

OCTOBER, 1939

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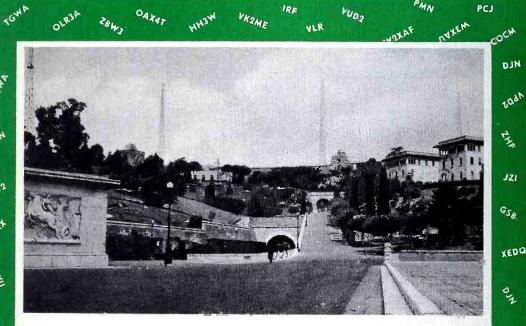
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Site Of "Radio Vaticano" At Vatican City

In this issue

VUD2

RAN

PB12

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PB13

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VAC/VIC S.W. HONOR ROLLS—NATIONAL DEFENSE LISTENERS LEAGUE-DX TRANSMISSIONS-THE I.D.A. 100 CLUB-ULTRA HIGH FREQUENCY-WAR NEWS-SHORT-WAVE NOTES-SHORT-WAVE LIST.

ten cents

INTERNATIONAL DX'ERS ALLIANCE

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# SHORT WAVE NOTES

Editor-in Chief, C. Morrison; UHF Editor, P. Ferrell; Frequency Checking Editors, R.B. Oxrieder, J. Larsen; Ama-Touring Editors, R. Legge and Roy Waite.

IDA PROGRAMS

NOV.19, 7-8pm EST, 6.03mc RV96 DEC.17, 1-2am EST, 13.9mc

### THE I.D.A. 100 CLUB-

1. John May, Wilkinsburg, Pa. (VIC)	148	ll.P.Alberto, New York, N.Y. (VIC)	111
2. Howard Bradley, Hamilton, N.Y.	144	R & I Brian, Minneapolis, Minn.	111
John DeMyer, Lansing, Mich.	144		110
3.Roger Legge, Binghamton, N.Y.	130		110
4.Ralph Gozen, Yonkers, N.Y.	124		110
Norman Kriebel, Ambler, Penna.	124		110
5.Lem Cavileer, Haddon Hts, N.J.	123	13. Jack Siringer, Lakewood, Ohio	109
6.G.Rockwell, Halifax, N.S., Canada		14. Hal Clein, Los Angeles, Calif.	107
7. Philip Rush, Pittsburgh, Penna.	116		107
8.H.Eck, East Lansing, Mich.	115	15. John Barre, New York, N.Y.	106
Roy Waite, Ballston Spa, N.Y.		16. Robt. Pybus, Manchester, England	102
9.Guy Bigbee, Ft. Benning, Georgia.	114		102
10. Roy Myers, Los Angeles, Calif.	113	W.Britting, Montebello, Calif.	102
Davis Thomas, Proctorville, Ohio	113	17. Gail Beyer, Chicago, Illinois.	100

#### WAR NEWS

E.S.T. E.S.T. GERMANY 6, 8:15 and 10:30pm (DJB,DJD). . . ITALY- 7:30pm (2RO3,2RO4, 2RO6)
U.S.S.R.-- 7pm (RKI,RNE,RAN,RV96). . . HUNGARY- 7:30pm (HAT4)

APPOINTMENT: DIST. DIRECTOR for IDA 7th DIST: Desmond Callan, Green Street, Readville, Mass. (Includes New England States; N.B., N.S., P.Q., Ont., Nfld).

PRESS DEADLINES: for NOVEMBER GLOBE CIRCLER: Oct.14; for NOVEMBER STOP PRESS SHEET: Oct.31; for NOVEMBER GLOBE CIRCLER: Oct.28 (For Ama-Touring, send

your news items to Roger Legge, 20 Beethoven St., Binghamton, N.Y.)

IMPORTANT: MAKE OUT YOUR SHORT-WAVE REPORTS AS FOLLOWS: Double space lines; use one side of page only; group items by continents and state time time used. Items in order of importance are: NEW stations; exact frequencies or frequency changes; exact schedules or addresses; identifying signals and unusual receptions. RUSH important items by fastest mail. FOUR STAR items de. note exceptional merit. EACH FIVE STAR ITEM PAYS \$1.00 to the contributor.

### **ULTRA HIGH FREQUENCY**

-By Perry Ferrell-

Dx'ers should watch the 8 and 9 meter regions for small transmitters used by the various armies now involved in the present European situation, such as those used in tanks, field units etc...My reports to WQKC (New Rochelle, N.Y. Police), KQCF (Tyler, Texas Police) and WlXKB (Springfield, Mass. 50 watt broadcaster) all verified as "firsts"! (Ray Simpson, N.S.W., Australia)...I.B. Robinson, Chief Engineer of WlXOJ informs us that their xmtr. is now using about 3 kw., but will soon increase to 50kW on 43.00 megs. It broadcasts frequency modulated programs from 8am-12 mid. daily...Aircraft radio beam signal from Mascot, N.S.W., Australia can be heard here with exceptionally strong signal from time to time while signing "SY" on 32.20 mcs (C.Criswell, H.Clein O.Barneson)... W9XYH to 43.00 from 26.3 megs (FCC)... W6XDA has moved to 42.3 from 38.6 mcs. and is operating their regular 3-9pm sked (Barneson)...Seems to be a slight (10kc?) difference in the operating frequencies of W6XKG and W8XNU although both are assigned as 25.95 mcs. Who else notices this? (Clein) ... W4XA has one of the best signals on the eleven meter band according to re ports received from 3 continents and is often heard R9 plus on the W.Coast.

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...W9XPD (25.9) and W2XJI (26.3) both being heard well here with much improved conditions (Hiatt)...NEW: Bamberger Broadcasting Service on 43.20 with lkW...N.B.C. (frequency modulation) on 42.6 mcs. with lkW....W2XQR to 43.2, all three New York City stations.... Have logged Army Signal Corp. stations Ull and TH178 from time to time on 43.6 mcs. (Criswell, Ferrell)... Have letter from Head of signal Corp. cordially refusing to verify reception because they are used in National Defense work (Criswell)...NEW: W9XOK (25.3), Metropolitan Bldg., Grand & Olive, St. Louis, Mo., heard at 7pm (Scholz)...CBS evening programs will be piped regularly into W2XMN at Alpine, N.J. for its "frequency modulation" transmissions (CBS)

TELEVISION: First demonstration of television in color was given by the Baird Corp. at Sydenham, England on Aug. 2. The color photo of King George on a large screen was in full color and perfect definition (Com. Bul)... First football telecasts over WZXBS, namely views of the Fordham Univ. Rams going

through their paces, were reported very successful (NBC).

CUBA NEW: COHI (6.450), 5kW, Santa Clara, was inaugurated on Sept.1.....

COX4 (6.39), Havana, heard testing (Hidalgo, Amers)... A COCE or COCA at Santa Clara, heard relaying CMHE daily 7pm to mid., on 6.47, may be same as COHI above (Balbi)... COCF is on exactly 11.8 now (Balbi)... COCQ now has a second xmtr. on 6.36mcs (Amers, Balbi, Larsen, Schubert); COCH now has a second xmtr., on 6.46mcs (Larsen, Schubert); an unidentified Cuban on 7.77, relaying COCW at times, and COBZ also at times, is being heard irreg. (Larsen)... CUBAN NETWORKS: CADENA CHUSSELLAS (Crusselas Network: Colgate-Palmolive) composed of CMQ (main station), CMJK, CMJA, CMKD, CMKG, is relayed by COCQ and COKG; CADENA AZUL (Blue Network), composed of CMHI (main station), CMCF, and CMKQ, is relayed by COHI and COCH; RADIO CADENA-NACIONAL (National Network) composed of CMK (main station), CMHW, CMGF, CMGF, CMAR, CMKF, CMKR, CMJC and CMJX is relayed by COGF (\*\*Hidalgo-Cuba)

CURACAO PJC1, "Radio Curom", is now back on 5.941 mcs. (RBO)

D.R. HIIS has shifted to 5.926 (RBO)...HIIN (6.243), "La Voz Del Particle Portivisore "Trusiallo City is guarant and control of the composed of CML (Reteated to 5.926)...

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MEXICO S.W. relay for XEBH, is being heard on 10.8 mcs, with same program as XEBR (11.826), the latter being well heard afternoons (Butcher)...XEQQ (now on 6.029), relays XEQ (730 kc), nightly until 12:30 or lam (\*Walcott) PANAMA HP5F is now on an announced frequency of 6.05 (RBO)...HP5F, Colon, QSL's with a gray card, having printing and call in red and blue (Batson) P.R. Special 250w emergency xmtr. to operate on 2.726, set up at Ponce. U.S.A. W92JB has worked all districts on 5 meters (Ferrell)...The Nat. Geographic, University of Virginia Exped. announced in the last G.C. has been called off on account of the war (NBC)...NEW CALLS: W1XAL has been changed to WRUL; W1XAR to WRUW; W2XE to W0BX; W4XB to WDJM, and W9XAA to WCBI..."W2USA Radio Club" of the N.Y. Worlds Fair, sponsors a program on the amateur bands, Fridays at 9:45pm; over W2XJI (25.3) on Fridays at 5pm (Brehmer, Kibling)...REVISED SCHEDULES: See S.W. list for revised schedules for WRUL/WRUW, WLWO, and WGEA/WGEO...KGEI, San Francisco, now operates daily, on 6.19mcs, 12 mid.-3am; on 9.53 mcs.,7am-noon and on 15.33mcs.,6:30-11:15p (GE, Balbi, Meyers, Walcott, Callan)...WCAB, Philadelphia, now operates on 21.52 mcs., daily 8am-5pm, on 9.59mcs., Mon/Thurs/Sat 5:30pm-lam, and Wed.9pm-lam, and on 6.06mcs., Sun.6:30-llpm, Tues/Fri 5:30-llpm and on Wed.5:30-8:30pm... WCBX (W2XE), New York, now operates on 21.57, 7am-ll:30pm, on 15.27, noon-2:30 pm, on 11.83, 3-5pm and 5:30-9pm, on 9.65, 9:30-10:30pm and on 11.83, 2-5p (CBS)... The Mail Bag Program over W2XAF/W2XAD which for 5 years has included S.W. items furnished by the IDA is now off the air for the duration of the war (Darlington)... WLWO is on the air 24-hours daily frequently broadcasting latest war news. You can obtain an elaborate war map free from radio stations WLW/WLWO simply by writing to these stations (WIW).

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and CB150 (Radio Guia)...CB1174 (11.74), "Radio Hucke", Santiago, relays CB93 nightly till 10:30pm; CB970, (9.74), relays CB76 of Santiago, inter-
  mittently from 7am to 11:30pm. Signs-off with "Pomp and Circumstance (AW) COLOMBIA HJAB is on 4.782; HJGB on 4.772; HJDU (4.805), signs-off at 8:50pm with a march (Larsen)...HJCD, Neuva Granada, heard on 9.4mcs. (RBO)
                          Latest move of \underline{\text{HClETC}} is to 8.00 mcs. (RBO)
  ECUADOR
                          OAXIA has shifted to 6.18 mcs. (RBO)
 VENEZUELA New 30kW Govt. xmtr. under construction at Caracas, will operate as follows when completed: YVKF on 6.172; YVSC on 9.64; YVOR on 11.725, and YVPX on 15.315 (DXIEC)...NEW: YV5RJ/G (4.967), heard nightly to 9:30pm.S.O. is military march (Larsen)...YV4RX, La Voz de Aragua, Maracay (4.84), is now on the air and broadcasting nightly to 10pm...YV5RY, "La Voz de la Esfera", is being heard on 4.76 (RBO, Larsen)...See list for other slight corrections
                                                                                    = ÉUROPE ===
                          "Radio Andorra", has been testing on 11.835 mc, since August (**Tuff) Replacing OLR5A; OLR4A (11.84), is now operating 7:55-10:15pm (DC)
 ANDORRA
 BOHEMIA
                          OZH (15.32) now operates Sun. 8am-1:30pm and weekdays 1-1:30pm;
 DENMARK
    OZU (7.26), operates daily 2-5pm; OZF no change in sked (*Pedersen)
NGLAND GSA (6.05), now operates 6:20-9:15pm for Europe (Larsen, Scholz)....
   erating daily 1-3:15am (Balbi)...GSG is beamed on N.A., now 5:45am-4pm (CAM)
   ESTONIA ES4G (14.11), was heard recently R7 from 3 to 4 p.m. (Legge-N.Y.)

The new 100kW xmtr. of "Paris Mondial" is on the air, and operating on 15.243, is beamed on N.A., daily 1:30-2:30pm (news in English at 2pm); oper airs on 9.68 mcs., is beamed on S.A., daily 7-8:45pm (**Wilson, Callan, Skyten, Balbi, Larsen, Christie, Prender-
                         New xmtr. DXB (9.61), broadcasts Latin program nightly 7 to
 GERMANY
   10:50pm. American network pick-ups originate over DXB, DJL (15.11) or DJD (11.77)(*Balbi,Christie,Callan,Pedersen,Wilson)...DXD (21.66),has been test
    ing near llpm (NRC)...DZH (14.46), is on almost nightly after 6 or 7pm (JL).
    ...S.W. listening in Germany is forbidden under maximum sentence of death.
   ... News in English is often heard over <u>DJE</u> (17.76) at 9:15am (CAM) <u>UNGARY</u> HAD (21.68,11.85 or 9.625), will make experimental transmissions again from Oct.24 to Nov.12, and from Jan.24 to Feb.12, 1940 (QRC via Legge)
 ITALY
                        NEW frequencies being used irreg., include: 2RO12 (15.10, after-
noons; 2RO13 (11.9); 2RO14 (15.23), afternoons, 2RO15 (17.76) and 2RO16 (21.51). 2RO9 (9.67), is relaying the American Hour irreg. (Callan)....2RO3 is operating daily 1-2am for the Far East (Balbi)

LIECHTENSTEIN A S.W. xmtr. to transmit commercially sponsored programs to
LIECHTENSTEIN A S.W. xmtr. to transmit commercially sponsored programs to N.A. and Gt.Britain is under consideration (Com.Bul.)

LITHUANIA LYR (9.29),500w,relays Kaunas I (153kC), weekdays 12 mid.-12:40am, 2:30-3pm and Sundays 1:30-2:15,6-7:45am,11:30am-1:15 and 2-3:30pm(Yoshimura LUXEMBOURG "Radio Luxembourg's" schedule for October follows: on 15.35mcs, Oct.1-2-3, 8-9am; 4-5-6,9-10am; 7-8-9,10-11am; on 6.09 mcs., Oct.1-2-3, 4-5 pm; 4-5-6,5-6pm; 7-8-9,6-7pm; on 9.527mcs., Oct.10-11-12,11pm-mid; 13-14-15, mid-lam; 16-17-18,1-2am; 19-20-21, 2-3am; 22-23-24, 7-8pm; 25-26-27, 8-9pm; 28-29-30,9-10pm; 31,Nov.1-2,10-11pm; on 11.782mcs, Oct.10-11,7-8pm; Oct. 12-13-14,8-9pm; 15-16-17,9-10pm; 18-19-20,10-11pm; 21-22-23,11-12; 24-25-26,12-lam; 28-29-30,1-2am; Oct.31-Nov.1-2,2-3am. Reports should be sent to "Radio Luxembourg" Compagnie Luxembourgeoise-de Radiodiffusion.Luxembourg (Skyten
  Luxembourg" Compagnie Luxembourgeoise-de Radiodiffusion, Luxembourg (Skyten RBO, Balbi, Tuff, Froelich)
                        LKV (15.165) can easily be identified when giving news in French
   at 9:15 a.m. EST (*Callan)
  COLAND A new station in <u>Warsaw</u> on 11.99, was heard on Aug.24 and 25, broad casting with loud signals in parallel with <u>SPW</u> (Skyten, Deptula)...All Polish short-wave stations have been off the air since Sept. 5.
ROUMANIA A 300w xmtr. in <u>Bucharest</u> has been transmitting daily from 2 to 5 p.m., since its inauguration last November (Com.Bul.) (Batson
                         The Swedish stations issue letters of verification but no cards.
SWITZERLAND The Govt. may acquire "Radio Nations", at Prangins, to replace the transmitter recently destroyed by fire at Schwarzenburg (R.P.S.)

U.S.S.R. RNE (12) now broadcasts from 7 to 8:50pm in English for N.A., in parallel with RV96, RKI and RAN (*Skyten)...The Soviet station on 15.41 is RV96 Mascow (Koslanoff Christic Schreen)
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RV96, Moscow (Koslapoff, Christie, Skyten).

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  ECUADOR
                          OAXIA has shifted to 6.18 mcs. (RBO)
 VENEZUELA New 30kW Govt. xmtr. under construction at Caracas, will operate as follows when completed: YVKF on 6.172; YVSC on 9.64; YVOR on 11.725, and YVPX on 15.315 (DXIEC)...NEW: YV5RJ/G (4.967), heard nightly to 9:30pm.S.O. is military march (Larsen)...YV4RX, La Voz de Aragua, Maracay (4.84), is now on the air and broadcasting nightly to 10pm...YV5RY, "La Voz de la Esfera", is being heard on 4.76 (RBO, Larsen)...See list for other slight corrections
                                                                                    = ÉUROPE ===
                          "Radio Andorra", has been testing on 11.835 mc, since August (**Tuff) Replacing OLR5A; OLR4A (11.84), is now operating 7:55-10:15pm (DC)
 ANDORRA
 BOHEMIA
                          OZH (15.32) now operates Sun. 8am-1:30pm and weekdays 1-1:30pm;
 DENMARK
    OZU (7.26), operates daily 2-5pm; OZF no change in sked (*Pedersen)
NGLAND GSA (6.05), now operates 6:20-9:15pm for Europe (Larsen, Scholz)....
   erating daily 1-3:15am (Balbi)...GSG is beamed on N.A., now 5:45am-4pm (CAM)
   ESTONIA ES4G (14.11), was heard recently R7 from 3 to 4 p.m. (Legge-N.Y.)

