

INTERNATIONAL MEDIUM WAVE DXING FROM WESTERN NORTH AMERICA

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Medium wave DXing is one of the most challenging parts of the DX listening hobby. Like tropical band listening, you're trying to hear stations you were never intended to hear. You are, after all, outside the station's target audience. And like tropical band DXing you're also trying to hear programs intended only for a local or regional audience.

Unlike the higher frequencies, the medium wave band is very crowded. Tune around on any night and you'll mostly hear stations within a couple hundred miles of your location. A few more distant stations will also be there, but by and large, you'll hear the one, two, or three nearby stations on each channel. So unless you have an unusually clear frequency, or unusually good propagation, the DX stations are masked by closer stations. To add to the challenge, medium wave signals are normally propagated via the E-layer, which means they are more severely attenuated and require more hops than shortwave signals, which reflect off the much higher F-layer. Nonetheless, it is possible to receive medium wave signals from every continent if you know where and when to listen.

Proceedings '89 had an excellent article on International Medium Wave DXing from the midwest by Fritz Mellberg. This article continues in a similar vein by looking at international medium wave DXing on the west coast of North America.

Medium wave DX can be difficult to hear in western North America. In recent years it has become even more difficult. For reasons subject to great debate, reception of foreign medium wave DX has not been what it used to be. Part of the reason is the FCC assigning many new stations on what had been clear channels, which has affected the west more than any other part of the country. Another reason is the present peak in the sunspot cycle, although this has historically had less effect on medium wave DX than might otherwise be believed.

Technological changes have also had their effect. Broadcasters seem to be putting out wider bandwidth signals with more punch than they used to, resulting in more interference from the increased number of stations, who are mostly on the air 24 hours a day. Light dimmers and other sources of electrical noise are likewise masking some of the weaker stations. Finally, an unexplained force seems to be at work: a natural phenomenon which makes medium wave signals much weaker than in previous years.

Nonetheless, it is still possible with knowledge and perseverance to hear a fairly respectable number of countries on the medium wave band. As with most DX endeavors, you need the right receiving equipment and knowledge of which stations to listen for, and when to listen. A good location is also important, as we'll see a little later in the article. But sometimes you don't have very much choice in the matter.

For a combination of reasons, most of the foreign DX on the west coast (as reported to "DX Worldwide" in the IRCA DX Monitor) comes from somewhere across the Pacific. Here in the Pacific Northwest, about 90 percent of my loggings in recent years have been of stations from the Far East, Pacific Islands, and Down Under. Another 5 percent have come from Mexico (not counting the 3 or 4 major borderblaster stations), with the remaining 5 percent from the rest of the world. In southern California and elsewhere near Mexico, the Pacific stations make up a smaller portion of the total, but the share is still substantial. The main reason is lack of interference: stations in Europe, Asia, Africa, and the Pacific operate on a nine kilohertz spacing (i.e. 531, 540, 549 kHz, and so on), instead of the ten kilohertz spacing utilized in the Western Hemisphere. As a result, the DX slips in between the domestic interference. Latin American stations, on the other hand, generally operate on the same channels as U.S. and

Canadian stations, and have to fight their way through the much closer, much stronger domestic stations.

GETTING STARTED

There are several things you need to successfully log foreign medium wave stations: a good location, good receiving equipment (both receiver and antenna), good band conditions, and knowledge of when to listen and what to listen for. All are of equal importance.

Location: Ideally, you should live outside a major metropolitan area. Better yet, outside the primary coverage area of the stations in the nearest major city. If you want to log some really good transpacific DX, then you should live in a rural area along the coast (which basically includes all the coastal areas north of Eureka, California). Aside from being outside a big city, geography matters little as far as hearing transatlantic stations or Latin American stations, although you will be much better off hearing the latter the farther south you are. We aren't all fortunate enough to live in small towns on the coast, so we have to either 1) make DXpeditions to some place with less interference, or 2) make the most of our equipment, stay informed on potential targets, and take advantage of DX openings when they do occur. (With respect to DXpeditions, see Nick Hall-Patch's article elsewhere in this edition of proceedings). Speaking from experience, a DXpedition to the Washington or BC coast is the next best thing to DX heaven. Stations which are unthinkable in Seattle, have come in quite regularly next to the ocean.

