Early in Jan. 1966 Don Jensen and Gerry Dexter offered me to partecipate of the DXRA round robin group, throughout my stay in the United States.

Aware of the group rules and regulations, I declined the offer, because I felt that my current school work would not allow the prompt forwarding of the mail, as requested; further, my listening activities were quite limited at the time, because of heavy TV interferences caused by a set located in a neighboring apartment: I had S-7 spots every 15 kc. on the dial of my rx up to 20 mc. Obviously, DX was impossible, since that TV set was on most nights.

Although I surely regretted not to enter the group, on the long run my choice resulted fully justified: 1966 has been a critical year and I have been operated four times between June and October. Evidently, in those occasions, my contribution to DXRA would have been nihil, besides, again, mail delays.

I am now operating regularly, because health troubles forced me to slow down the school pace, but I still prefer to avoid the responsibility of regular mail, since I should graduate soon and head for LA again.

a DX'er in this country and that offered me to enter its ranks: although the considerations that follow are quite summarized, the enclosed listing of Bolivian stas is the most complete I know of today and it might result of some help to the LA-minded DX'ers of the group.

Since most of you don't know me. I want to inform that I am 32, being in the DX'ing game since 1949: indeed, SWBC LA stas are my main field of interest today.

I want to express my thanks to Don Jensen of Racine, Wis. for proof reading the manuscript of this article as well as to Tommy Roesler of São Paulo, Brasil, who contributed with updated informations on some stns rpted in this listing.

Giacomo Perolo, P.O. Box 2390, São Paulo, BRASIL A BRIEF ANALYSIS OF THE BOLIVIAN BROADCASTING
SITUATION OF THE PERIOD 1955-67,
WITH SPECIAL REFERENCE TO CLANDESTINE STATIONS

by

Giacomo Perolo

A contribution to DXplorer Radio Association

Milwaukee, March 1967

Interesting sidelines of the SWL ing hobby are an increased geographical knowledge of far lands as well as their political situation.

It must be realized, however, that Bolivia is, in this respect, a unique country and does not fit any general classification, since its political developments brought the country to a rather unusual position. For a full understanding of the broadcasting situation in the country, particularly as it relates to clandestine operations, a quies look must be given to the Bolivian political history of the past 15 years. In fact, the upsurge of such widespread clandestine broadcasting is strictly a consequence of the political problems that are plaguing that country.

THE BEGINGING OF A MIGHTMARE. Bolivia and Indonesia are the world largest tin ore producers, but this apparently enviable situation degenerated in many aspects and now, for Bolivia, tin spells troubles.

with few exceptions, the Bolivian labor situation today resembles that existing in the United States at the end of the XIX century: a six day work week and ten to twelve hours per day. Overtime is badly paid and very few social benefits (such as paid vacations or free medical assistance) are given to the workses.

The golden empires owned by Patino, Aramayo and other wealthy Bolivian families were built at the expenses of the Bolivian tin miners. Their resistance to sharing a part of their huge income with the workers ultimately led to the full loss of their mines, as well as to the political unrest of their nation.

The situation had its roots in the beginning of the Bolivian mining industry and it lasted, with minor changes, until the bloody revolution of 1952, when the living conditions of the miners were as described above.

In that year, the newly created MNR (National Revolutionary Movement) seized power, following the hanging of President Villa-roel from a light pole just across the Presidential Palace in la Paz. The basish of MNR's popularity, since its birth, has been the motto: "The mines to the miners". Therefore, all mines were soon

nationalized and the miners happily paraded in the streets of Llalla gua, Katavi, San José, Oruro and other major mining centers: after years of struggle, the mines were finally theirs, and the hated Patino and Aramayo were forced to leave the country.

MORE TROUBLES. The private explotation of the mines, however, had kept the miners active and the Bolivian ores were sold on the world market at competitive prices: the lack of modernization of the mines was compensated by a strictly controlled administration plus the total negation of the most elementary human rights for those working in the mines.

The so longly dreamed nationalization of the mines, as most mationalizations in LA or elsewhere, brought chaos to the mines, and the Central Government (that has never been too strong) ultimately lost control of the miners.

In fact, nationalization brought featherbedders to the mines by the thousands, a typical pattern in LA, where, following any revolution, too many feel entitled to get some form of benefit from the "new" government. Therefore, social advisors, counselors, part time political leaders and many other doubtful characters (but very few doctors and nurses) moved to the mines.

Furthermore, the hated foremen who, under Patino organization, "sucked the blood" of the miners, were all hanged or gone, being substituted by union leaders or by ex miners. The length of the working day was shortened, compensating the loss of so many man-hours -not with machinery, but rather (you guessed it) with more miners.