The new 100kW xmtr. of "Paris Mondial" is on the air, and operating on 15.243, is beamed on N.A., daily 1:30-2:30pm (news in English at 2pm); oper airs on 9.68 mcs., is beamed on S.A., daily 7-8:45pm (**Wilson, Callan, Skyten, Balbi, Larsen, Christie, Prender-
                         New xmtr. DXB (9.61), broadcasts Latin program nightly 7 to
 GERMANY
   10:50pm. American network pick-ups originate over DXB, DJL (15.11) or DJD (11.77)(*Balbi,Christie,Callan,Pedersen,Wilson)...DXD (21.66),has been test
    ing near llpm (NRC)...DZH (14.46), is on almost nightly after 6 or 7pm (JL).
    ...S.W. listening in Germany is forbidden under maximum sentence of death.
   ... News in English is often heard over <u>DJE</u> (17.76) at 9:15am (CAM) <u>UNGARY</u> HAD (21.68,11.85 or 9.625), will make experimental transmissions again from Oct.24 to Nov.12, and from Jan.24 to Feb.12, 1940 (QRC via Legge)
 ITALY
                        NEW frequencies being used irreg., include: 2RO12 (15.10, after-
noons; 2RO13 (11.9); 2RO14 (15.23), afternoons, 2RO15 (17.76) and 2RO16 (21.51). 2RO9 (9.67), is relaying the American Hour irreg. (Callan)....2RO3 is operating daily 1-2am for the Far East (Balbi)

LIECHTENSTEIN A S.W. xmtr. to transmit commercially sponsored programs to
LIECHTENSTEIN A S.W. xmtr. to transmit commercially sponsored programs to N.A. and Gt.Britain is under consideration (Com.Bul.)

LITHUANIA LYR (9.29),500w,relays Kaunas I (153kC), weekdays 12 mid.-12:40am, 2:30-3pm and Sundays 1:30-2:15,6-7:45am,11:30am-1:15 and 2-3:30pm(Yoshimura LUXEMBOURG "Radio Luxembourg's" schedule for October follows: on 15.35mcs, Oct.1-2-3, 8-9am; 4-5-6,9-10am; 7-8-9,10-11am; on 6.09 mcs., Oct.1-2-3, 4-5 pm; 4-5-6,5-6pm; 7-8-9,6-7pm; on 9.527mcs., Oct.10-11-12,11pm-mid; 13-14-15, mid-lam; 16-17-18,1-2am; 19-20-21, 2-3am; 22-23-24, 7-8pm; 25-26-27, 8-9pm; 28-29-30,9-10pm; 31,Nov.1-2,10-11pm; on 11.782mcs, Oct.10-11,7-8pm; Oct. 12-13-14,8-9pm; 15-16-17,9-10pm; 18-19-20,10-11pm; 21-22-23,11-12; 24-25-26,12-lam; 28-29-30,1-2am; Oct.31-Nov.1-2,2-3am. Reports should be sent to "Radio Luxembourg" Compagnie Luxembourgeoise-de Radiodiffusion.Luxembourg (Skyten
  Luxembourg" Compagnie Luxembourgeoise-de Radiodiffusion, Luxembourg (Skyten RBO, Balbi, Tuff, Froelich)
                        LKV (15.165) can easily be identified when giving news in French
   at 9:15 a.m. EST (*Callan)
  COLAND A new station in <u>Warsaw</u> on 11.99, was heard on Aug.24 and 25, broad casting with loud signals in parallel with <u>SPW</u> (Skyten, Deptula)...All Polish short-wave stations have been off the air since Sept. 5.
ROUMANIA A 300w xmtr. in <u>Bucharest</u> has been transmitting daily from 2 to 5 p.m., since its inauguration last November (Com.Bul.) (Batson
                         The Swedish stations issue letters of verification but no cards.
SWITZERLAND The Govt. may acquire "Radio Nations", at Prangins, to replace the transmitter recently destroyed by fire at Schwarzenburg (R.P.S.)

U.S.S.R. RNE (12) now broadcasts from 7 to 8:50pm in English for N.A., in parallel with RV96, RKI and RAN (*Skyten)...The Soviet station on 15.41 is RV96 Mascow (Koslanoff Christic Schreen)
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RV96, Moscow (Koslapoff, Christie, Skyten).

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ASIA AND OCEANIA —

AUSTRALIA New Perth station to operate as VLW (6.13); VLW2 (9.56) and VLW3 (11.83), will be on the air in December...VLR3 (11.89), relays BBC program daily llpm-l2:30am. VLR (9.58), operates daily l-9am. (Balbi)...S.W. xmtrs. of the Australian Aerial Medical Services are: VK8SI (1600-5300-8830), Wynd ham; VK8SC (1600-4030-6960), Port Hedland; VK8UB (1600-5360-8750), Kalgoorlie; VK8US (1600-5410-8690), Alice Springs; VK8SK (2020-4130,6690), Broken Hill and VJI (2020-5110-8630), Cloncurry. Reports should be sent to Federal Course? Council of Australian Aerial Medical Services, 434 Collins St., Melbourne, C.1 (Tune In)

BAKER ISL. Yellow and blue QSL card from KF6PUL (10M only), received after

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XGOX/XGOY was bombed on Sept.3, Programs of the Central Broadcasting Administration are now being broadcast over XGX of Yunnan as follows: on 17.8; 9-10:40pm (English news at 9:50pm), for N.A.; on 11.9, 5:30 7:20am (news in English at 6:30am), for N.E.China, 7:20-7:50am for Japan, 8-llam (English news at 9am), for So.China, 11:10-11:30am for U.S.S.R., 2 4:20pm, for China, 4:30-6:20pm-for Europe (\*\*\*\*Ong)...XPSA (7.01), relays English news broadcast by XGX at 9am; Is on daily 5:30-11am and 5-6pm (Ong\*\*)...XMHA, now operates 7pm-llam...A strong new Chinese station on 9.525, location unknown, is being heard daily 5-7am or later (\*\*Callan) FR.INDO-CHINA "Radio Saigon" (6.116) gives news in English at 6am; operates on 11.78 mcs., daily 6:30-6:45am (\*Beyer, Legge, Yoshimura) GUAM KB6OCL (14.17), heard with R5 sigs Sept.7 & 8, at 7am (\*\*Roberts) JAPAN JZK (15.16), now operates 12-1:30,7-9:30am, 2-4pm (JBC) PMN (10.26) now broadcasts regularly to 11:30am (\*Tuff)...A new Batavia station on 4.85, is being heard daily to 8:30am (Roche-So.Africa) casting Administration are now being broadcast over XGX of Yunnan as fol-

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DIAL METERS MEGS. CALL STATION TIME----EASTERN STANDARD 13.85N -21.66 DXDBERLIN, GERMANY Heard testing late evenings 13.87S 21.63 WRCA New York City, N.Y 9am-5pm to Europe 13.910 21.57 WCBX New York City, N.Y. 7-11:30am to Europe 13.92NY 21.55 GST LONDON, ENGLAND Testing 5:45-8:50,9-10:15am. 4 13.93S 21.54 WPIT Pittsburgh, Pa. 6:30-9am. 13.93Y 21.53 GSJ London, England 13M 5:45-8:50,9am-noon 21.52 13.94N WCAB PHILADELPHIA, PA. 8am-5pm to South America 13.96S 21.50 WGEA Schenectady, N.Y. 8-llam to South America 13.97Y 21.47 GSH London, England 5:45-8:50, 9am-noon to Africa 13.99 <u>21.45</u> DJS <u>Berlin,Germany</u> 12:05-7:55am to Asia 15.7719.02 HS6PJ Bangkok, Thai Mondays 8-10am. 16.26 18.45 HBF Fridays 8:45-10:45am 9:30-11am. Geneva, Switzerland 16.81S 17.85 TPB3 Paris, France 16.82 17.845 DJHBerlin,Germany 12:05-7:50,8-9,9-llam. 16.82S 17.84 EIRE Athlone, Ireland 8:30-10; even dates 12:30-4:30p 5:30-6pm; odd days 12:30-2:30pm 16.84 17.82 2R08 Rome, Italy 5-8:45am, 6-7:25pm. 16.85Y 17.81 GSV London, England 5:45-8:50, 9-11:15am. 16.85 17.80 OIH Lahti, Finland 4-9am.16.85N 17.80 XGXYUNNAN, CHINA 9-10:40 pm to Western U.S.A. 5:45-8:50,9am-noon,12:25-4pm to 17.79 17.785 16.86Y GSG London, England 16.87 JZL Tokio, Japan 4:30-5:30,8-9pm. 17.78 17.78 16.87S WNBI New York City, N.Y. 5-10pm to Latin America. 16.87S WRCA New York City, N.Y. 9am-6pm omnidirectionally 16.89 17.77 PHI2 Huizen, Holland Sun.6:40-10:05am; Mon/Th 7:40-9 am; Tues/Wed/Fr/Sat 7:40-8:40am 12:05-7:45,8-llam,4:55-9pm. 17.76 16.898 DJE Berlin,Germany 19.47015.41 RV96 Moscow, U.S.S.R. 8:30-11am,8:55-10:30pm. 36 19.52 15.37 HAS3 Budapest, Hungary Sundays 9-10am. 19.54S 15.35 Luxembourg, Luxembourg Oct.1-9, 8-11am approx. 19.56 15.34 19M DJR Berlin, Germany 4:55-10:50pm to C.A. 19.57S 15.33 WGEA llam-6pm to Europe Schenectady, N.Y. 19.57 15.33 KGEI San Francisco, Calif 6:30-11:15pm. 19.58S 15.32 OZH Skamlebak Denmark 1-1:30pm; Sundays 8am-1:30pm. \* \_19.60Y 15.31 GSP London, England 1:15-4; 4:20-6pm to N.A. 19.60 15.31 YDB Soerabaja, Java 10:30pm-2am and Sat. 7:30pm-2am. 19.61 4:10-4:55,10am-12:06,1:38-2:30, 15.30 2R06 Rome, Italy 19.62 15.29 Buenos Aires, Argentina 7-9am (3-5:30, 7:30-9pm. LRU 15.29 15.28 19.62 1:30-3:30,7:30am-12:30,9:30-VUD3 Delhi, India 19.63S Berlin, Germany DJQ12:05-11am, 4:50-10:50pm. (11:30p 19.64CS 15.27 New York City, N.Y. 12-2:30pm; Sundays 12-1:30pm. WCBX 19.64 15.27 HI3X Trujillo City, D.R. Sun.7:40-9:40am; Tu/Fri 8:10-19.66Y 15.26 GSI 1:30-3:45am, 12:25-4pm. (10:10pm England, England 15.243 TPA2 6-llam; 1:30-2:30pm to N.A. 19.68S Paris, France 15.24 Belgrade, Yugoslavia 7:30-9pm to N.A. 19.68S YUG CR7BD Lourenco Marques, Moz. 4:30-6:30,9:30-llam, noon-4pm 15.24 19.68 19.70N 15.23 2RO14 ROME, ITALY Afternoons irregularly 15.22 Su/M/Th 7:40-9am; M/Tu/We/F/Sat-19.71 PCJ2 Huizen, Holland 7:40-8:45am;Tu 1-2:30am;Wd 9:30 19.72S 15.21 WPIT Pittsburgh,Pa. 9am-2pm. 19.74 15.20 DJB Berlin, Germany 12:05-llam; 4:50-10:50pm to NA 19.74 15.195 TAQ Ankara, Turkey 5:30-7am (Sun II:10am-12:25pm. 19.75 1:05-4, 9am-5pm. 15.19 Lahti, Finland OIE ll:55pm-2a, 3-4am, 7-8:50pm.(NA 4:20-6pm; 6:25-9:30pm to S.A. Moscow, U.S.S.R. London, England 19.76 15.18 RV96 15.18 19.76Y 4:20-6pm; GSO 19.78 15.17 TGWA Guatemala, Guatemala 12:45-1:45pm; Sun.12:45-5:15pm 15.165 6:40am-5pm. 19.78 TKA Oslo, Norway 12-1:30,7-9:30am,2-4;8-9pm (NA) 19.79S JZK 15.16 Tokio, Japan

SHORT WAVE BROADCASTING STATIONS SYMBOLS: N- NEW stations; F- Frequency changes; S- Change in sked; B- Frequency calibrations according to Oxrieder-IDA Frequency Bureau; J-stations persisting in hopping about; V- Varying in frequency; Y- Does not verify; X- Doesn't verify direct; U- Frequency in doubt; \*See S.W. Notes.

DIAL METERS MEGS. CALL STATION TIME----EASTERN STANDARD 13.85N -21.66 DXDBERLIN, GERMANY Heard testing late evenings 13.87S 21.63 WRCA New York City, N.Y 9am-5pm to Europe 13.910 21.57 WCBX New York City, N.Y. 7-11:30am to Europe 13.92NY 21.55 GST LONDON, ENGLAND Testing 5:45-8:50,9-10:15am. 4 13.93S 21.54 WPIT Pittsburgh, Pa. 6:30-9am. 13.93Y 21.53 GSJ London, England 13M 5:45-8:50,9am-noon 21.52 13.94N WCAB PHILADELPHIA, PA. 8am-5pm to South America 13.96S 21.50 WGEA Schenectady, N.Y. 8-llam to South America 13.97Y 21.47 GSH London, England 5:45-8:50, 9am-noon to Africa 13.99 <u>21.45</u> DJS <u>Berlin,Germany</u> 12:05-7:55am to Asia 15.7719.02 HS6PJ Bangkok, Thai Mondays 8-10am. 16.26 18.45 HBF Fridays 8:45-10:45am 9:30-11am. Geneva, Switzerland 16.81S 17.85 TPB3 Paris, France 16.82 17.845 DJHBerlin,Germany 12:05-7:50,8-9,9-llam. 16.82S 17.84 EIRE Athlone, Ireland 8:30-10; even dates 12:30-4:30p 5:30-6pm; odd days 12:30-2:30pm 16.84 17.82 2R08 Rome, Italy 5-8:45am, 6-7:25pm. 16.85Y 17.81 GSV London, England 5:45-8:50, 9-11:15am. 16.85 17.80 OIH Lahti, Finland 4-9am.16.85N 17.80 XGXYUNNAN, CHINA 9-10:40 pm to Western U.S.A. 5:45-8:50,9am-noon,12:25-4pm to 17.79 17.785 16.86Y GSG London, England 16.87 JZL Tokio, Japan 4:30-5:30,8-9pm. 17.78 17.78 16.87S WNBI New York City, N.Y. 5-10pm to Latin America. 16.87S WRCA New York City, N.Y. 9am-6pm omnidirectionally 16.89 17.77 PHI2 Huizen, Holland Sun.6:40-10:05am; Mon/Th 7:40-9 am; Tues/Wed/Fr/Sat 7:40-8:40am 12:05-7:45,8-llam,4:55-9pm. 17.76 16.898 DJE Berlin,Germany 19.47015.41 RV96 Moscow, U.S.S.R. 8:30-11am,8:55-10:30pm. 36 19.52 15.37 HAS3 Budapest, Hungary Sundays 9-10am. 19.54S 15.35 Luxembourg, Luxembourg Oct.1-9, 8-11am approx. 19.56 15.34 19M DJR Berlin, Germany 4:55-10:50pm to C.A. 19.57S 15.33 WGEA llam-6pm to Europe Schenectady, N.Y. 19.57 15.33 KGEI San Francisco, Calif 6:30-11:15pm. 19.58S 15.32 OZH Skamlebak Denmark 1-1:30pm; Sundays 8am-1:30pm. \* \_19.60Y 15.31 GSP London, England 1:15-4; 4:20-6pm to N.A. 19.60 15.31 YDB Soerabaja, Java 10:30pm-2am and Sat. 7:30pm-2am. 19.61 4:10-4:55,10am-12:06,1:38-2:30, 15.30 2R06 Rome, Italy 19.62 15.29 Buenos Aires, Argentina 7-9am (3-5:30, 7:30-9pm. LRU 15.29 15.28 19.62 1:30-3:30,7:30am-12:30,9:30-VUD3 Delhi, India 19.63S Berlin, Germany DJQ12:05-11am, 4:50-10:50pm. (11:30p 19.64CS 15.27 New York City, N.Y. 12-2:30pm; Sundays 12-1:30pm. WCBX 19.64 15.27 HI3X Trujillo City, D.R. Sun.7:40-9:40am; Tu/Fri 8:10-19.66Y 15.26 GSI 1:30-3:45am, 12:25-4pm. (10:10pm England, England 15.243 TPA2 6-llam; 1:30-2:30pm to N.A. 19.68S Paris, France 15.24 Belgrade, Yugoslavia 7:30-9pm to N.A. 19.68S YUG CR7BD Lourenco Marques, Moz. 4:30-6:30,9:30-llam, noon-4pm 15.24 19.68 19.70N 15.23 2RO14 ROME, ITALY Afternoons irregularly 15.22 Su/M/Th 7:40-9am; M/Tu/We/F/Sat-19.71 PCJ2 Huizen, Holland 7:40-8:45am;Tu 1-2:30am;Wd 9:30 19.72S 15.21 WPIT Pittsburgh,Pa. 9am-2pm. 19.74 15.20 DJB Berlin, Germany 12:05-llam; 4:50-10:50pm to NA 19.74 15.195 TAQ Ankara, Turkey 5:30-7am (Sun II:10am-12:25pm. 19.75 1:05-4, 9am-5pm. 15.19 Lahti, Finland OIE ll:55pm-2a, 3-4am, 7-8:50pm.(NA 4:20-6pm; 6:25-9:30pm to S.A. Moscow, U.S.S.R. London, England 19.76 15.18 RV96 15.18 19.76Y 4:20-6pm; GSO 19.78 15.17 TGWA Guatemala, Guatemala 12:45-1:45pm; Sun.12:45-5:15pm 15.165 6:40am-5pm. 19.78 TKA Oslo, Norway 12-1:30,7-9:30am,2-4;8-9pm (NA) 19.79S JZK 15.16 Tokio, Japan