Equipment: It almost goes without saying, you'll need a good receiver and good antenna to hear more than a handful of countries. I've heard Cuba on a car radio in southern California, and Japan in Seattle on a Portable radio with no external antenna. But for much more than that, you should have a communications receiver and a good directional antenna. Some communications receivers are better than others. The best are those which have good sensitivity, selectivity, and overload immunity on medium wave. Unfortunately, some receivers which are very good on shortwave are poor performers on medium wave, because they are deficient in one of the three categories. Remember, you're trying to hear very faint signals, which oftentimes are a kilohertz or two off from a powerhouse a few tens or hundreds of miles away. You'll need everything your receiver can deliver. For the record, DXers have reported good results on the Icom R-70/71, the NRD-515/525, and the Kenwood R-1000/2000/5000. The Yaesu FRG-7 is likewise a solid performer, if outfitted with mechanical filters, but the later FRG-7700/8800 are not as good. Several older, tube type receivers have remained big favorites among foreign MW DXers, especially the Hammarlund HQ-180 series and SP-600, the Collins R-390A, and the Racal RA-17. A good antenna is essential most of the time. I have heard excellent TP DX using only 50-70 feet of wire a few feet from the ocean, but that was because I was in a great location (Kalaloch campground at Olympic national Park). To consistently pull in good DX you'll need either a loop antenna, or a Beverage antenna. There are several good loop antennas on the market, or you can make one using plans available from the IRCA and NRC. Loops have several benefits: they are generally compact, they can be rotated to null interference, and they can be tuned to a particular frequency. Beverages have the best directionality, and can pull in stations that can't be heard any other way, but you obviously need to find a piece of real estate a couple thousand feet long.

Conditions: Band conditions play a critical role in determining what you will hear. The DX just won't get through unless the path is viable. In general, high latitude paths, such as paths to Europe and the Far East are best heard:

- During September, October, November, and March.
- When the ionosphere has been quiet for a while. Ideally, the A-index should have been below 5 for several days, although an A-index less than 10 is almost as good.
- During the low point in the sunspot cycle (although several DXers have questioned whether the sunspot cycle matters).

A darkness path between you and the station is, of course, essential. I've heard Asian stations over 3 hours after local sunrise, but such receptions

obviously aren't the norm. Europeans, when they make their rare appearances, can be heard from a couple hours past local sunset here, until around their local sunrise, with no set pattern of when they peak. Asian openings tend to vary as to when the DX peaks. Sometimes there is a peak around their local sunset. Sometimes there's a good peak around our local sunrise, sometimes there's a big enhancement in the middle of the night with little activity around sunrise. After 25 years of DXing, I still haven't detected a pattern in the activity.

Stations from the Pacific Islands and Australia can be heard throughout the year, but they are best heard during the Equinox periods (March, April, September, and October). The summer months can produce some good openings into this part of the world. Unfortunately, there are also nights of little activity. Enhancements at our local sunrise can often be very pronounced, especially at coastal locations. In the space of a few minutes, weak signals from Down Under can suddenly fade up to remarkable levels - and continue to come in well until 40-60 minutes after sunrise.

Latin American stations can be heard throughout the year, although the summer months produce noticeably poorer results than other times of the year. There are two "conditions" which help Latin American stations come in better:

- An absence of strong American and Canadian stations on the frequency. This can occur if there aren't many domestic stations on the channel or one or two which can be easily nulled by a loop or Beverage antenna. It can also occur if the normally dominant station is off the air for maintenance. HJCY-810 in Bogota, for example, can sometimes be heard when KGO in San Francisco is off for maintenance. Unfortunately, KGO only goes off 3 or 4 times a year, with little advance notice, so you have to be either persistent or lucky.
- During auroral conditions. High geomagnetic activity at these times tends to attenuate higher latitude signals more than lower latitude signals, or to actually enhance the lower latitude signals. This sometimes lets a few Latin stations slip past the usual interference.

Knowledge: In most of life's endeavors, you're more successful if you carry around a lot of information. Ideally, it should all be in your head, but there's a practical limit of how much you can actually retain. Nonetheless, you'll be a more successful DXer if you learn and retain as much as you can about your DX target areas. This includes the frequencies, location, slogan/call/network, bearing, fade in and fadeout times, sign on and sign off times, and similar information. Much of this knowledge is acquired through experience, the rest is acquired through reference material. Your best sources of information include the World Radio TV Handbook, the IRCA "Foreign DX Reference", various IRCA reprints, and the "DX Worldwide West" column in IRCAs bulletin DX Monitor. About 90 percent of the west coast's international medium wave DX loggings are reported to IRCA, so it's by far your best source of current information on the topic.