All these things together, plus thek lack of interest characteristic of anomimous (or nationalized, which in this case is about the same) enterprises and plus the fact that many benefits promised to the miners in earlier MNR campaigns never materialized, led to a point where the Bolivian Government was forced to keep the mines active (since tin is the only source of Bolivian income on the international market), but every pound of tin exported represented a loss of about 0.04US\$ for the Bolivian Government. In other words, the mines that helped Aramayo to gather an immense fortune, were now producing tin for the Bolivian Government at US\$0.83 per pound, being

the same material sold by the Bolivian Government on the intermnational market at US\$0.79 per pound.

BLOOD AGAIN. But the Central Government already had problems of its own: MNR was initiated by a group of politicians and did not win too much support in the army. Since the Army knows that the real power is in its hands, no government last too long in LA unless is fully supported by the Army. This rather unfortunate rule is true all over the southern part of this continent, with the sole exceptions of Costa Rica and, may be, Uruguay.

So, when the relations between the Army and the Government began to deteriorate, some persons imagined that power could be balanced with power, and since the majority of the miners was still supporting MNR, the miners were given weapons "to assure the fullfilment of the revolutionary ideals".

Before the Army realized it, the Government, backed by strong "popular" support, made a major purge of the Army's higher ranks.

All key jobs were assigned to officers loyal to the Party.

This move, that initially caused the Government to state that "the social rest was reached by the revolution", proved instead to be a bad one: miners have little or no education, rather primitive feelings and are overwhelmingly attracted by alcohol. Before long, futile attempts were made to call in the weapons which had been issued to the miners. This failed, and shboting literally became a part of the daily life in most Bolivian mining centers.

COMMUNISM BECOMES OF AGE. Following WW II Communism tried repeatedly to make inroads in LA. The effort was greatly helped by the ignorance of the people, together with its miserable living standards. That makes them easy prey simply in change of the promise of a better future. An early example was the unsuccessful coup in Guatemala, led by J. Arbenz in 1954.

So, after 1958, the living conditions of the Bolivian miners were nearly as bad as before. They lacked even the psychological pleasure of having a target for complaints as in the past, when Patino could be blamed for everything. Now, to whom could they complain

if the miners themselves were the owners of the mines?

Some elements of the Government, realizing that the real Bolivian power had shifted from the Army to the miners, decided to put this tool to work for their personal advantage, without realizing that this would bring more social unrest (as it would happen later in Cuba) to the country and ease the penetration of truly professional and trained communist agitators, rather than the part-time organizers of the past. Vice President Juan Maria bechin was probably the brain of the whole manouver in an attempt to get miners votes for the presidential elections planned for 1962. Therefore the miners, still blind tools in the hands of their new leaders, were given more weapons and they reached the peak of their power and unrestness around 1962-64.

ORDER AHEAD? When President Paz Estenssoro was deposed by the Army in 1964, it was the first time in years that the Army was back in dictatorial power. A provisional government followed and later General René Barrientos was elected President in what United Nations observers defined as the "first fraude free elections in years".

What will come next is difficult to say, with so many variables involved: it is worth remarking that this time the picture was reversed, in the meaning that in the same way the Army was previously taken by surprise and purged by MNR (when weapons were initially distributed to the miners), now the Army took both MNR and miners (split between old-line MNR, led by Estenssoro, and pro-communist new fashion Lechin) by surprise and seized the power.

The fact, however, that miners are still armed is an indication that more troubles could be expected, even if it seems now that the Army plans systematic screening and clearing of the mines; in fact, the recent armed envounters between Army units and miners in the Oruro area brought little benefit to either side, besides human losses.

SHORT-WAVES: A NATURAL CHOICE. This rather lengthy discussion is necessary to appreciate how the Bolivian political situation has

affected the broadcasting field. When the split between the Central Government and the left-minded miners began, after 1955 or so, the latter were very well aware that, because of their arms and numerical strength, the Army could never dare to step into the mines: therefore, SW broadcasting became a logical choice to transmit the miners' feelings to the Central Government as well as to try to inflame the peasants of the neighborhood.

Thru a Bolivian friend, at the time a Colonel of the Ministry of Communications in la Paz, this writer entreviewed some spokesmen for the Bolivian Government. Also interviewed were many local broadcasters, including clandestine operators.

THE GOVERNMENT POINT. The Bolivian representative at the ITU meeting stated that, out of the 94 stns operating in Bolivia at the end of 1962, 34 were clandestines. This made the otherwise pleasant task of a LA representative in Europe a rather notchy one. In fact, he was basically representing a Government that had no power nor means to stop the operation of the stns broadcasting illegally in his country, tho the the locations of these stns were known all over the world:

Additional troubles: not only those stns were broadcasting illegally, but they were also in the wrong bands, generally allocated to point-to-point or news agencies facilities: this caused many countries to file complaints against the existing situation.

Further, the technical standards were low (namely: drift and spurious emissions), thus making the interferences caused by those stas even harder to avoid. And if this weren't enough, most of those improvvised broadcasters presented on the air the same language they were probably using in the mines, without missing any popular obscenity.