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SBT
  19.80
           15.155
                         Motala, Sweden
                                               1-4:15pm; Wed/Sat 8-9pm to N.A.
           15.15
                  YDC
  19.80
                         Bandoeng, Java
                                               4:30-10:30am; 6-9pm ex.Sat;
                                               10:30pm-2am; Sat. 7pm-2am.
  19.82Y
          15.14
                  GSF
                         London, England
                                               5:45-8:50,9am-noon,4:20-6,6:20-
          15.13
                  TPB6
  19.83S
                         Paris, France
  19.83SC 15.13
                  WRUW
                         Boston, Mass.
                                               3:30-5:30 ex.Sa/Su; M/T/F 5:30-
                                               7pm; 8-9:30pm ex.Sa/Su; Sa 2pm-
  19.84S
          15.12
                  SP19
                         Warsaw, Poland
                                               Not heard recently *
                                                                         (6:30pm.
           15.12
  19.84
                  HVJ
                         Vatican City
  19.84S
          15.12
                  CSW4
                         Lisbon, Portugal
                                               7-9am.
                                                                         (-4:25pm)
                         Berlin, Germany
                                               12:05-2; 8-9am to N.A.; 10:40am 4-5:30,6-7:25,7:30-9pm irreg. *
  19,85
           15.11
                  DJL
  19.87
          15.10
                  2RO12 Rome, Italy
                         Moscow, U.S.S.R.
 19.95S
          15.04
                  RKI
                                               7-8:50pm to N.A.
          14.94
                  PSE
                         Rio de Janeiro, Brazil 6-7pm; Wed.4-4:10pm; Thur 3p
 20.08
                  KQH
 20.11
          14.92
                                               Sat.7:30-8pm; Sun.9-9:30pm. (NA
                         Kahuku, Hawaii
          14.535 HBJ
                                               Wes.6:45-8:15; 8:40-10:15pm to-
 20.64 .
                         Geneva, Switzerland
 20.75
          14.46
                  DZH
                         Berlin Germany
                                               7-10:50pm almost nightly
                                               7-8:15,11:30am-2:30,4:45-10:15p
 20.80
          14.42
                  HClJB Quito, Ecuador
 21.58
          13.90
                  YNDG
                         Leon, Nicaragua
                                               Sat.9:30-10pm or later. (exMon
          13.635 SPW
 22.00S
                         Warsaw, Poland
                                               Not heard recently
 24.03
          12.486 HI1N
                         Trujillo City, D.R.
                                               6:40-10:40am,5:10-10:40pm.
 24.08
                  HCJB
                                               7-8:15,11:30am-2:30,5-10:30pm-
          12.46
                         Quito, Ecuador
                         Reykjavik, Iceland
Moscow, U.S.S.R.
 24.53
          12.235
                  TFJ
                                              Sundays 1:30-2:30pm.
                                                                          (ex.Mon
 25.00S
          12.00
                                               6am-6pm inter, 7-8:50, 9-10pm ir.
                  RNE
                  CB1180 Santiago, Chile
 25.06
          11.97
                                               7-11 pm.
                  HI2X
 25.06
          11.97
                         Trujillo City, D.R.
                                               Tues/Fri 8:10-10:10pm;Sun 7:40-
          11.94
11.91
11.91
 25.13
                  TI2XD San Jose, C.R.
                                              7:30am-noon, 4-10pm.
3:45-4:15,7-9:30am.
                                                                          (9:40am
 25.19
                         Hanoi, F. Indo-China
 25.19S
                  CD1190 Valdivia, Chile
                                               10am-1, 3-10pm.
                                                                                 25M
                                              7:30pm-mid.; Sun.12:30-2pm.
5:30-7:50,8-11,11:10-11:20am,2-
          11.90
 25.21
                  XEWI
                         Mexico D.F., Mexico
 25.21N
          11.90
                  XGX
                         YUNNAN, CHINA
 25.23FS 11.89
                  VLR3
                         Melbourne, Australia 3:30pm-12:30am.
                                                                         *(6:20pm
 25.23S
          11.885
                  TPB11 Paris, France
                                               1:30-2:30;9pm-12:45am to N.A.
 25.23S
          11.885 TPB12 Paris, France
                                               7-8:45pm to S.A.
 25.27S
          11.87
                  WPIT
                         Pittsburgh, Pa.
                                               2-11pm.
 25.27
          11.87
                                              Mon/Wed/Fr 3:30-4am.
                  VUM2
                         Madras, India
 25.30Y
          11.86
                  GSE
                         London, England
                                              Afternoons.
 25.30
          11.855
                                               12:05-2am, 4:50-10:50pm irreg.
                  DJP
                         Berlin, Germany
 25.30S
          11.855 XMHA
                         Shanghai, China
                                               7pm-llam.
          11.85
 25.32
                  CB1185 Santiago, Chile
                                               Sāt.6-11pm.
 25.34S
          11.84
                  OLR4A Prague, Bohemia
                                               7:55-10:15pm to N.A.
 25.36CS 11.83
                                              3-5,5:30-9pm; Sun 2-5,5:30-9pm.
                  WCBX
                         New York City, N.Y.
 25.37
                                               9-11am, 8-10:30pm or later. (ly
          11.826 XEBR
                         Hermosillo, Mexico
 25.38
          11.82
                  XGOK
                         Canton, China
                                               6-8:35am. Has anyone heard late
                         Rome, İtaly
                                               4:30-8:45,10am-3,6-7:30;7:30-9
 25.40
          11.81
                  2R04
 25.42
          11.801 DJZ
                         Vienna, Germany
                                               4:50-10:50 pm.
                                                                      (pm to N,A.
 25.42F
          11.80
                  COGF
                         Matanzas, Cuba
                                               6am-9pm.
 25.42
                  JZJ
                         Tokio, Japan
Boston, Mass.
                                              7-9:30am, 2-4pm.
          11.80
 25.45CS
          11.79
                  WRUL
                                              3:30-5:30pm ex.Sa/Su; Sa.2-6:30p
 25.47S
                         Luxembourg, Luxembourg Oct.10-Nov.2, 7pm-3am, prox.* Saigon, F. Indo-China 12:15-12:45,6:30-6:45,8:30-9:45
          11.782
 25.47S
          11.78
11.78
 25.47
                  HP5G
                         Panama City, Panama Noon-1, 6-10pm.
 25.47
          11.78
                  OFE
                                              1:15am-12:05pm.
                         Lahti, Finland
25.48S
          11.775
                  MTCY
                         Hsinking, Manchoukyo 1:30-2:30am to N.A.; 9:50-11:50
 25.49
          11.77
                         Berlin, Germany
                  DJD
                                              11:30am-4:25pm;4:50-10:50pm (NA)
                                              1:30-3:45,12:25-4;4:20-6,6:20-
 25.53Y
          11.75
                  GSD
                         London, England
                                              9:15,9:40-11:30pm to N.A.
                                              Nightly to 10:30pm.
 25.55S
          11.74
                  CB1174 Santiago, Chile
          11.74
 25.55S
                                              Not heard recently
                  SP25
                         Warsaw, Poland
 25.57V
          11.735
                                              8am-12 mid.
                  COCX
                         Havana, Cuba
 25.57
          11.735
                         Oslo, Norway
                  LKQ
                                              4:30-6:40am; Sun.2:30-6:40am.
 25.58CS
          11.73
                  WRUW
                                              M/T/W/Th 8-9:30,10-11:30pm;Sun-
                         Boston, Mass.
          11.725
 25.59
                  JVW3
                         Tokio, Japan
                                              2-4,4-8am irreg.
                                                                         (2-5:30p)
 25.60
          11.72
                  CJRX
                         Winnipeg, Canada
                                              Sa. 6pm-Sun.4am.
                                                                            (6pm.
 25.60
          11.72 | ZP14
                         Villarica, Paraguay Mon.thr Fri.5-8pm; Sa/Su llam-
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SBT
  19.80
           15.155
                         Motala, Sweden
                                               1-4:15pm; Wed/Sat 8-9pm to N.A.
           15.15
                  YDC
  19.80
                         Bandoeng, Java
                                               4:30-10:30am; 6-9pm ex.Sat;
                                               10:30pm-2am; Sat. 7pm-2am.
  19.82Y
          15.14
                  GSF
                         London, England
                                               5:45-8:50,9am-noon,4:20-6,6:20-
          15.13
                  TPB6
  19.83S
                         Paris, France
  19.83SC 15.13
                  WRUW
                         Boston, Mass.
                                               3:30-5:30 ex.Sa/Su; M/T/F 5:30-
                                               7pm; 8-9:30pm ex.Sa/Su; Sa 2pm-
  19.84S
          15.12
                  SP19
                         Warsaw, Poland
                                               Not heard recently *
                                                                         (6:30pm.
           15.12
  19.84
                  HVJ
                         Vatican City
  19.84S
          15.12
                  CSW4
                         Lisbon, Portugal
                                               7-9am.
                                                                         (-4:25pm)
                         Berlin, Germany
                                               12:05-2; 8-9am to N.A.; 10:40am 4-5:30,6-7:25,7:30-9pm irreg. *
  19,85
           15.11
                  DJL
  19.87
          15.10
                  2RO12 Rome, Italy
                         Moscow, U.S.S.R.
 19.95S
          15.04
                  RKI
                                               7-8:50pm to N.A.
          14.94
                  PSE
                         Rio de Janeiro, Brazil 6-7pm; Wed.4-4:10pm; Thur 3p
 20.08
                  KQH
 20.11
          14.92
                                               Sat.7:30-8pm; Sun.9-9:30pm. (NA
                         Kahuku, Hawaii
          14.535 HBJ
                                               Wes.6:45-8:15; 8:40-10:15pm to-
 20.64 .
                         Geneva, Switzerland
 20.75
          14.46
                  DZH
                         Berlin Germany
                                               7-10:50pm almost nightly
                                               7-8:15,11:30am-2:30,4:45-10:15p
 20.80
          14.42
                  HClJB Quito, Ecuador
 21.58
          13.90
                  YNDG
                         Leon, Nicaragua
                                               Sat.9:30-10pm or later. (exMon
          13.635 SPW
 22.00S
                         Warsaw, Poland
                                               Not heard recently
 24.03
          12.486 HI1N
                         Trujillo City, D.R.
                                               6:40-10:40am,5:10-10:40pm.
 24.08
                  HCJB
                                               7-8:15,11:30am-2:30,5-10:30pm-
          12.46
                         Quito, Ecuador
                         Reykjavik, Iceland
Moscow, U.S.S.R.
 24.53
          12.235
                  TFJ
                                              Sundays 1:30-2:30pm.
                                                                          (ex.Mon
 25.00S
          12.00
                                               6am-6pm inter, 7-8:50, 9-10pm ir.
                  RNE
                  CB1180 Santiago, Chile
 25.06
          11.97
                                               7-11 pm.
                  HI2X
 25.06
          11.97
                         Trujillo City, D.R.
                                               Tues/Fri 8:10-10:10pm;Sun 7:40-
          11.94
11.91
11.91
 25.13
                  TI2XD San Jose, C.R.
                                              7:30am-noon, 4-10pm.
3:45-4:15,7-9:30am.
                                                                          (9:40am
 25.19
                         Hanoi, F. Indo-China
 25.19S
                  CD1190 Valdivia, Chile
                                               10am-1, 3-10pm.
                                                                                 25M
                                              7:30pm-mid.; Sun.12:30-2pm.
5:30-7:50,8-11,11:10-11:20am,2-
          11.90
 25.21
                  XEWI
                         Mexico D.F., Mexico
 25.21N
          11.90
                  XGX
                         YUNNAN, CHINA
 25.23FS 11.89
                  VLR3
                         Melbourne, Australia 3:30pm-12:30am.
                                                                         *(6:20pm
 25.23S
          11.885
                  TPB11 Paris, France
                                               1:30-2:30;9pm-12:45am to N.A.
 25.23S
          11.885 TPB12 Paris, France
                                               7-8:45pm to S.A.
 25.27S
          11.87
                  WPIT
                         Pittsburgh, Pa.
                                               2-11pm.
 25.27
          11.87
                                              Mon/Wed/Fr 3:30-4am.
                  VUM2
                         Madras, India
 25.30Y
          11.86
                  GSE
                         London, England
                                              Afternoons.
 25.30
          11.855
                                               12:05-2am, 4:50-10:50pm irreg.
                  DJP
                         Berlin, Germany
 25.30S
          11.855 XMHA
                         Shanghai, China
                                               7pm-llam.
          11.85
 25.32
                  CB1185 Santiago, Chile
                                               Sāt.6-11pm.
 25.34S
          11.84
                  OLR4A Prague, Bohemia
                                               7:55-10:15pm to N.A.
 25.36CS 11.83
                                              3-5,5:30-9pm; Sun 2-5,5:30-9pm.
                  WCBX
                         New York City, N.Y.
 25.37
                                               9-11am, 8-10:30pm or later. (ly
          11.826 XEBR
                         Hermosillo, Mexico
 25.38
          11.82
                  XGOK
                         Canton, China
                                               6-8:35am. Has anyone heard late
                         Rome, İtaly
                                               4:30-8:45,10am-3,6-7:30;7:30-9
 25.40
          11.81
                  2R04
 25.42
          11.801 DJZ
                         Vienna, Germany
                                               4:50-10:50 pm.
                                                                      (pm to N,A.
 25.42F
          11.80
                  COGF
                         Matanzas, Cuba
                                               6am-9pm.
 25.42
                  JZJ
                         Tokio, Japan
Boston, Mass.
                                              7-9:30am, 2-4pm.
          11.80
 25.45CS
          11.79
                  WRUL
                                              3:30-5:30pm ex.Sa/Su; Sa.2-6:30p
 25.47S
                         Luxembourg, Luxembourg Oct.10-Nov.2, 7pm-3am, prox.* Saigon, F. Indo-China 12:15-12:45,6:30-6:45,8:30-9:45
          11.782
 25.47S
          11.78
11.78
 25.47
                  HP5G
                         Panama City, Panama Noon-1, 6-10pm.
 25.47
          11.78
                  OFE
                                              1:15am-12:05pm.
                         Lahti, Finland
25.48S
          11.775
                  MTCY
                         Hsinking, Manchoukyo 1:30-2:30am to N.A.; 9:50-11:50
 25.49
          11.77
                         Berlin, Germany
                  DJD
                                              11:30am-4:25pm;4:50-10:50pm (NA)
                                              1:30-3:45,12:25-4;4:20-6,6:20-
 25.53Y
          11.75
                  GSD
                         London, England
                                              9:15,9:40-11:30pm to N.A.
                                              Nightly to 10:30pm.
 25.55S
          11.74
                  CB1174 Santiago, Chile
          11.74
 25.55S
                                              Not heard recently
                  SP25
                         Warsaw, Poland
 25.57V
          11.735
                                              8am-12 mid.
                  COCX
                         Havana, Cuba
 25.57
          11.735
                         Oslo, Norway
                  LKQ
                                              4:30-6:40am; Sun.2:30-6:40am.
 25.58CS
          11.73
                  WRUW
                                              M/T/W/Th 8-9:30,10-11:30pm;Sun-
                         Boston, Mass.
          11.725
 25.59
                  JVW3
                         Tokio, Japan
                                              2-4,4-8am irreg.
                                                                         (2-5:30p)
 25.60
          11.72
                  CJRX
                         Winnipeg, Canada
                                              Sa. 6pm-Sun.4am.
                                                                            (6pm.
 25.60
          11.72 | ZP14
                         Villarica, Paraguay Mon.thr Fri.5-8pm; Sa/Su llam-
```

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8
             11.718 CR7BH Lourenco Marques, Moz. 4:30-6:30,9-11am, Noon-4pm, Su
    25.60
                                                   4-7, 10am-2pm.
             11.713 TPA4
    25.61S
                           Paris, France
                                                   7-8:45pm; 9pm-12:45am to NA.
    25.62
             11.71
                           San Sálvador, El Salvador 1-2:30pm.
                    YSM
             11.71
    25.62
                           Saigon, F. Indo-China
                                                   7:30-9:45am.
                                                                   (8-9pm to N.A.
             11.705 SBP
    25.63
                           Motala, Sweden
                                                1-4:15pm; Sun 3am-4:15pm; Wed/Sat
    25.64
             11.70
                    HP5A
                                                7-8:30am,10am-1,5-10pm;Su 6-10p
                           Panama City, Panama
    25.64
             11.70
                    CB1170 Santiago, Chile
                                                10am-2, 3:30-11pm.
                                                                          (2:30pm
    25<u>.74</u>
             11.67
                    IQY
                           Rome, Italy
                                                5:20-5:40am,12:07-12:56,1:50-
    26,01S
             11.535
                    SPD
                           Warsaw, Poland
                                               Not heard recently
    26.32
             11.402 HBO
                           Geneva, Switzerland Mon. 6:45-8:15;8:45-10:15 to NA;
                                                Tu 12:45-2:45pm;1st Su.12:45-
    27.17S
             11.04
                    CSW5
                           Lisbon, Portugal
                                                12-5:30pm;Su llam-5:30p.(2:30am
    27.27
             11.00
                    PLP
                           Bandoeng, Java
Taihoku, Taiwan
                                                4:30-10:30am,6-9,10:30pm-2am.
    28.48
             10.535
                    JIB
                                               Relays JFAK 9-9:55am.
    28.55V
            10.40
                    YSP
                           San Salvador, El Salvador 1-3, 6:30-11pm.
    28.96
29.04
                    EAJ43 Tenerife, Canarias | 3-4,5-7,7:45-8:45,9-10pm.
            10.36
            10.33
                    ORK
                           Ruysseledge, Belgium 1:30-3pm to Belgian Congo (Sun
    29.24S
            10.26
                    PMN
                           Bandoeng, Java
                                              | 4:30-11:30am,6-9,10:30pm-2am ex
    29.35
                           Rio de Janeiro, Brazil 6-7pm; Mon 8-8:30pm to NA; Fr
            10.22
                    PSH
    29.81
            10.065 TIEM
                           San Jose, C.R.
                                               4:30-8pm.
                                                                        (7-7:30pm
    30.03VF 9.99
                    COBC
                           Havana, Cuba
                                               6am-mid.
    30.23
            9.925
                    JDY
                          Darien, Manchoukuo
Madrid, Spain
                                               7-8am.
                                                                     (9:30-10:30
    30.45S
            9.855
                    EAQ
                                               6-8:30pm; Sat 2-4pm; Su 6-8:30.
    30.52
            9.83
                    IRF
                           Rome, Italy
                                               5:20-5:40,12-2:30,6-7:30,7:30-9
    30.57J
            9.815
                    COCM
                           Havana, Cuba
                                               8am-12:30am.
                                                                       (pm to N.A
   30.71
            9.77
                    HH3W
                           Port-au-Prince, Haiti
                                                  1-2, 7-9:15pm.
   30.77
            9.752
                                               11:45pm-12:50,3:30-7:30,9-11:15
am; Sun.5:30-7, 9-11:15am.
                    ZRO
                           Durban, So. Africa
   30.80
            9.74
                    CSW7
                                               6-9pm.
                           Lisbon, Portugal
   30.80
            9.74
                    CB974 Santiago, Chile
                                               7am-11:30pm inter.
   30.93
            9.70
                           Fort-de-France, Martinique 6-8:10 or 9:30pm.
   30.95
            9.695
                    JIE2
                          Tyureki, Taiwan
                                              | 9:05-10:20am.(am,Sun.2:30-4am.
   30.95
                          Tananarive, Madagascar 12:30-12:45,3:30-4:30,10-11-
            9.693
   30.96
                    TI4NRH Heredia, Costa Rica Tu/Th/Sat 9-10pm; Sun.7-8am.
            9.69
   30.96
                          Buenos Aires, Argen. Mon. to Th. 6-9pm; Fri. 4-9pm, Sat
            9.69
                    LRAl
                                               Sun.7-9pm. (am, Sun 5:40-9:40am.
   30.96V
                                              4:40-9:40am; Wed/Sat 12:40-1:40
            9.69
                    ZHP
                          Singapore, S.S.
   30.98
            9.685
                    TGWA
                          Guatemala, Guatemala 10-11:30pm ex.Su; Su 7pm-mid to
   30.98