With these thoughts in mind, let's take a look at stations which have been heard on the west coast in recent years. The following summaries are based on Phil Bytheway's "Foreign DX Reference", which lists all the foreign DX reported to IRCAs "DX Worldwide" columns during the past three years, and the issue(s) in which they were reported.

TRANSATLANTIC STATIONS

This is by far the toughest area to hear in western North America. Signals from this part of the world need to travel long distances via high latitudes, and are therefore subject to considerable attenuation. Europeans have been heard a few times in recent years. Norway-1314 has been the easiest of late, thanks to their running 1200 kw into an antenna pointing west. Other possibilities include other northern Europeans, including Germany-756, Holland-747, and Britain-1215. Southern Europe is rare, but not impossible. Nick Hall-Patch's logs of Bulgaria and Turkey in the late 1970's are legendary examples. Africans haven't been heard here in ages, due generally to poor conditions. In the late 1970's, and early 1980's, Senegal-765 was probably the most frequently heard African, followed by Guinea-1404 and Algeria-891.

TRANSPACIFIC STATIONS

Asia provides some very good DX possibilities. Japan leads the pack, particularly the high powered NHK stations. Several South and North Koreans, Chinese, and Soviet stations are also often heard. A couple times a year, Taiwan, Philippines, Sabah, & Thailand are also known to come in. Far East stations are heard best in the early fall. The first decent receptions usually occur around Labor day. Far East stations continue to show up when conditions are right up to sometime in October or November. After that, they almost disappear until around March, when they reappear for a few weeks before winding down for the season.

Far East openings are often limited to particular frequency ranges or locations. Openings limited to the upper end of the dial have been fairly common lately, especially during mid winter. Korea-1566 and China/USSR-1476 usually have the best signals during these openings. At other times, only certain parts of the Far East can be heard. Openings limited solely or almost solely to Japan are particularly common.

Far East stations generally do not start fading in until around 0900 or 1000 UTC, depending on conditions and the time of year. Depending on the particular opening, they usually remain in until just after sunrise. The earliest fade in I know of was at about 0600 (JOIB-747). Fade outs two hours after local sunrise here have been known to occur on several occasions, and fade outs three or more hours after sunrise have occurred under very rare circumstances. For some reason, these late fadeouts seem to only occur at coastal Beverage antenna sites.

South Pacific stations can be heard throughout the year, although reception is generally best around the equinox periods. I've found this to be a very interesting target area. One reason is the large number of potential DX countries which can be heard. Another is the surprising number of strong signals for their power outputs. The programming can also be quite interesting, especially on some of the exotic island stations. Watch for especially strong signals around the stations' sunset time or your local sunrise.

ALASKA: In the Northwest, you've got several possibilities, including KTKN-930, KRSA-580, KYOK-560, KYAK-650, KBBI-890, and KFQD-750. Another interesting possibility is "SQM", a weather station & beacon on 529 in southeast Alaska. The best time to try for them is just before your local sunrise during the winter. None are very easy, but you'll bag one of the above eventually just by being there. Further south and east it will be tougher. Your best bets are the ones on the clear channels.

AUSTRALIA: There are many stations to choose from, especially if you're using a coastal Beverage antenna. The strongest signals come from the ABC outlets such as 3LO-774, 4QD-1548, 3GI-828, and 4RK-837; these can be heard inland in urban areas. 3LO was even heard in Georgia a couple years ago. There are lots of commercial stations which are heard by the coastal Beverage crowd: 4MK-1026 is the most reliable, followed by 2MC-531, 2GB-873, 4RR-891, 2UE-954, 2KY-1017, 2UW-1107, 2WL-1314, and 2RE-1557. The most exciting target of all are the stations on 1620 and 1629 which broadcast for the visually impaired. Although only 500 watts, they have been heard and confirmed as far east as Ontario and Massachusetts. Unfortunately, they may be moving to standard medium wave channels in the near future, so try to log them while you still can. Overall, about 60 different Aussies have been reported to IRCA's DX Monitor during the last 3 or 4 years, so you've got lots of stations to shoot for.

