320	1000	PRD8	Niteroi
690	250	PRD7 Sorocaba	1320	500	PRD9	S.Paulo
690		PRC7 B. Horizonto	1320	2000	PRE6	Fortaleza
690	250	Rio Preto	1320	500	PRH4	S.Paulo
720	25000	PRA8 Recife	1340	5000	PRE4	S. Paulo
740	10000	PRA4	1360	50000	PRC8	Rio de Janeiro
760	10000	PRA6 S. Paulo	1370	250	PRC4	Blumenau
800		PRA2 Rio de Janeiro	1370	250	PRI2	Marilia
840	5000	PRH9 S. Paulo	1400		PRD5	Rio de Janeiro
860	10000	PRA3 Rio de Janeiro	1410	5000	PRE7	S.Paulo
880	22000	PRI3 B. Horizonto	1420	2000	PRB2	Curityba 🔊
900	5000	PRB7 Rio de Janeiro	1430	5000	PRE2	Rio de Janeiro
940	10000	PRF4. Rio de Janeiro	1440	3000	PRF9	P.Alegre
960	5000	PRF3 S. Paulo	1440	500	PRG6	Cruzeiro
980	20000	PRES. Rio de Janeiro	1440	250	PRG8	Bauru
1000	10000	PRB9 S. Paulo	1450		PRB4	Santos
1040	10000	PRG2 S. Paulo	1450	250	PRH5	Pocos de C
1060	10000	PRD2 Rio de Janeiro	1460	250	PRF2	Rio Claro
1080 1090	10000	Joao Pessoa	1460	250	PRF7	Çampos
1100	20000	PRD4 Araquara	1470	1000	PRE6	Niteroi
1120	5000 5000		1470	250	PRG4	Jaboticabal
1160	5000		1480	250	PRB 5	Franca
1100	0000	PRH3 S. Paulo	1480	1000	PRD3	Petropolis

I. D. A. INTERNATIONAL FRIENDSHIP PROGRAMS

	Oct.14/15/16/17,7-7:30am EST, M/V "Kanimbla"	1 kW	6010KC	9MI	
	Friday, Oct. 14.1:30-7:15am EST. Norfolk Nebraska	7	1060	WJAG	
(7)	Saturday, Oct. 15.3-4am EST. Rio de Janeiro Brazil	10	1060	PRD2	
	ADDRESS: Radio Cruzeiro Do Sul S/A; Filial do Rio de	Jane	iro	TIME	
(8)	Saturday, Oct. 22, 10-11:30pm EST, Guatemala, Guatemala	valle	9685	TGWA	
	NOTE: 10-11pm, concert by Orquesta Progresista	}	6040	TGWA	
	NOTE: 11-11:30pm, marimba concert.	(5	1520		
(10)	Sat. Nov. 6, to Nov. 12, inclusive, daily 3-4am EST,		1040	TGW	
	ADDRESS: Radio Tupi de Sao Paulo- PRG2, Rua 7 de Abril	ພິບ	1040	PRG2	
	30 Andar, Sao Paulo, Brazil. Announcements in	D 02	/00 -	18	P
	Thurs., Nov. 17, 2-2:30am EST, Cincinnati, Ohio	Eng 1	lsn.	TATT 187	h
	NOTE: Lutheran program. Write to Pastor Barth, C/o WIN	300	6060 I	WLW	į
(13)	Tues., Nov. 22,9-11pm EST, Guayaquil, Ecuador	V .		W8XAL	
/	ADDRESS: Dr. Roberto Levi, Mgr. of HC2RL, Quinta Piedad,	0-1	0000	HC2RL	
	Luque Nos. 106-116 - Casilla 759, Guayaquil,	, car	1e-		
	Thurs., Nov. 24,9-10pm EST, Heredia, Costa Rica (N	Lcua	OCOF m	* ANITOIT	
(14)	Saturday Dec 4 Buce remarks Colombia	(0)	9095 T.	LANKH	
(16)	Ducaramanya, contonora	30	9030 H	1 / ABD	
()	ADDRESS: Radio Union Madrid, Apartado 745, Comite de Co	10	T082	EAJ7	
(19)	Sunday Jan 8 1-20m FGT Ctrock - To Complete de Uc	ntro	L Obrei	ro.	
(10)	Sunday, Jan. 8, 1-2am EST, Strasbourg, France	100	859		
	ADDRESS: Radio Strasbourg, Radiodiffusion Nationale; 3	30 , Ru	e Du-	-	
	22-Novembre, Strasbourg, France.				
(21)	Sunday, Jan. 8, (time undecided) Zeesen, Germany		6020	DJC	
(DI)	Sunday, Jan. 22, 3-4am EST, Guatemala, Guatemala		1310	TGl	
	Monday, March 20,12:01-lam EST, San Salvador, El Salvado	r	7894	YSD	
	NOTE: We urge that you listen to these special Intern	atio	nal Fri	end-	
	snip programs, and drop a report or at least a word of	fth	anks to		
	each, - (Director, Herbert Tucker, 57 Kenilworth Drive, Ak	ron	Ohio)		