            9.683
                    HNF
                          Baghdad,Iraq
                                              Heard on West coast 8-9:30a.(MA
   <u>30.99N</u>
            9.68
                    TPB--
                          PARIS, FRANCE
                                               9pm-12:45am to N.A.
   31.01
            9.675
                    DJX
                                               10:40am-4:25pm to Africa.
                          Vienna, Germany
   31.010
            9.675
                          Saigon, F. Indo-China 7:30-9:45am.
   31.02S
            9.67
                    WRCA
                          New York City, N.Y.
                                               6pm-lam.
   31.03
            9.67
                    2R09
                                               12:40-5:30,6-6:30,& 7:30-9pm ir
                          Rome, Italy
   31.06
            9.66
                   LRX
                          Buenos Aires, Argen. 6-6:45am, 9:15am-10pm.
   31.09S
            9.65
                    IABA
                          Addis Abeba, I.E.A.
                                               4:30-5:30am, llam-2:30pm.
   31.09
            9.65
                   WCBX
                          New York City, N.Y.
                                               9:30-10:30pm.
   31.12
            9.64
                    CXA8
                          Colonia, Uruguay
                                               5am-10:45 or llpm; Sat. to lam.
                                               1-2am,12:07-2:55,5:30-7:30,<u>7:30</u>
   31.15
            9.63
                    2R03
                          Rome, Italy
   31.15
            9.63
                    JFO
                          Taihoku, Taiwan
                                               4-10:30am.
                                                                      -9pm to NA
   31.19
            9.625
                    CXA6
                          Montevideo, Uruguay
                                               10:30am-12:30,3:30-9:30pm.
   31.21
            9.615
                   TIPG
                          San Jose, C.R.
                                               7-9:30am,12-2,8-11:30pm.
   31.22
            9.61
                   ZRL
                          Capetown, So. Africa
                                               11:45pm-2:50am ex.Sat;3:30-7:20
                                               9-11:45am;Sun.3:30-11:45am int.
   31.22
                                               7-10:50pm.
            9.61
                   DXB
                          Berlin, Germany
   31.22
            9.61
                   HP5J
                          Panama City, Panama Noon-1:30,6:30-10:30pm.
                                               9-11pm irreg. 6-7,7-8:50pm to NA; 9-10pm.
   31.24
            9.614
                   XEYU
                          Mexico D.F., Mexico
   31.25
            9.60
                                                                               31M
                   RAN
                          Moscow, U.S.S.R.
   31.25
            9.60
                                               8-11:30pm.
                   CB960 Santiago, Chile
   31.27S
            9.595
                          Athlone, Ireland
                   EIRE
                                               Odd dates 2:30-4:30,5:30-6pm
                                               Sun 1:40-3,7:15-9:50pm;Tu 1:45-
   31.28
            9.59
                   PCJ
                          Huizen, Holland
                                               3:30pm,7-10:15pm;Wd 7:15-8:40pm
   31.28
            9.59
                   VK6ME Perth, W. Australia
                                               Weekdays 6-8am.
                                                                      (Fri.8-9pm
   31.28
            9.59
                   VK2ME Sydney, Australia
                                               Sun.12-2,4:30-8:30,10:30am-1230
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8
             11.718 CR7BH Lourenco Marques, Moz. 4:30-6:30,9-11am, Noon-4pm, Su
    25.60
                                                   4-7, 10am-2pm.
             11.713 TPA4
    25.61S
                           Paris, France
                                                   7-8:45pm; 9pm-12:45am to NA.
    25.62
             11.71
                           San Sálvador, El Salvador 1-2:30pm.
                    YSM
             11.71
    25.62
                           Saigon, F. Indo-China
                                                   7:30-9:45am.
                                                                   (8-9pm to N.A.
             11.705 SBP
    25.63
                           Motala, Sweden
                                                1-4:15pm; Sun 3am-4:15pm; Wed/Sat
    25.64
             11.70
                    HP5A
                                                7-8:30am,10am-1,5-10pm;Su 6-10p
                           Panama City, Panama
    25.64
             11.70
                    CB1170 Santiago, Chile
                                                10am-2, 3:30-11pm.
                                                                          (2:30pm
    25<u>.74</u>
             11.67
                    IQY
                           Rome, Italy
                                                5:20-5:40am,12:07-12:56,1:50-
    26,01S
             11.535
                    SPD
                           Warsaw, Poland
                                               Not heard recently
    26.32
             11.402 HBO
                           Geneva, Switzerland Mon. 6:45-8:15;8:45-10:15 to NA;
                                                Tu 12:45-2:45pm;1st Su.12:45-
    27.17S
             11.04
                    CSW5
                           Lisbon, Portugal
                                                12-5:30pm;Su llam-5:30p.(2:30am
    27.27
             11.00
                    PLP
                           Bandoeng, Java
Taihoku, Taiwan
                                                4:30-10:30am,6-9,10:30pm-2am.
    28.48
             10.535
                    JIB
                                               Relays JFAK 9-9:55am.
    28.55V
            10.40
                    YSP
                           San Salvador, El Salvador 1-3, 6:30-11pm.
    28.96
29.04
                    EAJ43 Tenerife, Canarias | 3-4,5-7,7:45-8:45,9-10pm.
            10.36
            10.33
                    ORK
                           Ruysseledge, Belgium 1:30-3pm to Belgian Congo (Sun
    29.24S
            10.26
                    PMN
                           Bandoeng, Java
                                              | 4:30-11:30am,6-9,10:30pm-2am ex
    29.35
                           Rio de Janeiro, Brazil 6-7pm; Mon 8-8:30pm to NA; Fr
            10.22
                    PSH
    29.81
            10.065 TIEM
                           San Jose, C.R.
                                               4:30-8pm.
                                                                        (7-7:30pm
    30.03VF 9.99
                    COBC
                           Havana, Cuba
                                               6am-mid.
    30.23
            9.925
                    JDY
                          Darien, Manchoukuo
Madrid, Spain
                                               7-8am.
                                                                     (9:30-10:30
    30.45S
            9.855
                    EAQ
                                               6-8:30pm; Sat 2-4pm; Su 6-8:30.
    30.52
            9.83
                    IRF
                           Rome, Italy
                                               5:20-5:40,12-2:30,6-7:30,7:30-9
    30.57J
            9.815
                    COCM
                           Havana, Cuba
                                               8am-12:30am.
                                                                       (pm to N.A
   30.71
            9.77
                    HH3W
                           Port-au-Prince, Haiti
                                                  1-2, 7-9:15pm.
   30.77
            9.752
                                               11:45pm-12:50,3:30-7:30,9-11:15
am; Sun.5:30-7, 9-11:15am.
                    ZRO
                           Durban, So. Africa
   30.80
            9.74
                    CSW7
                                               6-9pm.
                           Lisbon, Portugal
   30.80
            9.74
                    CB974 Santiago, Chile
                                               7am-11:30pm inter.
   30.93
            9.70
                           Fort-de-France, Martinique 6-8:10 or 9:30pm.
   30.95
            9.695
                    JIE2
                          Tyureki, Taiwan
                                              | 9:05-10:20am.(am,Sun.2:30-4am.
   30.95
                          Tananarive, Madagascar 12:30-12:45,3:30-4:30,10-11-
            9.693
   30.96
                    TI4NRH Heredia, Costa Rica Tu/Th/Sat 9-10pm; Sun.7-8am.
            9.69
   30.96
                          Buenos Aires, Argen. Mon. to Th. 6-9pm; Fri. 4-9pm, Sat
            9.69
                    LRAl
                                               Sun.7-9pm. (am, Sun 5:40-9:40am.
   30.96V
                                              4:40-9:40am; Wed/Sat 12:40-1:40
            9.69
                    ZHP
                          Singapore, S.S.
   30.98
            9.685
                    TGWA
                          Guatemala, Guatemala 10-11:30pm ex.Su; Su 7pm-mid to
   30.98
            9.683
                    HNF
                          Baghdad,Iraq
                                              Heard on West coast 8-9:30a.(MA
   <u>30.99N</u>
            9.68
                    TPB--
                          PARIS, FRANCE
                                               9pm-12:45am to N.A.
   31.01
            9.675
                    DJX
                                               10:40am-4:25pm to Africa.
                          Vienna, Germany
   31.01V
            9.675
                          Saigon, F. Indo-China 7:30-9:45am.
   31.02S
            9.67
                    WRCA
                          New York City, N.Y.
                                               6pm-lam.
   31.03
            9.67
                    2R09
                                               12:40-5:30,6-6:30,& 7:30-9pm ir
                          Rome, Italy
   31.06
            9.66
                   LRX
                          Buenos Aires, Argen. 6-6:45am, 9:15am-10pm.
   31.09S
            9.65
                    IABA
                          Addis Abeba, I.E.A.
                                               4:30-5:30am, llam-2:30pm.
   31.09
            9.65
                   WCBX
                          New York City, N.Y.
                                               9:30-10:30pm.
   31.12
            9.64
                    CXA8
                          Colonia, Uruguay
                                               5am-10:45 or llpm; Sat. to lam.
                                               1-2am,12:07-2:55,5:30-7:30,<u>7:30</u>
   31.15
            9.63
                    2R03
                          Rome, Italy
   31.15
            9.63
                    JFO
                          Taihoku, Taiwan
                                               4-10:30am.
                                                                      -9pm to NA
   31.19
            9.625
                    CXA6
                          Montevideo, Uruguay
                                               10:30am-12:30,3:30-9:30pm.
   31.21
            9.615
                   TIPG
                          San Jose, C.R.
                                               7-9:30am,12-2,8-11:30pm.
   31.22
            9.61
                   ZRL
                          Capetown, So. Africa
                                               11:45pm-2:50am ex.Sat;3:30-7:20
                                               9-11:45am;Sun.3:30-11:45am int.
   31.22
                                               7-10:50pm.
            9.61
                   DXB
                          Berlin, Germany
   31.22
            9.61
                   HP5J
                          Panama City, Panama Noon-1:30,6:30-10:30pm.
                                               9-11pm irreg. 6-7,7-8:50pm to NA; 9-10pm.
   31.24
            9.614
                   XEYU
                          Mexico D.F., Mexico
   31.25
            9.60
                                                                               31M
                   RAN
                          Moscow, U.S.S.R.
   31.25
            9.60
                                               8-11:30pm.
                   CB960 Santiago, Chile
   31.27S
            9.595
                          Athlone, Ireland
                   EIRE
                                               Odd dates 2:30-4:30,5:30-6pm
                                               Sun 1:40-3,7:15-9:50pm;Tu 1:45-
   31.28
            9.59
                   PCJ
                          Huizen, Holland
                                               3:30pm,7-10:15pm;Wd 7:15-8:40pm
   31.28
            9.59
                   VK6ME Perth, W. Australia
                                               Weekdays 6-8am.
                                                                      (Fri.8-9pm
   31.28
            9.59
                   VK2ME Sydney, Australia
                                               Sun.12-2,4:30-8:30,10:30am-1230
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WCAB
31.28S
         9.59
                                              M/Th/Sa 5:30pm-lam; Wd 9pm-lam.
                        Philadelphia, Pa.
31.28
31.30
         9.59
                 VUD2
                        Delhi, India
                                              1:30-3:30,7am-12:30,9:30-11:30p
         9.585
                 KZHS
                        Manila, Philippines
                                              Daily from 6am on.
31.32Y
         9.58
                 GSC
                        Daventry, England
                                              1:30-4,4:20-6,6:25-9:30pm; 9:40-
                                              11:30pm to N.A.
                 VLR
31.32S
         9.58
                        Melbourne, Australia mid-9am ex.Sun; Sun 12-7:30am.
31.35
         9.57
                 WBOS
                        Boston, Mass.
                                              8am-lam.
31.35
         9.57
                 KZRM
                        Manila, Philippines
                                              Weekdays 4:30-6pm; Mon.to Fri.
                                              5-9am; Sat.5-10am; Sun.4-10am.
                 CXA2
31.35
         9.57
                        Montevideo, Uruguay
                                              5:30-10:30pm.
31.38
         9.556
                 OAX4T Lima, Peru
                                              11:30am-1:30pm.
31.38
         9.56
                 DJA
                                              6:30-10:50pm to C.A.
                        Berlin, Germany
         9.55
                 YDB
                                              4:30-10:30am, 6-9,10:30pm-2am-
ex.Sat; Sat.7pm-2am.
31.40
                        Soerabaja, Java
         9.55
                 VUD2
                        Bombay, India
                                              1:30-3:30,5-6a,9:30-10:30pm.
31.40
                                                                                31M
31.41S
         9.55
                 WGEA
                        Schenectady, N.Y.
                                              6:15-9:15pm
31.41
         9.55
                 XEFT
                        Veracruz, Mexico
                                              7:30pm-midnight.
         9.54
                                              12:05-2:30am,4:50-10:50pm.
31.45
                 DJN
                        Zeesen, Germany
         9.538
                 VPD2
31.46
                        Suva, Fiji's
                                              5:30-7am ex.Sundays.
         9.535
                 SBU
                        Motala, Sweden
                                              4:15-5:05pm.
31.47
         9.535
31.47
                 JZI
                        Tokio, Japan
                                              4:30-5:30pm.
31.48S
         9.53
                 KGEI
                        San Francisco, Calif.
                                                7am-noon.
                        Schenectady, N.Y.
31.48S
         9.53
                 WGEO
                                              3-6pm to Europe, 6pm-mid.toS.A
         9.528
                 VUC2
                                              2-4am, 10pm-2am.
31.48
                        Calcutta, India
                 Luxembourg, Luxembourg, Oct.10-Nov.2, 8pm-2am int.*
ZBW3 Hong King, Hong Kong 5-10am, 11:30pm-1:15am; Sun 5-
OQ2AA Leopoldville, Bel.Congo. 5:25-7am (9:30am; Sa 9pm on SP31 Warsaw, Poland Not heard recently *
         9.527
31.48S
         9.525
31.50
31.50
         9.525
31.50S
         9.525
31.50
         9.523
                 ZRG
                        Pretoria, So. Africa
                                              5-7am; Sundays 5:30-7am.
                                              8-9:30, 9:30-llpm.
1-3, 4-7pm & irreg.
         9.52
                 OZF
31.51
                        Skamlebak, Denmark
31.51
         9.52
                 RV96
                        Moscow, U.S.S.R.
                        Guadalajara, Mexico Noon-4:30, 7pm-mid.
31.52
         9.517
                 XEDQ
                                              1:30-3:45am,6:20-9:15;9:40pm-
31.55Y
         9.51
                 GSB
                        London,England
                                              7-10am ex.Mon.(11:30pm to N.A.
31.55
         9.51
                 HS8PJ Bangkok, Thai
31.57N
         9.505
                 YUC
                        BELGRADE, YUGOSLAVIA Daily to 5:30pm.
31.57
         9.503
                 XEWW
                        Mexico D.F., Mexico 7:45am-12:30am.
31.58
                        Rio de Janeiro, Brazil 4:45-5:55pm ex. Sundays.
         9.501
                 PRF5
31.58
         9.50
                        Lahti, Finland
                                              12:15-5pm.
                 OFD
31.58
         9.50
                 VK3ME Melbourne, Australia 4-7am except Sundays.
         9.492
31.60VS
                 KZIB
                        Manila, P.I.
                                              8:30pm-2:40am, 6-10am.
31.70
         9.465
                 TAP
                        Ankara, Turkey
                                              11:30am-5pm.
         9.445
                                              8:15-10:15pm ex.Sundays.
31.77
                 HCODA Guayaquil, Ecuador
31.787
         9.44
                                              8am-11pm; Sun.8am-10pm.
                 COCH
                        Havana, Cuba
                 OAX5C Ica, Peru
31.95
         9.39
                                              7-11:30pm.
         9.34
32.12
                 OAX4J Lima, Peru
                                              Noon-3 and 5pm-mid.
32.28
         9.295
                 XTC
                                              8-9am in Chinese
                        Shanghai, China.
                                                                          (4:40pm
32.28
         9.295
                 HI2G
                                              6:4008:40,11:40am-2:10,3:40-
                        Trujillo City, D.R.
                        Kaunas, Lithuania
32.29S
         9.29
                 LYR
                                              12-12:40am,2:30-3pm; Su.1:30-
                                              2:15-6-7:45am,11:30-1:15,2-3:30
32.54N
         9.23
                        Bucharest, Roumania
                                              2-5pm.
                                                                              (pm
         9.205
32.56
                 COBX
                        Havana, Cuba
                                              8am-11:30pm.
         9.20
                        Sofia, Bulgaria
32.61
                                              Near 1:45am and Sun.at 8:15am.
32.64
         9.19
                 HC2ET Guayaquil, Ecuador
                                              8-10pm; Sun 8:30-10:30pm.
                                              Mon/Wed/Sat 9-9:55pm.
32.72
         9.17
                 HClGQ Quito, Ecuador
                                              7-8pm; Sat.6-7pm.
32.88
         9.125
                 HAT4
                        Budapest, Hungary
                                              llam-1, 7-llpm.
Noon-1:15am; till 3am irreg.
         9.12
32.89
                 HC2CW Guayaquil, Ecuador
33.00V
         9.09
                 COCA
                        Havana, Cuba
                 COBZ
                        Havana,Cuba
33.26V
         9.02
                                              7:45am-1:15am.
33.48
         8.96
                                              5-6, 9:30-10:30pm.
                 COKG
                        Santiago, Cuba
         8.96
                 TPZ2
33.48
                        Algiers, Algeria
                                              Tuesdays 12:30-1:30pm.
                                              5:55am-12 mid.
33.94J
         8.84
                 COCQ
                        Havana, Cuba
34.50
         8.695
                 COCO
                                              7:55am-12 mid,
                        Havana, Cuba
34.68J
         8.65
                                              11:30am-12:30,3:30-6,8-8:30pm.
                 COJK
                        Camaguey, Cuba
34.97
         8.58
                        Managua, Nicaragua
                                              12:45-2:15,6:45-10;15pm.
                 YNPR
                 HClETC Quito, Ecuador
                                              Saturdays 8-11pm.
37.50F
         8.00
```

```
WCAB
31.28S
         9.59
                                              M/Th/Sa 5:30pm-lam; Wd 9pm-lam.
                        Philadelphia, Pa.
31.28
31.30
         9.59
                 VUD2
                        Delhi, India
                                              1:30-3:30,7am-12:30,9:30-11:30p
         9.585
                 KZHS
                        Manila, Philippines
                                              Daily from 6am on.
31.32Y
         9.58
                 GSC
                        Daventry, England
                                              1:30-4,4:20-6,6:25-9:30pm; 9:40-
                                              11:30pm to N.A.
                 VLR
31.32S
         9.58
                        Melbourne, Australia mid-9am ex.Sun; Sun 12-7:30am.
31.35
         9.57
                 WBOS
                        Boston, Mass.
                                              8am-lam.
31.35
         9.57
                 KZRM
                        Manila, Philippines
                                              Weekdays 4:30-6pm; Mon.to Fri.
                                              5-9am; Sat.5-10am; Sun.4-10am.
                 CXA2
31.35
         9.57
                        Montevideo, Uruguay
                                              5:30-10:30pm.
31.38
         9.556
                 OAX4T Lima, Peru
                                              11:30am-1:30pm.
31.38
         9.56
                 DJA
                                              6:30-10:50pm to C.A.
                        Berlin, Germany
         9.55
                 YDB
                                              4:30-10:30am, 6-9,10:30pm-2am-
ex.Sat; Sat.7pm-2am.
31.40
                        Soerabaja, Java
         9.55
                 VUD2
                        Bombay, India
                                              1:30-3:30,5-6a,9:30-10:30pm.
31.40
                                                                                31M
31.41S
         9.55
                 WGEA
                        Schenectady, N.Y.
                                              6:15-9:15pm
31.41
         9.55
                 XEFT
                        Veracruz, Mexico
                                              7:30pm-midnight.
         9.54
                                              12:05-2:30am,4:50-10:50pm.
31.45
                 DJN
                        Zeesen, Germany