CHINA (PRC That Is): Your best bet is the outlet on 1476, which mixes with the Russian. These two are among the half dozen most frequently heard Asians. Be careful with the language, as the Russian carries Chinese as well. Runner up is the Japanese foreign service on 1044. The Yanbian station on 1206 is also sometimes heard during their Korean broadcasts. Other stations reported in recent years include CPBS stations on 576, 756, 828, 837, 927, 995, 1017, and 1035.

CHINA (Taiwan): Difficult to fair. You can probably get either the 738, 1143, 1458 or 1521 outlet if you try hard enough and conditions are good.

FIJI: This is one of several countries with no shortwave outlets. If you want to hear it at all, you'll have to do it on medium wave. The programming on Radio Fiji can be rather interesting at times: local ads, DJs in English, Fijian, and/or Hindi, and anything from hard rock or country western to Hindi music. Just about all the outlets listed in the WRTH have been heard here in recent years, but those on 558, 684, 774, and 891 are heard most often.

GUAM: Very difficult. KGUM-567, KUAM-612 and/or KTWR-801 are heard every 2 or 3 years.

HAWAII: KIKI-830 seems to be the best bet up and down the west coast, partly because it's on one of the few relatively clear channels left. KPUA-670 is often heard where you can get past KBOI. KUIA-720, KGU-760, KAIM-870, KNUI-900, KHVH-990, and KMVI-550 are also good bets depending on your local interference. Hawaiians fade in at about their local sunset when conditions are very good, but are best from a couple hours past their sunset until your local sunrise. Like most foreign DX, the Hawaiians aren't in every night but with a little effort, you'll bag a couple without too much effort. Hawaiians can be heard throughout the year.

JAPAN: The strongest signals you'll hear are from the high powered NHK outlets: JOAB-693, JOIB-747, JOBB-828, JOUB-774, JOAK-594, and JOGB-873. These 6, with 300 or 500 kw of power, are among the easiest TPs of all. The language is distinctive enough, but you can catch the time signal ...- at the top of the hour, and maybe an occasional NHK mention to confirm their identity. Some of the NHK programming is quite interesting; especially the English language lessons where they discuss life in the U.S. When conditions are good, you'll be able to hear many more NHK and commercial stations, including some relative low powered outlets. NHK audio has been heard on 1584 more than once, and the most powerful thing listed is 100 watts! Several commercial stations can also be heard, including JOKR-954, JONR-1008, JOHR-1287, and JORF-1422.

KIRIBATI: Tarawa-846 is not hard to hear on coastal Beverage antennas, and can sometimes be heard in metropolitan areas with loop antennas.

KOREA (South): HLAZ-1566 is consistently one of the best Asians here, with religious programs in several different languages. HLCA-972 is a respectables second. For a real treat try the jammer on 1053, which sounds like the sound effects from a grade Z 1950's sci-fi flick. Other likely targets include stations on 603, 864, 891, 1035, and 1467.

KOREA (North): Pyongyang on 657 is by far your best bet. It can be heard when other Far East stations are in reasonably well.

MALAYSIA: Kota Kinabalu-1475 is heard a few times each season during the broadcasts to the Philippines in Tagalog at 1030-1300 UTC. Reception of this one is often best during the spring.

MARSHALL ISLANDS: Two stations have been heard by folks with coastal Beverage antennas recently. WSZO-1098 on Majuro with programming aimed at the local population, and AFRS-1224 on Kwajalein mostly with US network feeds for Americans stationed on the island. Not many people know it yet, but the Marshalls are now an independent country.

NEW CALEDONIA: Noumea-666 is sometimes there during south Pacific openings. It has been heard both on DXpeditions and occasionally in the big city.

NEW ZEALAND: I used to hear this country quite regularly in Seattle, but for some reason, they've been much more difficult in recent years. On coastal DXpeditions, it's relatively easy to hear several "zedders", unless the opening is entirely for high latitude stations. The best bets are the Radio New Zealand stations on 1008, 1035, 1044, and 1098, as well as the National Program stations on 819 and 756. Be forewarned that many New Zealand stations are moving to FM in the next few years, and their channels may become vacant.

PAPUA NEW GUINEA: This is somewhat tough to hear, but if you make enough pilgrimages to the coast, you'll eventually hear it. The current best bets are Madang-864, Radio Enga-1494, and Radio West Sepik on 1593. I can't recall anyone hearing them in a metro area recently.