         9.538
                 VPD2
31.46
                        Suva, Fiji's
                                              5:30-7am ex.Sundays.
         9.535
                 SBU
                        Motala, Sweden
                                              4:15-5:05pm.
31.47
         9.535
31.47
                 JZI
                        Tokio, Japan
                                              4:30-5:30pm.
31.48S
         9.53
                 KGEI
                        San Francisco, Calif.
                                                7am-noon.
                        Schenectady, N.Y.
31.48S
         9.53
                 WGEO
                                              3-6pm to Europe, 6pm-mid.toS.A
         9.528
                 VUC2
                                              2-4am, 10pm-2am.
31.48
                        Calcutta, India
                 Luxembourg, Luxembourg, Oct.10-Nov.2, 8pm-2am int.*
ZBW3 Hong King, Hong Kong 5-10am, 11:30pm-1:15am; Sun 5-
OQ2AA Leopoldville, Bel.Congo. 5:25-7am (9:30am; Sa 9pm on SP31 Warsaw, Poland Not heard recently *
         9.527
31.48S
         9.525
31.50
31.50
         9.525
31.50S
         9.525
31.50
         9.523
                 ZRG
                        Pretoria, So. Africa
                                              5-7am; Sundays 5:30-7am.
                                              8-9:30, 9:30-llpm.
1-3, 4-7pm & irreg.
         9.52
                 OZF
31.51
                        Skamlebak, Denmark
31.51
         9.52
                 RV96
                        Moscow, U.S.S.R.
                        Guadalajara, Mexico Noon-4:30, 7pm-mid.
31.52
         9.517
                 XEDQ
                                              1:30-3:45am,6:20-9:15;9:40pm-
31.55Y
         9.51
                 GSB
                        London,England
                                              7-10am ex.Mon.(11:30pm to N.A.
31.55
         9.51
                 HS8PJ Bangkok, Thai
31.57N
         9.505
                 YUC
                        BELGRADE, YUGOSLAVIA Daily to 5:30pm.
31.57
         9.503
                 XEWW
                        Mexico D.F., Mexico 7:45am-12:30am.
31.58
                        Rio de Janeiro, Brazil 4:45-5:55pm ex. Sundays.
         9.501
                 PRF5
31.58
         9.50
                        Lahti, Finland
                                              12:15-5pm.
                 OFD
31.58
         9.50
                 VK3ME Melbourne, Australia 4-7am except Sundays.
         9.492
31.60VS
                 KZIB
                        Manila, P.I.
                                              8:30pm-2:40am, 6-10am.
31.70
         9.465
                 TAP
                        Ankara, Turkey
                                              11:30am-5pm.
         9.445
                                              8:15-10:15pm ex.Sundays.
31.77
                 HCODA Guayaquil, Ecuador
31.787
         9.44
                                              8am-11pm; Sun.8am-10pm.
                 COCH
                        Havana, Cuba
                 OAX5C Ica, Peru
31.95
         9.39
                                              7-11:30pm.
         9.34
32.12
                 OAX4J Lima, Peru
                                              Noon-3 and 5pm-mid.
32.28
         9.295
                 XTC
                                              8-9am in Chinese
                        Shanghai, China.
                                                                          (4:40pm
32.28
         9.295
                 HI2G
                                              6:4008:40,11:40am-2:10,3:40-
                        Trujillo City, D.R.
                        Kaunas, Lithuania
32.29S
         9.29
                 LYR
                                              12-12:40am,2:30-3pm; Su.1:30-
                                              2:15-6-7:45am,11:30-1:15,2-3:30
32.54N
         9.23
                        Bucharest, Roumania
                                              2-5pm.
                                                                              (pm
         9.205
32.56
                 COBX
                        Havana, Cuba
                                              8am-11:30pm.
         9.20
                        Sofia, Bulgaria
32.61
                                              Near 1:45am and Sun.at 8:15am.
32.64
         9.19
                 HC2ET Guayaquil, Ecuador
                                              8-10pm; Sun 8:30-10:30pm.
                                              Mon/Wed/Sat 9-9:55pm.
32.72
         9.17
                 HClGQ Quito, Ecuador
                                              7-8pm; Sat.6-7pm.
32.88
         9.125
                 HAT4
                        Budapest, Hungary
                                              llam-1, 7-llpm.
Noon-1:15am; till 3am irreg.
         9.12
32.89
                 HC2CW Guayaquil, Ecuador
33.00V
         9.09
                 COCA
                        Havana, Cuba
                 COBZ
                        Havana,Cuba
33.26V
         9.02
                                              7:45am-1:15am.
33.48
         8.96
                                              5-6, 9:30-10:30pm.
                 COKG
                        Santiago, Cuba
         8.96
                 TPZ2
33.48
                        Algiers, Algeria
                                              Tuesdays 12:30-1:30pm.
                                              5:55am-12 mid.
33.94J
         8.84
                 COCQ
                        Havana, Cuba
34.50
         8.695
                 COCO
                                              7:55am-12 mid,
                        Havana, Cuba
34.68J
         8.65
                                              11:30am-12:30,3:30-6,8-8:30pm.
                 COJK
                        Camaguey, Cuba
34.97
         8.58
                        Managua, Nicaragua
                                              12:45-2:15,6:45-10;15pm.
                 YNPR
                 HClETC Quito, Ecuador
                                              Saturdays 8-11pm.
37.50F
         8.00
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10
                            San Salvador, El Salvador 7-10:30pm.
    38.00
             7.894
                     YSD
    38.12
             7.87
                     HClRB Quito, Ecuador
                                                 8:30-11:30pm.
    38.22
             7.85
                     ZAA
                            Tirana, Albania
                                                 6:30-8:30am.
             7.854
                     HC2JSB Guayaquil, Ecuador llam-2, 4-llpm.
    38.20
    38.46
             7.80
                     COBS
                            Havana, Cuba
                                                 Evenings.
    _39.16
             7.66
                     YNDG
                            Leon, Nicaragua
                                                 8:30-9:30pm ex.Sundays.
    39.89
             7.614
                     CR6AA Lobito, Angola
                                                 Mon/Wed/Sat 2:30-4:30pm.
    39.89
             7.52
                     KKH
                            Kahuku, Hawaii
                                                 Sun.9-9:30pm, Sat.7:30-8pm.
    40.05
             7.49
                     EAJ43 Tenerife, Canarias
                                                 7-7:45; 8-9:30pm irreg.
    40.27
             7.45
                     TI2RS San Jose, C.R.
                                                 7-11pm.
    40.32
             7.44
7.38
                     FG8AH Pointe-a-Pitre, Guadeloupe, 6-7:10pm.
    40.65
                     XECR Mexico D.F., Mexico Sundays 6-7pm.
    41.01
             7.31
                            Port Moresby, Papua Oct. 14/28, 3-5am.
                     VIG
             7.295
    41.13
                            Tyureki, Taiwan
                                                 9:05-10:20am.
             7.284
    41.19
                     YNlIP Managua, Nicaragua
                                                 Sundays 10-llam.
    41.21S
             7.28
                     TPBll Paris, France
                                                 11:15am-1:45,2-6:15pm.
    41.32S
             7.26
                     CSW8
                           Lisbon, Portugal
                                                 Tues/Thurs/Sat 5:05-6pm.
             7.26
    41.32N
                     OZU
                                                 2-5pm.
                           SKAMLEBAK, DENMARK
    41.38
             7.25
                     YDA
                           Bandoeng, Java
LONDON, ENGLAND
                                                 10:30pm-2am; Sat.7:30pm-2am.
    41.49N
             7.23
                     GSW
                                                 6am-12:45pm.
    41.55S
             7.22
                     YDX
                           Medan, Sumatra
                                                 6-10:30am; 10:30pm-2am.
             7.18
    41.78
                     EA9AI Mellila, Span. Morocco Sat. 9-10pm.
    42.25
             7.10
                     FOSAA Papeete, Tahiti
                                                 Sat.12:01-3:30am.
    42.80S
             7.01
                     XPSA
                           Kweiyang, China
Hankow, China
                                                 5:30-llam, 5-6pm.
    43.80V
             6.85
                     XOJD
                                                 6-8:35am.
    44.12
             6.80
                     PZH
                           Paramaribo, D. Guiana Mon/Wed/Fri 5:41-8:41pm.
    44.25
             6.78
                     HIH
                           San Pedro, D.R.
                                               7-9:40pm; Sun.5:20-6:40pm.
   44.38
             6.76
                     HI7P
                           Trujillo City, D.R. 7:10-8:40pm; Sun. 9:40-10:40pm.
   44.38
             6.76
                     YNRF
                           Managua, Nicaragua
                                                 6:45-10:15 or 11pm.
   44.58
             6.73
                    HI3C
                           La Romana, D.R.
                                                 To 8:20pm.
   44.64
             6.72
                    PMH
                           Bandoeng, Java
                                                 4:30-llam; Sun.8:30pm-1:30am.
                           San Jose, C.R. | Trujillo City, D.R.
   44.81
             6.695
                    TIEP
                                                 7pm-midnight.
   45.06
            6.66
                    HI5G
                                                To 8:40pm.
   45.22
            6.635
                    HC2RL Guayaquil, Ecuador
                                                Sun.5:45-7:45 & Tues.9:15-11:15
   45.25
            6.63
                    HIT
                           Trujillo City, D.R.
                                                12:10-1:40,4:40-8:40pm.
                                                                                (pm
   45.29
            6.625
                    PRADO Riobama, Ecuador
                                                Thursdays 9-11pm.
   45.39V
            6.61
                    YNLG
                           Managua, Nicaragua
                                                1:30-2:30,6-10:15pm.
   45.70
            6.565
                    HI5P
                           Puerto Plata, D.R.
                                                 5:40-7:40,9:40-11:40am.
   45.80
            6.55
                                                Tu/Th/Sat 6-7pm; Sun.8-10pm.
                    TIRCC San Jose, C.R.
                    YN1GG Managua, Nicaragua 1-2:30,8-10pm ex. Sundays.

HIL Trujillo City, D.R. 12:30-2,6-8 or 9pm ex. Sundays.

TGWB Guatemala, Guatemala 7:45-9,12:45-3:45,7:30pm-12:15
   45.87
            6.54
   46.15
            6.50
   46.25
            6.486
                                               am; Sun.10:30am-5:15, 7pm-mid.
   46.26
            6.485
                    HILL
                           Santiago, d.l.c., DR Weekdays 5:30-9:30pm.
                    COCH
   46.44N
            6.46
                           HAVANA, CUBA
                                              1 Relays COCH evenings.
   46.44
            6.455
                           S.F.de Macoris, D.R. 5:10-7:40pm; to 10pm irreg.
                    HI4V
   46.51N
            6.45
                    COHI
                           SANTA CLARA, CUBA
                                                7pm-mid.
                           Quezaltenango, Guatemala 8-11pm; Sat.8pm-lam, Sun.
   46.88
            6.40
                    TGQA
   46.97V
            6.388
                    HI9B
                                              5-8:45pm.
                           Santiago, D.R.
                                                                      (7:30am-3pm.
                           Basseterre, St. Kitts 4-4:45pm; Wed. 7-7:30pm.
   46.99
            6.384
                    ZIZ
   47.02
            6.38
                    TIWS
                           Puntarenas, C.R.
                                                5-7, 7:30-10pm; Sun.5-6pm.
                                                                                 49M
   47.17N
            6.36
                    COCQ
                           HAVANA, CUBA
                                                7pm-mid.
                           San Pedro Sula, Honduras 6-7:30am, 2-4; irreg.to 10
   47.20
            6.357
                    HRPl
   47.32
                          Trujillo City, D.R. 8:10-10:10pm; Sun. 7:40-9:40am.
            6.34
                    HILX
   47.39
            6.33
                    COCW
                           Havana, Cuba
                                                6:55am-lam; Sun.9:55am-10pm.
                           Trujillo City, D.R. 11:40am-12:40pm; 5:10-7:40pm ex.
   47.51
            6,315
                    HILZ
   47.66
            6.295
                    OAX4G Lima, Peru
                                               6 or 7pm to mid.
                                                                           (Sun.
   47.69V
            6.29
                          Trujillo City, D.R. 6:40-8:40, 11:40am-2:10, 3:40-
                    HIlG
   47.96
            6.255
                    CP12
                                                7-9 \,\mathrm{pm}.
                          La Paz, Bolivia
                                                                         (9:40pm.
                          Trujillo City, D.R. 5:10-10:40pm or later.
   48.05
            6.243
                    HIJN
   48.11
            6.235
                          La Ceiba, Honduras | 8-11pm; Sun. 4-6pm.
                    HRD
   48.23FJ
            6.22
                    HI6H
                          Trujillo City, D.R. 5-8:50pm.
   48.27
            6.215
                          Saigon, F. Indo-China 7:30-9:45am, 11:45pm-lam.
   48.39
            6.20
                    CP5
                          La Paz, Bolivia
                                             6:30-11:30pm.
                          Guatemala, Guatemala 7:30-10am, 6-11:30pm, Sat 6pm-3
  48.43
            6.195
                    TG2
```

```
10
                            San Salvador, El Salvador 7-10:30pm.
    38.00
             7.894
                     YSD
    38.12
             7.87
                     HClRB Quito, Ecuador
                                                 8:30-11:30pm.
    38.22
             7.85
                     ZAA
                            Tirana, Albania
                                                 6:30-8:30am.
             7.854
                     HC2JSB Guayaquil, Ecuador llam-2, 4-llpm.
    38.20
    38.46
             7.80
                     COBS
                            Havana, Cuba
                                                 Evenings.
    _39.16
             7.66
                     YNDG
                            Leon, Nicaragua
                                                 8:30-9:30pm ex.Sundays.
    39.89
             7.614
                     CR6AA Lobito, Angola
                                                 Mon/Wed/Sat 2:30-4:30pm.
    39.89
             7.52
                     KKH
                            Kahuku, Hawaii
                                                 Sun.9-9:30pm, Sat.7:30-8pm.
    40.05
             7.49
                     EAJ43 Tenerife, Canarias
                                                 7-7:45; 8-9:30pm irreg.
    40.27
             7.45
                     TI2RS San Jose, C.R.
                                                 7-11pm.
    40.32
             7.44
7.38
                     FG8AH Pointe-a-Pitre, Guadeloupe, 6-7:10pm.
    40.65
                     XECR Mexico D.F., Mexico Sundays 6-7pm.
    41.01
             7.31
                            Port Moresby, Papua Oct. 14/28, 3-5am.
                     VIG
             7.295
    41.13
                            Tyureki, Taiwan
                                                 9:05-10:20am.
             7.284
    41.19
                     YNlIP Managua, Nicaragua
                                                 Sundays 10-llam.
    41.21S
             7.28
                     TPBll Paris, France
                                                 11:15am-1:45,2-6:15pm.
    41.32S
             7.26
                     CSW8
                           Lisbon, Portugal
                                                 Tues/Thurs/Sat 5:05-6pm.
             7.26
    41.32N
                     OZU
                                                 2-5pm.
                           SKAMLEBAK, DENMARK
    41.38
             7.25
                     YDA
                           Bandoeng, Java
LONDON, ENGLAND
                                                 10:30pm-2am; Sat.7:30pm-2am.
    41.49N
             7.23
                     GSW
                                                 6am-12:45pm.
    41.55S
             7.22
                     YDX
                           Medan, Sumatra
                                                 6-10:30am; 10:30pm-2am.
             7.18
    41.78
                     EA9AI Mellila, Span. Morocco Sat. 9-10pm.
    42.25
             7.10
                     FOSAA Papeete, Tahiti
                                                 Sat.12:01-3:30am.
    42.80S
             7.01
                     XPSA
                           Kweiyang, China
Hankow, China
                                                 5:30-llam, 5-6pm.
    43.80V
             6.85
                     XOJD
                                                 6-8:35am.
    44.12
             6.80
                     PZH
                           Paramaribo, D. Guiana Mon/Wed/Fri 5:41-8:41pm.
    44.25
             6.78
                     HIH
                           San Pedro, D.R.
                                               7-9:40pm; Sun.5:20-6:40pm.
   44.38
             6.76
                     HI7P
                           Trujillo City, D.R. 7:10-8:40pm; Sun. 9:40-10:40pm.
   44.38
             6.76
                     YNRF
                           Managua, Nicaragua
                                                 6:45-10:15 or 11pm.
   44.58
             6.73
                    HI3C
                           La Romana, D.R.
                                                 To 8:20pm.
   44.64
             6.72
                    PMH
                           Bandoeng, Java
                                                 4:30-llam; Sun.8:30pm-1:30am.
                           San Jose, C.R. | Trujillo City, D.R.
   44.81
             6.695
                    TIEP
                                                 7pm-midnight.
   45.06
            6.66
                    HI5G
                                                To 8:40pm.
   45.22
            6.635
                    HC2RL Guayaquil, Ecuador
                                                Sun.5:45-7:45 & Tues.9:15-11:15
   45.25
            6.63
                    HIT
                           Trujillo City, D.R.
                                                12:10-1:40,4:40-8:40pm.
                                                                                (pm
   45.29
            6.625
                    PRADO Riobama, Ecuador
                                                Thursdays 9-11pm.
   45.39V
            6.61
                    YNLG
                           Managua, Nicaragua
                                                1:30-2:30,6-10:15pm.
   45.70
            6.565
                    HI5P
                           Puerto Plata, D.R.
                                                 5:40-7:40,9:40-11:40am.
   45.80
            6.55
                                                Tu/Th/Sat 6-7pm; Sun.8-10pm.
                    TIRCC San Jose, C.R.
                    YN1GG Managua, Nicaragua 1-2:30,8-10pm ex. Sundays.

HIL Trujillo City, D.R. 12:30-2,6-8 or 9pm ex. Sundays.

TGWB Guatemala, Guatemala 7:45-9,12:45-3:45,7:30pm-12:15
   45.87
            6.54
   46.15
            6.50
   46.25
            6.486
                                               am; Sun.10:30am-5:15, 7pm-mid.
   46.26
            6.485
                    HILL
                           Santiago, d.l.c., DR Weekdays 5:30-9:30pm.
                    COCH
   46.44N
            6.46
                           HAVANA, CUBA
                                              1 Relays COCH evenings.
   46.44
            6.455
                           S.F.de Macoris, D.R. 5:10-7:40pm; to 10pm irreg.
                    HI4V
   46.51N
            6.45
                    COHI
                           SANTA CLARA, CUBA
                                                7pm-mid.
                           Quezaltenango, Guatemala 8-11pm; Sat.8pm-lam, Sun.
   46.88
            6.40
                    TGQA
   46.97V
            6.388
                    HI9B
                                              5-8:45pm.
                           Santiago, D.R.
                                                                      (7:30am-3pm.
                           Basseterre, St. Kitts 4-4:45pm; Wed. 7-7:30pm.
   46.99
            6.384
                    ZIZ
   47.02
            6.38
                    TIWS
                           Puntarenas, C.R.
                                                5-7, 7:30-10pm; Sun.5-6pm.
                                                                                 49M
   47.17N
            6.36
                    COCQ
                           HAVANA, CUBA
                                                7pm-mid.
                           San Pedro Sula, Honduras 6-7:30am, 2-4; irreg.to 10
   47.20
            6.357
                    HRPl
   47.32
                          Trujillo City, D.R. 8:10-10:10pm; Sun. 7:40-9:40am.
            6.34
                    HILX
   47.39
            6.33
                    COCW
                           Havana, Cuba
                                                6:55am-lam; Sun.9:55am-10pm.
                           Trujillo City, D.R. 11:40am-12:40pm; 5:10-7:40pm ex.
   47.51
            6,315
                    HILZ
   47.66
            6.295
                    OAX4G Lima, Peru
                                               6 or 7pm to mid.
                                                                           (Sun.
   47.69V
            6.29
                          Trujillo City, D.R. 6:40-8:40, 11:40am-2:10, 3:40-
                    HIlG
   47.96
            6.255
                    CP12
                                                7-9 \,\mathrm{pm}.
                          La Paz, Bolivia
                                                                         (9:40pm.
                          Trujillo City, D.R. 5:10-10:40pm or later.
   48.05
            6.243
                    HIJN
   48.11
            6.235
                          La Ceiba, Honduras | 8-11pm; Sun. 4-6pm.
                    HRD
   48.23FJ
            6.22
                    HI6H
                          Trujillo City, D.R. 5-8:50pm.
   48.27
            6.215
                          Saigon, F. Indo-China 7:30-9:45am, 11:45pm-lam.
   48.39
            6.20
                    CP5
                          La Paz, Bolivia
                                             6:30-11:30pm.
                          Guatemala, Guatemala 7:30-10am, 6-11:30pm, Sat 6pm-3
  48.43
            6.195
                    TG2
```

				<b>–</b> 111
				am, Su 3-8p. For IDA Sun. 2-2:30am
48.43	6.195		Trujillo City, D.R.	5:10-7:10pm.
48.47N	6.19	KGEI	San Francisco, Cal.	12 mid3am to Alaska.
48.47	6.19	HILA LRA2	Santiago, D.R.	10:40am-1:40,6:40-9:40pm. 5:30-9pm ex.Sun; Sat/Sun 7-9pm.
48.51 _48.54FJ	6.185		Chiclayo, Peru	8-11pm.
48.58	6.175	XEXA	Mexico D.F., Mexico	8-llam,2:30-4,7:30pm-12:45am;
48.66	6.165	TILS	San Jose, C.R.	Noon-2:30pm,6-11pm.
48.78	6.15			9:30am-lpm, 5-11:30pm.
48.81	6.147	ZTD	Durban, So. Africa	11:20am-3:45pm; Sun.11:30-3:20p
48.81	6.147 6.14	CJRO WPIT	Winnipeg, Canada Pittsburgh, Pa.	Sat.6pm-Sun.4am.
48.86S 48.86	6.14		Manila, Philippines	
48.86	6.14			ongo Sundays 5:35-7am.
48.86S	6.14	SP48	Warsaw, Poland	Not heard recently.
48.88	6.138		Havana, Cuba	10am-11pm; Sun.10am-9pm.(12-11p
48.93	6.132	CHNX	Halifax, N.S., Canada	a 7am-11:15pm; Sat 8am-11pm; Sun
48.94 48.94	6.13 6.13	VP3BG LKJ		a 10:15-11:15am,3:45-7:45pm ex. Noon-6pm irreg. (Sun
48.94	6.13	KZRM	Manila, Philippines	6-9am.
48.98	6.125	MTCY	Hsinking, Manchouku	o 4-9am. *
49.00S	6.122	FK8AA	Noumea, New Caledon	ia 2:30-3:30am ex.Sun. *
49.00V	6.122	HP5H		6-10:30pm; to mid. irreg.
49.00S	6.12	WCBX	New York City, N.Y.	
49.04 49.05	6.117 6.116	XEUZ	Mexico D.F., Mexico	a 6-6:30am,6:45-7:15am,11:45pm-
49.18VS		AUK		a 12:43-3,6:30-8:30am,12-5:30,-
49.18S	6.10	WNBI	New York City, N.Y.	10pm-lam to S.A. (7:30-9pm)
49.18S	6.10	KZRH	Manila, Philippines	Testing from 5 to 10am.
49.18	6.10	ZHJ	Penang, S.S.	6:40-8:40am ex.Sun & irreg.
49.20	6.097	ZRK	Capetown, So. Africa	12-4pm; Sun.12-3:20pm.
49.20S	6.097 6.09	ZRJ ZNS	Nassau, Bahamas	. 11:45pm-12 noon inter ex.Sat. 1:30-2,6:20-10pm.
49.25 45.25S	6.09	TIND	Luxembourg.Luxembourg	urg Oct.1-9, 4-7pm approx.
49.25	6.09	XEBF	Jalapa, Mexico	Irreg. in evenings.
49.30	6.085	ZAA	Tirana, Albania	12:20-6pm.
49.32	6.083		Nairobi, Kenya	5:30-6,11:15am-2:15pm;Tu/Th 815
49.34	6.08	CRY9	Macao, Macao	Mon.8:30-10am. (-9:15am)
49.34 49.37	6.08 6.077	CKFX	Vancouver, Canada Lima, Peru	l-3am ex.Mondays. 7am-1:30am.
49.42	6.07	OFRX	Toron to, Canada	7am-12:30am; Sun.10am-11pm.
49.46	6.065	SBO	Motala, Sweden	4:15-5pm. (-4am)
49.48	6.063		Tananarive, Madagas	car 12:30-12:45,10-11am,Sun 230-
49.50S	6.06	WCAB	Philadelphia,Pa.	Su.6:30-llpm; Tu/Fr 5:30-llpm;
40.50	0.00	TRIT TRIC	dinainmati Obio	Wed.5:30-8:30pm. Su.8am-6:30pm; M.Th 5:40-2am,
49.50	6.06	MTMO	Cincinnati, Ohio	Tu/Wed/Fri 5:45-5:30pm;Sa 5:45a
49.54	6.056	9MI	M/V Kanimbla	6:45-7:30am irreg. (-2am)
49.56Y	6.05	GSA	London, England	6:20-9:15pm for Europe.
49.56J	6.05	HP5F	Colon, Panama	7-9pm. *
49.63	6.045	XETW	Tampico, Mexico	7-11pm.
49.67S	6.04	WRUL	Boston, Mass.	6:30-7pm ex.Sat/Sun; 10-11:30pm
49.67S	6.04	KZIB	Manila, Philippines	ex.Sat/Sun.; Su.2-5:30p 6-10am. *
49.67C	6.04	WDJM	Miami, Florida	1-3, 9pm-2am; Sun.4-6pm.
49.73	6.033	HP5B	Panama City, Panama	10:30am-2, 6-10pm.
49.75	6.03	CFVP	Calgary, Alta., Cana	da 10am-2am.
49.75	6.03	RV96	Moscow, U.S.S.R.	1-3, 4-7pm.
49.76F	6.029	XEQQ	Mexico D.F., Mexico	6-llpm. *
49.81 49.83	6.023 6.02	DJC	Veracruz, Mexico Berlin, Germany	10pm-lam.   11:30am-4:25pm to Africa.
49.83	6.02	CR.7AA	Lourenco Marques.M	lozam. 12-lam ex.Sun.
49.88F	6.015	PRA8	Pernambuco, Brazil	4-9pm.
49.92	6.01	CJCX	Sydney, Nova Scoti	a7am-1:30,4-8:30pm. (pm.)
49.94	6.007	XYZ	Rangoon, Burma	6:30-10am,9-11pm;Sat 9:30-11:30
	-	<del>-</del>	-	<del>-</del>