PHILIPPINES: This is a toughie, but a few stations have poked through in recent years. VOA-1143 and DXCC-828 are the most likely targets. Sometimes some other obscure station will be picked up by someone, on a practically one-time-only basis.

SAMOA (American): WVUV-648 is sometimes picked up at coastal locations, although CISL-650 gives them a rough time.

SAMOA (Western): 2AP on 540, 747, 1251 and 1404 are sometimes heard on the coast.

SOLOMON ISLANDS: Moderately easy on coastal Beverages and feasible farther inland. Watch for the 1035 outlet when you're out at the coast. This station is sometimes heard in metropolitan locations, too. The 945 station is occasionally heard on this side of the Pacific. The shortwave parallel on 5020 can be used to confirm the identity of both outlets.

TAHITI: Papeete-738 can be heard at coastal sites. Audio can be difficult due to KCBS-740 interference. A heterodyne from this one can often be heard up and down the coast.

THAILAND: If it weren't for VOA-1575, this country would almost never be heard in North America. It's reported 3 or 4 times per year.

TONGA: A3Z-1017 has been getting out very well since they replaced their transmitter. Listen for lots of a capella native music, plus talk in English and Tongan. This one is moderately easy on coastal sites and can be heard on good equipment in the cities.

TUVALU: 621 is usually tough to separate from the domestics on 620, but a few people have done it on coastal beverages in recent years.

USSR: The station on 1476 is one of the best heard Asian signals, with programs in Russian and Chinese. Listen for the "Midnight in Moscow" chimes at the top or bottom of the hour. The outlets on 549, 585, 648, 720, 1008, and 1251 are also regularly reported. There are also several longwave stations which present challenges of their own, check 153, 180, 189, 234, 245, and 281 kHz when medium wave reception is good.

VANUATU: Port Vila-1125 is very rare, but there has been at least one reception during the past year or two.

WALLIS ISLAND: 1188 is very tough to separate from KEX-1190, but one or two fortunate souls have been able to pull it in.

LATIN AMERICA

Mexico can be heard on your tooth fillings throughout the west. After that it gets a little more difficult. A few Cubans sometimes put in respectable signals, as do a handful of other Caribbean stations. Central America can also be heard from time to time, as can the northern South American countries. The more southerly South American countries were heard up to the early 1980's but haven't been reported lately.

ANGUILLA: This country is blessed with a station on 1610, Caribbean Beacon, whose only interference is the ten watt Travellers Information stations. Watch for it with religious broadcasts during the evening or after 0900 sign on.

ANTIGUA: The Caribbean Lighthouse on 1165 has been reported in recent years. Your chances of hearing it depend on its weak signal getting past the 1160/1170 interference.

BAHAMAS: ZNS3-810 is sometimes heard in southern California during rare KGO silent periods or with KGO carefully nulled out (with either a loop or Beverage antenna). Good luck on this one.

BELIZE: Radio Belize has been heard a lot less often since moving to 830 from 834 in late 1984. Nonetheless, it does sometimes poke through during the evening or just after 1100 UTC sign on.

CAYMAN ISLANDS: Radio Cayman on 1205 and 1555 are two more splits sometimes reported out here. The best time to try is just after their 1100 sign on, although winter evenings are also a possibility.

COLOMBIA: A few years ago this country was relatively easy to hear. Since then, the AM dial has gotten much more congested. Now you'll probably have to wait for a clear channel pest or two to make a rare silent period. Your best bet is HJCY-810 if KGO goes off. Other possibilities include HJJM-660, HJCU-730, HJED-820, HJKC-850, HJAI-1040 or HJCN/HJAT-1100 if a strong US or Canadian station is off, or if you're using a Beverage antenna pointing that way.

COSTA RICA: Try TICAL-530. R Rumbo, whose main interference is the Travellers Information stations and a couple low powered Canadians. Another good bet is TISHB which operates in the range of 1125-27. TIHB-730 was also heard once in California last season.

CUBA: This is probably the second easiest Latin country after Mexico. Watch for the high powered Radio Taino stations on 830, 1040, 1100, and 1160 during the evening. I've even heard the first two on a car radio in southern California. Your chances of hearing them obviously depend on the co-channel interference. Radio Progreso-640/670, Radio Rebelde-670 and Radio Reloj-940 also sometimes are heard in the western U.S., especially on Beverage antennas. Cubans aren't audible all the time, but when they're in, they are often quite strong.