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am, Su 3-8p. For IDA Sun. 2-2:30am
                       Trujillo City, D.R. 5:10-7:10pm.
         6.195
                HI2D
48.43
         6.19
                                             12 mid.-3am to Alaska.
                KGEI
                       San Francisco, Cal.
48.47N
48.47
         6.19
                ALIH
                                             10:40am-1:40,6:40-9:40pm.
                       Santiago, D.R.
                       Buenos Aires, Argen 5:30-9pm ex.Sun; Sat/Sun 7-9pm.
         6.185
                LRA2
48.51
        6.18
                OAXIA Chiclayo, Peru
                                             8-11pm.
48.54FJ
                       Mexico D.F., Mexico 8-llam, 2:30-4, 7:30pm-12:45am;
48.58
         6.175
                XEXA
                                           | Noon-2:30pm,6-11pm.
         6.165
                TILS
                       San Jose, C.R.
48.66
                HJ4DAE Medellin, Colombia 9:30am-lpm, 5-11:30pm.
48.78
         6.15
                                             11:20am-3:45pm; Sun.11:30-3:20p
                       Durban, So. Africa
         6.147
                 ZTD
48.81
48.81
         6.147
                CJRO
                       Winnipeg, Canada
                                             Sat.6pm-Sun.4am.
                WPIT
48.86S
         6.14
                       Pittsburgh, Pa.
                                             llpm-lam.
                       Manila, Philippines 5-10am.
48.86
         6.14
                KZEG
                 OQ2AA Leopoldville, Bel. Congo Sundays 5:35-7am.
         6.14
48.86
48.86S
         6.14
                SP48
                       Warsaw, Poland
                                             Not heard recently.
         6.138
                COCD
                       Havana, Cuba
                                            10am-11pm; Sun.10am-9pm.(12-11p
48.88
                CHNX Halifax, N.S., Canada 7am-11:15pm; Sat 8am-11pm; Sun VP3BG Georgetown, B. Guiana 10:15-11:15am, 3:45-7:45pm ex.
         6.132
48.93
48.94
         6.13
48.94
         6.13
                 LKJ
                                             Noon-6pm irreg.
                       Jeloy, Norway
48.94
         6.13
                KZRM
                       Manila, Philippines 6-9am.
                       Hsinking, Manchoukuo 4-9am.
         6.125
                MTCY
48.98
                FK8AA Noumea, New Caledonia 2:30-3:30am ex.Sun.
         6.122
49.00S
                       Panama City, Panama 6-10:30pm; to mid. irreg. New York City, N.Y. llpm-lam.
         6.122
                HP5H
49.00V
         6.12
                WCBX
49.00S
                       Mexico D.F., Mexico 9am-1, 7pm-2am.
                                                                       (12:15am)
49.04
         6.117
                 XEUZ
                       Saigon, F. Indo-China 6-6:30am, 6:45-7:15am, 11:45pm-
         6.116
49.05
                       Belgrade, Yugoslavia 12:43-3,6:30-8:30am, 12-5:30, -
49.18VS 6.10
                 YUA
                       New York City, N.Y., 10pm-lam to S.A. (Manila, Philippines Testing from 5 to 10am.
         6.10
                WNBI
49.18S
         6.10
                 KZRH
49.18S
                                             6:40-8:40am ex.Sun & irreg.
49.18
         6.10
                       Penang, S.S.
                 ZHJ
                       Capetown, So. Africa 12-4pm; Sun. 12-3:20pm.
         6.097
                 ZRK
49.20
                       Johannesburg, S. Afr. 11:45pm-12 noon inter ex. Sat. Nassau, Bahamas 1:30-2,6:20-10pm.
                 ZRJ
         6.097
49.20S
         6.09
                 ZNS
49.25
                       Luxembourg, Luxembourg Oct.1-9, 4-7pm approx.
         6.09
45.25S
                                             Irreg. in evenings.
         6.09
                 XEBF
                       Jalapa, Mexico
49.25
                                             12:20-6pm.
                       Tirana, Albania
49.30
         6.085
                 ZAA
                                             5:30-6,11:15am-2:15pm;Tu/Th 815
49.32
         6.083
                 VQ7LO Nairobi, Kenya
                                             Mon.8:30-10am.
                                                                       (-9:15am
49.34
         6.08
                 CRY9
                       Macao, Macao
                                             1-3am ex.Mondays.
         6.08
                 CKFX
                        Vancouver, Canada
49.34
         6.077
                 OAX4Z Lima, Peru
                                             7am-1:30am.
49.37
         6.07
                        Toron to, Canada
                                             7am-12:30am; Sun.10am-11pm.
                 OFRX
49.42
                       Motala, Sweden
                                             4:15-5pm.
         6.065
                 SBO
49.46
                        Tananarive, Madagascar 12:30-12:45,10-11am, Sun 230-
49.48
         6.063
                                             Su.6:30-llpm; Tu/Fr 5:30-llpm;
49.50S
         6.06
                 WCAB
                       Philadelphia, Pa.
                                             Wed.5:30-8:30pm.
                                             Su. 8am-6:30pm; M.Th 5:40-2am,
         6.06
                 MTMO
                        Cincinnati, Ohio
49.50
                                             Tu/Wed/Fri 5:45-5:30pm;Sa 5:45a
                                             6:45-7:30am irreg.
                                                                           (-2am
         6.056
                       M/V Kanimbla
49.54
                 9MI
                                             6:20-9:15pm for Europe.
49.56Y
         6.05
                 GSA
                        London, England
                                             7-9 pm.
49.56J
         6.05
                 HP5F
                        Colon, Panama
                                             7-llpm.
49.63
         6.045
                 XETW
                        Tampico, Mexico
                                             6:30-7pm ex.Sat/Sun; 10-11:30pm
49.67S
         6.04
                 WRUL
                        Boston, Mass.
                                             ex.Sat/Sun.; Su.2-5:30p
49.67S
                                             6-10am.
         6.04
                 KZIB
                        Manila, Philippines
                                             1-3, 9pm-2am; Sun.4-6pm.
                        Miami,Florida
49.67C
         6.04
                 WDJM
                        Panama City, Panamal 10:30am-2, 6-10pm.
49.73
         6.033
                 HP5B
                        Calgary, Alta., Canada 10am-2am.
49.75
         6.03
                 CFVP
49.75
         6.03
                 RV96
                        Moscow,U.S.S.R.
                                             1-3, 4-7pm.
49.76F
         6.029
                 XEQQ
                        Mexico D.F., Mexico 6-11pm.
                                             10pm-lam.
49.81
         6.023
                 XEUW
                        Veracruz, Mexico
         6.02
                 DJC
                        Berlin, Germany
                                            11:30am-4:25pm to Africa.
49.83
                 CR7AA Lourenco Marques, Mozam. 12-lam ex.Sun.
49.83
         6.02
         6.015
                        Pernambuco, Brazil | 4-9pm.
                 PRA8
49.88F
                        Sydney, Nova Scotia7am-1:30,4-8:30pm.
49.92
         6.01
                 CJCX
                                                                             (pm.
                                             6:30-10am,9-11pm;Sat 9:30-11:30
49.94
         6.007
                 XYZ
                        Rangoon, Burma
```

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12
    49.94
                             Pretoria, S. Africa | 11:45-12:45am ex. Sat, 9:30am-4pm
              6.007 ZRH
                                                    Sun.9:40am-noon,12:15-3:15pm.
                      \mathtt{CFCX}
    49.94V
              6.005
                             Montreal, Canada
                                                    7:45am-lam; Sun.9am-11:15pm.
    50.00V
              6.000
                      HP5K
                             Colon, Panama 7-9am, 12-1, 6-11pm.

Mexico D.F., Mexico 10am-1:45am.

Port-au-Prince, Haiti 6:30-9 or 10pm.
                             Colon, Panama
              6.000
    50.00
                      XEBT
    50.11
              5.987
                      HH2S
    50.17
              5.98
                      VONG
                             St. John's, Newfoundland 8:30am-12:30,1:30-9:30pm.
    50.21
              5.975
                      OAX4P Huancayo, Peru
                                                    9-11pm.
    50.50F
              5.941
                      PJCl
                             Curacao, D.W. I.
                                                   6:36-8:36pm; Su.10:36am-12:36pm
    50.51
              5.94
                      TG2X
                             Guatemala, Guatemala Mon/Thurs 9-11:30pm; Sa.10pm-
    50.51
              5.94
                                                   Tues/Wed/Sat/Sun 7-10pm.
                      OAX2A Trujillo, Peru
                                                                                    (mid
    50.63FJ
             5.926
                      HILS
                             Santiago, D.R.
                                                   5:40-7:35pm ex.Sundays.
    50.74
              5.913
                      HILJ
                             San Pedro, D.R.
                                                   11:40am-1:40,6:10-8:30pm.
    50.85
              5.90
                      ZNB
                             Mafeking, Bechuanaland, 1-2:30pm; 6-7am ex.Sun.
    51.07
              5.875
                      HRN
                             Tegucgalpa, Honduras 6-11pm.
    51.24F
              5.855
                      TGXl
                             Guatemala, Guatemala Nightly to approx. lam
    51.46
              5.83
                      TIGPH San Jose, C.R.
                                                   7-10pm.
    51.46
51.50
              5.83
                      TIXGP3 San Jose, C.R.
                                                   10-11pm.
              5.82
                      TIGPH2 San Jose, C.R.
                                                  Noon-2, 7-11pm ex.Sundays.
                             Tegucigalpa, Honduras Nightly to 11pm.
Managua, Nicaragua | 8-9:30pm; Sundays 2-3pm.
    51.77
              5.795
                      HRK
    52.12J
             5.755
                      YNOP
              5.725
    52.40
                      HClPM Quito, Ecuador
                                                   Sundays 9-11pm.
    55.97J
              5.36
                      HCK
                             Quito, Ecuador
                                                   Evenings irreg.
    56.60
             5.30
                             Belize, Brit. Honduras Tu/Th/Sa 1:30-2,8:30-9pm.
                      ZIK3
    58.31
59.58V
                     PMY Bandoeng, Java 5:30am-noon,
YN5RN Caracas, Venezuela 4-11:30pm; Sun 8:30-11:30am, 3:30
             5.14
             5.035
                     YV4RQ Puerto Cabello, Venez. Broadcasting nightly (-11pm. YV5RM Caracas, Venezuela 3:30-10pm; Sun. 8am-10:30pm. YV3RX Barquisimeto, Venez. 10am-11pm. YV1RJ Coro, Venezuela Signs-off at 9:35pm.
    59.76
             5.02
    59.88
             5.01
    60.12
             4.99
                     YVlRJ Coro, Venezuela
VUD2 Delhi, India
    60.31
             4.975
    60.48
             4.96
                                                   7:30am-12:30pm.
    60.48
                     YV5RS Caracas, Venezuela
             4.96
                                                   4:30-9:30pm or later.
    60.57V
             4.953
                     YV4RO Valencia, Venezuela Noon-1, 6-10pm.
    60.73
             4.94
                     YV5RO Caracas, Venezuela
                                                   Signs-off at 10pm.
    60.85
             4.93
                     YV4RP Valencia, Venezuela 5-9:30pm.
    60.92
             4.924
                     HJAP
                            Cartagena, Colombia 9am-1:30,7-10:15pm Sundays.
    60.98
             4.92
                     YV5RU Caracas, Venezuela
                                                   5-9:30pm; Sun. to 10:30pm.
    60.98
             4.92
                     VUM2
                            Madras, India
                                                   6:30am-noon.
    61.04
             4.915
                     HJFC
                             Pereira, Colombia
    61.10
             4.91
                     YVlRY Coro, Venezuela
                                                   6:30-9:30pm ex.Sundays.
    61.16
             4.905
                            Barranquilla, Colom.llam-llpm; Sun.llam-8pm.
                     HJAG
                     YV6RT Bolivar, Venezuela | Signs-off at 9:30pm.
    61.22
             4.90
    61.29
             4.895
                     HJCH
                            Bogota, Colombia
                                                   11:30am-2, 6-11pm.
                                                                                     62M
   61.35V
             4.89
                     YV1RX Maracaibo, Venez.
                                                   10:30am-1:30,4:30-10:30pm.
   61.42
             4.885
                     HJDP
                            Medellin, Colombia 8am-2, 6-11pm.
   61.48
             4.88
                     YV6RU Ciudad Bolivar, Venezuela
   61.48
             4.88
                     VUB2
                            Bombay, India
                                                   7:30am-12:30pm.
   61.54
             4.875
                     HJFH
                            Armenia, Colombia
                                                 8-11am, 6-10pm.
   61.60
             4.87
                     YV2RN San Cristobal, Venez. 11:30am-12:30pm, 6-9pm ex.Sun
   61.67
             4.865
                     HJBJ
                            Santa Marta, Colom. 5:30-10:30pm.
   61.73
             4.86
                     YVIRL Maracaibo, Venez.
                                                   llam-lpm, 4:30-10:30pm.
   61.80
             4.855
                     HJCF
                            Bogota, Colombia
                                                   7pm-mid. ex.Sundays.
   61.88
             4.85
                     YVlRZ Valera, Venezuela
                                                   11:30am-1, 5:45-8:45pm.
   61.98
             4.84
                     VUC2
                            Calcutta, India
                                                   6:30am-noon
                                                  Nightly to 10pm.
7am-6, 7-11pm.
6:30-7:30,10:30am-1,3:30-10pm.
   61.98F
             4.84
                     YV4RX Maracay, Venezuela
   62.05
             4.835
                     HJAE
                            Cartagena, Colombia
   62.11
             4.83
                     YV5RH Caracas, Venezuela
   62.17
             4.825
                     HJED
                                                  7-llpm ex.Sundays.
                            Cali, Colombia
   62.24
             4.82
                     YV3RN Barquisimeto, Venez. 11:30am-1:30,5:30-9:30pm.
   62.31
             4.815
                     HJBB
                            Cucuta, Colombia
   62.38
                     YVIRU Maracaibo, Venezuela 10:45am-12:45,4:30-10:30pm.
             4.81
   62.44
             4.805
                     HJDU
                            Medellin, Colombia 7-8:50pm.
   62.53V
             4.798
                     YVIRV Maracaibo, Venezuela 10:45am-12:45,4:30-10:30pm.
   62.57
             4.795
                     HJFI
                            Ibague, Colombia.
   62.63
             4.79
                     YV5RY Caracas, Venezuela.
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12
    49.94
                             Pretoria, S. Africa | 11:45-12:45am ex. Sat, 9:30am-4pm
              6.007 ZRH
                                                    Sun.9:40am-noon,12:15-3:15pm.
                      \mathtt{CFCX}
    49.94V
              6.005
                             Montreal, Canada
                                                    7:45am-lam; Sun.9am-11:15pm.
    50.00V
              6.000
                      HP5K
                             Colon, Panama 7-9am, 12-1, 6-11pm.

Mexico D.F., Mexico 10am-1:45am.

Port-au-Prince, Haiti 6:30-9 or 10pm.
                             Colon, Panama
              6.000
    50.00
                      XEBT
    50.11
              5.987
                      HH2S
    50.17
              5.98
                      VONG
                             St. John's, Newfoundland 8:30am-12:30,1:30-9:30pm.
    50.21
              5.975
                      OAX4P Huancayo, Peru
                                                    9-11pm.
    50.50F
              5.941
                      PJCl
                             Curacao, D.W. I.
                                                   6:36-8:36pm; Su.10:36am-12:36pm
    50.51
              5.94
                      TG2X
                             Guatemala, Guatemala Mon/Thurs 9-11:30pm; Sa.10pm-
    50.51
              5.94
                                                   Tues/Wed/Sat/Sun 7-10pm.
                      OAX2A Trujillo, Peru
                                                                                    (mid
    50.63FJ
             5.926
                      HILS
                             Santiago, D.R.
                                                   5:40-7:35pm ex.Sundays.
    50.74
              5.913
                      HILJ
                             San Pedro, D.R.
                                                   11:40am-1:40,6:10-8:30pm.
    50.85
              5.90
                      ZNB
                             Mafeking, Bechuanaland, 1-2:30pm; 6-7am ex.Sun.
    51.07
              5.875
                      HRN
                             Tegucgalpa, Honduras 6-11pm.
    51.24F
              5.855
                      TGXl
                             Guatemala, Guatemala Nightly to approx. lam
    51.46
              5.83
                      TIGPH San Jose, C.R.
                                                   7-10pm.
    51.46
51.50
              5.83
                      TIXGP3 San Jose, C.R.
                                                   10-11pm.
              5.82
                      TIGPH2 San Jose, C.R.
                                                  Noon-2, 7-11pm ex.Sundays.
                             Tegucigalpa, Honduras Nightly to 11pm.
Managua, Nicaragua | 8-9:30pm; Sundays 2-3pm.
    51.77
              5.795
                      HRK
    52.12J
             5.755
                      YNOP
              5.725
    52.40
                      HClPM Quito, Ecuador
                                                   Sundays 9-11pm.
    55.97J
              5.36
                      HCK
                             Quito, Ecuador
                                                   Evenings irreg.
    56.60
             5.30
                             Belize, Brit. Honduras Tu/Th/Sa 1:30-2,8:30-9pm.
                      ZIK3
    58.31
59.58V
                     PMY Bandoeng, Java 5:30am-noon,
YN5RN Caracas, Venezuela 4-11:30pm; Sun 8:30-11:30am, 3:30
             5.14
             5.035
                     YV4RQ Puerto Cabello, Venez. Broadcasting nightly (-11pm. YV5RM Caracas, Venezuela 3:30-10pm; Sun. 8am-10:30pm. YV3RX Barquisimeto, Venez. 10am-11pm. YV1RJ Coro, Venezuela Signs-off at 9:35pm.
    59.76
             5.02
    59.88
             5.01
    60.12
             4.99
                     YVlRJ Coro, Venezuela
VUD2 Delhi, India
    60.31
             4.975
    60.48
             4.96
                                                   7:30am-12:30pm.
    60.48
                     YV5RS Caracas, Venezuela
             4.96
                                                   4:30-9:30pm or later.
    60.57V
             4.953
                     YV4RO Valencia, Venezuela Noon-1, 6-10pm.
    60.73
             4.94
                     YV5RO Caracas, Venezuela
                                                   Signs-off at 10pm.
    60.85
             4.93
                     YV4RP Valencia, Venezuela 5-9:30pm.
    60.92
             4.924
                     HJAP
                            Cartagena, Colombia 9am-1:30,7-10:15pm Sundays.
    60.98
             4.92
                     YV5RU Caracas, Venezuela
                                                   5-9:30pm; Sun. to 10:30pm.
    60.98
             4.92
                     VUM2
                            Madras, India
                                                   6:30am-noon.
    61.04
             4.915
                     HJFC
                             Pereira, Colombia
    61.10
             4.91
                     YVlRY Coro, Venezuela
                                                   6:30-9:30pm ex.Sundays.
    61.16
             4.905
                            Barranquilla, Colom.llam-llpm; Sun.llam-8pm.
                     HJAG
                     YV6RT Bolivar, Venezuela | Signs-off at 9:30pm.
    61.22
             4.90
    61.29
             4.895
                     HJCH
                            Bogota, Colombia
                                                   11:30am-2, 6-11pm.
                                                                                     62M
   61.35V
             4.89
                     YV1RX Maracaibo, Venez.
                                                   10:30am-1:30,4:30-10:30pm.
   61.42
             4.885
                     HJDP
                            Medellin, Colombia 8am-2, 6-11pm.
   61.48
             4.88
                     YV6RU Ciudad Bolivar, Venezuela
   61.48
             4.88
                     VUB2
                            Bombay, India
                                                   7:30am-12:30pm.
   61.54
             4.875
                     HJFH
                            Armenia, Colombia
                                                 8-11am, 6-10pm.
   61.60
             4.87
                     YV2RN San Cristobal, Venez. 11:30am-12:30pm, 6-9pm ex.Sun
   61.67
             4.865
                     HJBJ
                            Santa Marta, Colom. 5:30-10:30pm.
   61.73
             4.86
                     YVIRL Maracaibo, Venez.
                                                   llam-lpm, 4:30-10:30pm.
   61.80
             4.855
                     HJCF
                            Bogota, Colombia
                                                   7pm-mid. ex.Sundays.
   61.88
             4.85
                     YVlRZ Valera, Venezuela
                                                   11:30am-1, 5:45-8:45pm.
   61.98
             4.84
                     VUC2
                            Calcutta, India
                                                   6:30am-noon
                                                  Nightly to 10pm.
7am-6, 7-11pm.
6:30-7:30,10:30am-1,3:30-10pm.
   61.98F
             4.84
                     YV4RX Maracay, Venezuela
   62.05
             4.835
                     HJAE
                            Cartagena, Colombia
   62.11
             4.83
                     YV5RH Caracas, Venezuela
   62.17
             4.825
                     HJED
                                                  7-llpm ex.Sundays.
                            Cali, Colombia
   62.24
             4.82
                     YV3RN Barquisimeto, Venez. 11:30am-1:30,5:30-9:30pm.
   62.31
             4.815
                     HJBB
                            Cucuta, Colombia
   62.38
                     YVIRU Maracaibo, Venezuela 10:45am-12:45,4:30-10:30pm.
             4.81
   62.44
             4.805
                     HJDU
                            Medellin, Colombia 7-8:50pm.
   62.53V
             4.798
                     YVIRV Maracaibo, Venezuela 10:45am-12:45,4:30-10:30pm.
   62.57
             4.795
                     HJFI
                            Ibague, Colombia.
   62.63
             4.79
                     YV5RY Caracas, Venezuela.
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## **BROADCAST STATION NEWS**

AUSTRALIA 6TZ (1340),500w, Dardanup, sister station of 6PR, Perth, W.A., should be testing shortly (Wignall). (Callan)

BAHAMAS ZNS (790),200m, Nassau, is considering a shift to a new frequency-CBK (540), 50kW, Watrous, Sask., went on air July 29...NEW: CKLN <u>Canada</u> 100w, Nelson, B.C. (Callan) (1420)CMHX (1480), off the air...NETWORKS: CADENA CRUSSELAS (Crusselas Network: Colgate-Palmolive) is composed of CMQ, COCQ (8.85), CMJK, CMJA, CMKG, and COKG (8.96); CADENA AZUL (Blue Network) is composed of CMHI (830), CMKG, CMG) (6.45), CMCF and COCH (9.436); RADIO-CADENA-NACTONAL (Radio-Habana-C (1460), CMKR (1400), CMJC (1390), and CMJX (640) (Enrique Hidalgo-Havana) RADIO-CADENA-NACIONAL (Radio-Habana-Cuba) NEW: a 5kW station at Hyderabad, operating on 730kC, and a \*\* kW station at Aurangabad, operating on 940kC (Com. Bul.) XENT expects to have its new transmitter on the air this month. NEWFOUNDLAND VOMA (655), Battle Harbor, operated by Marconi Co., comes on air daily exc. Sun. at 3pm EST, with mouth organ selections, gives days news and signs-off at 3:10pm. Uses low power (RADEX-Callan) With the political existence of this country seriously threatened and radio the only means of communication the following list of stations in operation (as of Sept.18) should be of value: WARSAW I (224),120kW; WAR SAW II (1384),7kW; BARANOWICZE (520), 50kW; CRACOW (1022), 10kW; KATOWICE (758),50kW; LWOW (795), 50kW; LODZ (1339), 10kW; POZNAN (868),16kW; TORUN (986),24kW; WILNO (536),50kW; LUCK,50kW (Under construction) (Com.Bul.)

SO.AFRICA NEW STATION ATTENDED (1380), relaying Johannesburg. NEW STATIONS AUTHORIZED SINCE JAN.1, 1939. WMOB, Mobile, Ala., 1200kC, 100w day WGBR, Goldsboro, N.C., 1370kC.100W WINN, Louisville, Ky, 1210kC, 100w KWBD, Plainview, Tex., 1200kC, 100w day. KWFC, Hot Springs, Ark., 1310kC, 100w. WFSX, Salem, Mass., 1200kC, 100w. WFIG, Sumter, S.C., 1310kC, 100/250w. WISE, Asheville, N.C., 1370kC, 100w WBAB, Atlantic City, N.J., 1200kC, 100w WTMC, Ocala, Fla., 1500kC, 100w WHUB, Cookeville, Tenn., 1370kC, 100/250 WJPF, Herrin, Ill. 1310kC, 100/250w. KDRO, Sedalia, Mo., 1500kC, 100w (250w) KOVO, Provo, Utah, 1210kC, 100/250w. WJPR, Greenville, Miss., 1310kC, 100/250 WMGA, Moultrie, Ga., 1370kC, 100/250w. WTSP,St.Petersburg,Fla.,1370kC,100w WFVA,Fredricksburg,Va.,1260kC,250w day WSKB,McComb,Miss.,1200kC,100w day WSPB, Sarasota, Fla., 1420kC, 100/250w. Ft.Lauderdale, Fla., 1370kC, 100w. Brunswick, Ga., 1500kC, 100/250w Ft.Dodge, Iowa, 1370kC, 100/250w KXOX, Sweetwater, Tex., 1210kC, 250w day Mansfield, Ohio, 1370kC, 250w day Pontiac, Mich. 1100kC, 1000w day WCNC, Elizabeth, N.C., 1370kC, 100w WLBJ, Bowling Green, Ky., 1310kC, 100/250w Greenville, N.C., 1500kC, 250w day WMAM, Marinette, Wisc., 570kC, 250w day WRSR, Panama City, Fla., 1200kC, 100w KHAS, Hastings, Nebr., 1200kC, 100/250w WKIN, Kingston, N.Y., 1500kC, 100w day KVIC, Victoria, Tex., 1500kC, 100w day Columbia, S.C., 1310kC, 100/250w Spartanburg, S.C., 1370kC, 100/250 KYUM, Yuma, Arizona (1210), 100/250w. WAKR, Akron, Ohio, 1530kC, 1kW. WHLD, Niagara Falls, N.Y., 1260kC, 1kW WLPM, Suffolk, Va., 1420kC, 100/250w. The following stations have been deleted this year: KGCI, Coeur d'Alene, Idaho; KGVL, Greenville, Texas; WRKL, Rock Hills, S.C., and KECA, Los Angeles, Cal ....WCKY, Covington, Ky., now 50kW, has joined the CBS Network... KRLD to 50kW. Aug. 26, was a very fine barbecue pic-– CHAPTERS – nic attended by 26 members. Meeting of ACC (Detroit) -- Chapter has been re-Sept.30, was held at the home of Aug. organized and plans many activities

for coming season. Next meeting will be held in Detroit News room Tues., Oct. 17. SO.JERSEY )Philadelphia area)--Meet-ings are held regularly Saturdays Camden, N.J.YMCA. For further details contact Lem Cavileer, 1223 Keswick Ave., Haddon Heights, N.J. SO.CALIF.(Los Angeles) -- Meeting of

Balbi. The chapt. contest for July was won by M & H Amers, while the August contest was won by Hal Clein. For further chapt details contact Hal Clein, 1427 Maltman Ave., Los Angeles, Calif. at 8 p.m. on the 2nd floor of the WINDY CITY- (Chicago) -- Next regular chapt. meeting will be on Wed., Oct.11 at YMCA, 19 So. La Salle St., Chicago. For further details contact C.Trezise, 7638 So.Lafayette Ave., Chicago, Ill.

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## International

Published Monthly Excepting July



# Ax'ers Alliance

CHARLES A. MORRISON BDITOR

Volume 7

October, 1939

Number

#### **EDITORIAL**

War has come! The IDA like many other organizations is feeling the effect of this grave con dition. Many foreign mem bers are finding it impossible to dx much, if at all. As a result our foreign enrollments, renewals and news items from foreign countries have been tremendously reduced. With cooperation and finances impaired it may be tough sledding for a time, but we have no intentions of laying-down or quitting. With your cooperation and support we intend to ahead. This fellow mem-

bers is important, we do need your loyal support now as never before. We need plenty of domestic enrollments. You can help us maintain our present news standards by sending in more items and at more frequent in-

tervals.



I propose to organize at once a National Defense Listeners League. In this time of grave emergency, we believe United States listeners can be of valuable service to their government by organizing their listening periods according to a systematic plan that will be worked out to the end that accurate, reliable and up-to date short-wave information concerning all short-wave stations, particularly those in Europe, may be readily available for governmental reference purposes. With your G.C. you will find an Application blank. If you are willing to give part of your time to this serious and worthy project care fully fill out the blank and return as soon as possible. A filing card will be made out for each observer giving a detailed description of his or her experience, qualifications and



keep right on plugging MEMBERS AT THE IDA CONVENTION AT DOWNERS GROVE, ILL

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All observers and officers will donate their services asking no reward other than that of cooperating in a much needed enterprise.

Although we hope many IDA members will enroll as Official Observers in the National Defense Listeners League, it will by no means be restricted to the IDA and all listeners regardless of club or non-club affiliations will be asked to cooperate. Tell your radio friends to send for an application blank. -- Charles A. Morrison.

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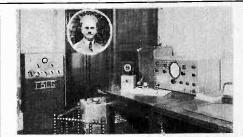
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(VIC ratings cont. from back cover) 6-F.Heiss, 4-T.Hogg, 3-J.Pedersen... GT.BRITAIN: 102- R.PYBUS, 88-R.COALES, 57-J.Shaw, 27-G.Haylock, 20-W.Raw-lins, 18-P.Fawcett (Send reports to R.Pybus, 4 Highfield Rd., Manchester 21 England) JAPAN:88-S.Yoshimura. N.Z.: 83-A. BREEN, 53-B.Connor. CANAL ZONE: 57-J.Gallivan (Next VIC/VAC Lists will appear in the January G.C.)

#### - NEW MEMBERS

H.G.Starr, Roxbury, Mass...Mario T.Catini, Ashland, Ky...Van R.Field, Center Moriches, N.Y...F.C.Flater, White Bear Lake, Minn...Vernon Easley, Santa Fe, New Mexico...Charles R.Maul, Denver, Colorado...R. F: Young, Christchurch, New Zealand...August Manza, Port Washington, New York...Earl G.Bartels, Denver, Colorado...Roger Place, Schererville, Indiana...Fred L. Voorhees, Grove City, Pennsylvania.



F3LG-PARIS. NOW OFF THE AIR

		TRANSMISSIONS -		\		
(EST)		TRANSMISSIONS		( <u>Kcs</u> )		
OCT.4 (Wed),	2-3am	WSPD, Toledo, Ohio	NNRC	1340		
OCT.7 (Sat),	2-4am	WCOL, Columbus, Ohio	NNRC	1210		
OCT.10(Tues),	3:35-3:50am	WICA, Ashtabula, Ohio	NNRC	940		
OCT.14(Sat),	4:15-4:30am	WOSU, Columbus, Ohio	NNRC	570		
OCT.14(Sat),	5:10-5:25am	WROL, Knoxville, Tenn.	NNRC	1310		
OCT.16(Mon),	3-4am	WADC, Akron, Ohio	NNRC	1320		
OCT.18(Wed),	2-3am	WLOK, Lima, Ohio	NNRC	1210		
OCT.18(Wed),	3-4am	WPAY, Portsmouth, Ohio	NNRC	1370		
OCT.20(Fri),	2-3am	WJW, Akron, Ohio	NNRC	1210		
OCT.21(Sat),	4:15-5pm	TAP, ANKARA, TURKEY	ISWC	9465		
OCT.21(Sat),	2-4am	WKRC, Cincinnati, Ohio	NNRC	550		
OCT.22(Sun),	2-4am	WGAR, Cleveland, Ohio	NNRC	1450		
OCT.29(Sun),	1-2am	WCPO, Cincinnati, Ohio	NNRC	1200		
OCT.31(Tues),	3-5am	LS11, LA PLATA, ARGENTINA	URDXC	1310		
NOV. 2(Thur),	1:30-2am	WLW, Cincinnati, Ohio	0, 1	700		
NOV. 2(Thur),	1:30-2am	WLWO, Cincinnati, Ohio		6060		
NOV. 8 (Wed),	4:30-4:45am	WEDA, Evansville, Indiana	NNRC	1370		
NOV. 9(Thur),	4:25-4:40am	WGBF, Evansville, Indiana	NNRC	630		
NOV.15(Wed),	4-6am	ZP15, VILLARICA, PARAGUAY	URDXC	700		
NOV.15(Wed),	4-6am	ZP14, VILLARICA, PARAGUAY	URDXC	11721		
NOV.19(Sun),	1-2am	YNDG, LEON, NICARAGUA	NRC	13900		
NOV.19(Sun),	7-8pm	RV96, MOSCÓW, U.S.S.R.	IDA	6030		
DEC.17(Sun),	1-2am	YNDG, LEON, NICARAGUA	IDA	13900		
JAN.14(Sun),	2-6am	CMHJ, CIENFUEGOS, CUBA	All	1160		
FEB.18(Sun),	2-6am	CMHJ, CIENFUEGOS, CUBA	All	1160		
DAILY 12 mid.	-6am.	KPAB, Laredo, Texas	All	1500		
Mexican Tourist program, with souvenirs of Old Mexico for each report.						

WEEKLY(Sun), 2-2:30am TG2, GUATEMALA, GUATEMALA IDA 6195
Prizes for best, and most distant reports each week include: 100 Spatari seals; One honorary membership in, and 10 seals of the SRRL; One Universal Time Chart; One year's membership in IDA (twice-monthly)

BROADCAST BAND DX

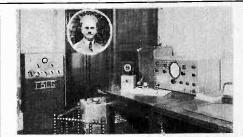
LR1 (1070), LR3 (950), LR5 (830), LR6 (870) and LS2 (1190), have been coming in very strong 9-10pm. LR1 has been better than its S.W. outlet LRX many nights (Skyten-Mass)...Most recent veri' is 2CY which gives me 11 TP stations verified with 100 veri's of 2000 miles or more away (Lippincott).

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(VIC ratings cont. from back cover) 6-F.Heiss, 4-T.Hogg, 3-J.Pedersen... GT.BRITAIN: 102- R.PYBUS, 88-R.COALES, 57-J.Shaw, 27-G.Haylock, 20-W.Raw-lins, 18-P.Fawcett (Send reports to R.Pybus, 4 Highfield Rd., Manchester 21 England) JAPAN:88-S.Yoshimura. N.Z.: 83-A. BREEN, 53-B.Connor. CANAL ZONE: 57-J.Gallivan (Next VIC/VAC Lists will appear in the January G.C.)

#### - NEW MEMBERS

H.G.Starr, Roxbury, Mass...Mario T.Catini, Ashland, Ky...Van R.Field, Center Moriches, N.Y...F.C.Flater, White Bear Lake, Minn...Vernon Easley, Santa Fe, New Mexico...Charles R.Maul, Denver, Colorado...R. F: Young, Christchurch, New Zealand...August Manza, Port Washington, New York...Earl G.Bartels, Denver, Colorado...Roger Place, Schererville, Indiana...Fred L. Voorhees, Grove City, Pennsylvania.



F3LG-PARIS. NOW OFF THE AIR

		TRANSMISSIONS -		\		
(EST)		TRANSMISSIONS		( <u>Kcs</u> )		
OCT.4 (Wed),	2-3am	WSPD, Toledo, Ohio	NNRC	1340		
OCT.7 (Sat),	2-4am	WCOL, Columbus, Ohio	NNRC	1210		
OCT.10(Tues),	3:35-3:50am	WICA, Ashtabula, Ohio	NNRC	940		
OCT.14(Sat),	4:15-4:30am	WOSU, Columbus, Ohio	NNRC	570		
OCT.14(Sat),	5:10-5:25am	WROL, Knoxville, Tenn.	NNRC	1310		
OCT.16(Mon),	3-4am	WADC, Akron, Ohio	NNRC	1320		
OCT.18(Wed),	2-3am	WLOK, Lima, Ohio	NNRC	1210		
OCT.18(Wed),	3-4am	WPAY, Portsmouth, Ohio	NNRC	1370		
OCT.20(Fri),	2-3am	WJW, Akron, Ohio	NNRC	1210		
OCT.21(Sat),	4:15-5pm	TAP, ANKARA, TURKEY	ISWC	9465		
OCT.21(Sat),	2-4am	WKRC, Cincinnati, Ohio	NNRC	550		
OCT.22(Sun),	2-4am	WGAR, Cleveland, Ohio	NNRC	1450		
OCT.29(Sun),	1-2am	WCPO, Cincinnati, Ohio	NNRC	1200		
OCT.31(Tues),	3-5am	LS11, LA PLATA, ARGENTINA	URDXC	1310		
NOV. 2(Thur),	1:30-2am	WLW, Cincinnati, Ohio	0, 1	700		
NOV. 2(Thur),	1:30-2am	WLWO, Cincinnati, Ohio		6060		
NOV. 8 (Wed),	4:30-4:45am	WEDA, Evansville, Indiana	NNRC	1370		
NOV. 9(Thur),	4:25-4:40am	WGBF, Evansville, Indiana	NNRC	630		
NOV.15(Wed),	4-6am	ZP15, VILLARICA, PARAGUAY	URDXC	700		
NOV.15(Wed),	4-6am	ZP14, VILLARICA, PARAGUAY	URDXC	11721		
NOV.19(Sun),	1-2am	YNDG, LEON, NICARAGUA	NRC	13900		
NOV.19(Sun),	7-8pm	RV96, MOSCÓW, U.S.S.R.	IDA	6030		
DEC.17(Sun),	1-2am	YNDG, LEON, NICARAGUA	IDA	13900		
JAN.14(Sun),	2-6am	CMHJ, CIENFUEGOS, CUBA	All	1160		
FEB.18(Sun),	2-6am	CMHJ, CIENFUEGOS, CUBA	All	1160		
DAILY 12 mid.	-6am.	KPAB, Laredo, Texas	All	1500		
Mexican Tourist program, with souvenirs of Old Mexico for each report.						

WEEKLY(Sun), 2-2:30am TG2, GUATEMALA, GUATEMALA IDA 6195
Prizes for best, and most distant reports each week include: 100 Spatari seals; One honorary membership in, and 10 seals of the SRRL; One Universal Time Chart; One year's membership in IDA (twice-monthly)

BROADCAST BAND DX

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