DOMINICA: The 595 outlet was last heard a couple years ago.

ECUADOR: About once a year someone hears Ecuador. Most of the time it's on a Beverage antenna. Radio Superior (HCRS9) on 890 is the most frequently heard. Other recent receptions include Radio Sucre on 700, Radio Caroussel on 660, and Radio Huancavilca on 830. All have major interference to contend with.

EL SALVADOR: Radio Nacional-655 is heard occasionally.

GRENADE: The outlet on 535 has been heard only a couple of times in recent years. Best time to try is just after sign on.

GUATEMALA: Another one where you have to hope someone else is off the air. TGN-730 is possible in California. TGRT-670 is heard occasionally.

HONDURAS: Radio Moderna (HRLP16) on 820 has been heard a few times in the past couple years. On a Beverage you may be able to pull in one or more others.

JAMAICA: Radio Jamaica on 700 in Montego Bay was heard in southern California on a Beverage antenna last season. This is a tough one, thanks to KFAM, WLW, CKRD, et al.

MEXICO: If you live in southern California, put your ear next to the toaster and listen for talk in Spanish. Further north you'll have to use a radio. Best signals everywhere are from 50 kw (or more) borderblasters like XETRA-690, XEPRS-1090, and XEROK-800. There are about 700 stations in Mexico, so DXing this country can be an end in itself.

NETHERLANDS ANTILLES: PJB-800 sometimes is heard through the XEROK and Canadian interference.

NICARAGUA: R Sandino-750 used to be an easy catch but it's been overwhelmed by all the new domestic stations. Best bet now is the 555 outlet, if it's still around.

PERU: R Union-880 has been heard here, but it's rough now due to all the domestics operating all night on 880. R Nacional-854 may be possible, but it hasn't been reported lately.

ST KITTS: Radio Paradise on 825 can sometimes be heard on the west coast, if you can get past one of the many adjacent interference sources.

TURKS AND CAICOS: Caribbean Beacon on 1570 has made it to the west coast. It's basically a matter of sneaking past the Canadian interference. A Beverage would probably make this one a good bet.

VENEZUELA: YVNA-660 was heard before KTNN went 24 hours. YVLT-830 has been heard in Seattle at 0400 UTC s/off, on what is still a relatively open channel. YVQT-1110 has been heard in California, as has YVOZ-1200.

VERIFICATIONS

In general, the rules for medium wave reception reports are the same as for those to Tropical Band stations. A report in the station's native language is a wonderful idea, but except for Latin America, is not usually necessary. A taped report is a good idea, and in many cases is the only way to produce convincing program details. Return postage (preferably mint stamps or a US dollar) is also strongly recommended, and in some cases mandatory. The verification policies of medium wave stations are similar to their tropical band counterparts. Only a small percentage of Latin American stations will answer but those that do will be highly prized. Caribbean and Pacific Island stations can be good verifiers when they want to be, but many of them need to be prodded. Most Far East, New Zealand and Australian stations are good verifiers; notable exceptions include the Russian and North Korean networks. South Korea's KBS network likewise has a strict non-verification policy.

CONCLUSIONS

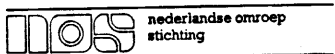
Medium wave DXing can be a major challenge, but the rewards make it well worth the patience and effort you put into it. The next time you have a good tropical band opening, pull yourself away for a few minutes to scan the medium wave band. You may hear some really good DX.

FOR MORE INFORMATION

The International Radio Club of America and the National Radio Club have a wide range of reprints and publications on medium wave DXing. Both clubs make these publications available at moderate costs. For lists of available publications send a dollar to the following addresses:

IRCA Goodie Factory, c/o Steve Ratzlaff, 295 Pettis Ave., Mountain View CA 94041

NRC Publications Center, P.O. Box 164, Mannsville, NY 13661



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concerning our radio~~transmission~~
transmitter LOPIK (2)

on a frequency of 747 kHz
on channel

which you received on 13.03. 1980.

from 0527 till 0600 hours ~~EST~~
at Seattle (USA) UTC

we thank you for your remarks and we assure you
that these are always helpful for us.
wishing you happy listening.

nos, the technical department.

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Dear Listener
Thank you for your report on the reception
of station RF II Rakiraki
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We are pleased to confirm your report

Unfortunately there is not enough
information for us to confirm your report

[Signature]
General Manager
Broadcasting House
Box 334 Suva, Fiji.