Finally, in later years, the stns which initially used 50 or 100 watts ham (or surplus) rigs, installed 1, 2 and even 5 kW outlets, thus widening the numbers of complaints caused by their interferences. It was flatly stated in that occasion that the

Government did not know what to do to bring the situation under control.

A VISIT TO RADIO ILLIMANI. Don Carlito Cervantes, a former theater director and actor, an extremely bright and sympathetic man of about 50 or 52, and a blind MNR supporter, was given the General Director post for R.Illimany 3 years prior to my visit. The appointment was considered of the same importance as that of a State Minister.

It was particularly interesting to hear his vivid description of when, during a minor revolution in 1960 or so ("I don't recall the year", he said," we have had fire so many times around here, that you can hardly recall who's who"), he was called by phone to the stn, late at night, because "enemy" forces were attacking it. He rushed there, with a jeep load of six soldiers, and arrived while the "battle" still was in progress. The jeep was immediately halted by a shot in a tire. After many vicissitudes, he finally reached the main power supply and switched the station off the air, shouting around to the men he found there that they were all idiot (the he used another word....) and that they should have shut down the stn at once, rather than waiting for him. Imagine his shock when he realized that the power room was controlled by the "enemy" and he had stumbled upon them without knowing their identity! He escaped, but suffered a gunshot wound in the leg.

He had other problems, too. Union leaders frequently asked to use R.Illimani's facilities "to bring to public knowledge an important message". To refuse could mean retaliation; power wires cut at night, or even bombing. To say "yes" would mean troubles from the Government, since most of those messages were antitegovernment in tone.

So, Don Carlito had already devised a solution when we met: the Union leader was generally stalled by the secretary for quite a while, before being admitted to Don Carlito. Then more attempts were made to discourage him. Finally, his speech was approved for

transmission, but a part of his written message, where the attacks against the Government were more evident, was "slightly retouched". The Jnion speaker was told that "hadio Illimani has powerful transmitters and it is regularly heard abroad: we can't send this thing abroad as it stands". At last, when he got to the microphone, his speech was monitored for his escort in a nearby room ("See? you are indeed getting on the air!"). In trath, however, the MW outlet was at the same time radiating rock 'n rolls or LA pop times, dualed by the 9555 kc. channel....and the Union speaker was giving off his lungs into the standby transmitter on 5955 kc., rated at 200 watts, installed for emergencies on the top of the building.

The regular transmitters are located out of town and, in order to visit them, we had to pass several sentinels, all equipped with machine guns and automatic weapons.

RADIO ALTIPLANO. This stn is owned by Don Mario Carrasco, a very wealthy and pleasant bachelor, in his early fifties, who is also a strong MNR supporter and owner of the largest Bolivian daily newspaper.

The SW transmitter is an imported Phillips model, rated at 5 kW, and it is neatly installed a few miles outside la Paz, in a lot of about 50 x 100 yds. In the center of the lot is the building housing the transmitter and the emergency power plant, with annexed a water cooling tower for the generators.

My ignorance led me to ask what was the purpose of those 4 small square towers, maybe 10 ft. high, located at each corner of the lot. I was then told, in an annoyed tone of voice, that a SW stn could be attacked at any time and in order to keep such profitable business going on, it was always wise "to protect" it. So, inside each tower, was house the "protection" in the form of .50" caliber machine guns.

In mr. Carrasco's words, them penetration and the range of the clandestine stas operated in the mines was very limited by their power (?), by the mountainous conformation of the Bolivian terrain, as well as by the type of programming, that was mainly (but unintientionally) aimed at a very selective audience.

While the first point could be questioned, it seemed that there was some truth in the others. Indeed stns located, for instance, in the Cochabamba area (a highland surrounded by mountains 2-4000 ft. higher) are difficult to hear both in la Paz and in Santa Cruz de la Sierra, only a few hundred miles away. And even in the miners living centers, it was frequently noted that receivers were tumed to local MW featuring pop tunes, rather than to the nearest SW clandestine.

SOME CLANDESTINES. As it has already become evident, the uniqueness of a Bolivian clandestine lays in the fact that instead of being hidden in the jungle, hunted by government forces, it is peacefully installed in some convenient location, receives and sends mail, featuring listeners' request paid mx as any other commercial stn. At times, they even verify reports from foreign listeners.

Furthermore, the fact that they operate on RTTY channels is another step to show that they are "regular" stns. On several occasions, they told me that they were using "the same channel already authorized for the local Port Office telegraphic service", so that supposedly no troubles for anybody could result, since the channel was "authorized". This, evidently, is not true, since the Post Office would either be forced to share the channel with the clandestine (thus interfering each other) or, as it happened more frequently, it would move to another channel. This was the declared philosophy of Radio Macional de Huanuni on 5862 kc. and by Radio Libertad on 6135 kc., the former operated by a Miners Union and the latter by a Textile Workers Union.

Incidentally, it is worth remembering at this point, that following the steps of Miners Unions in 1958, many other Unions went wild shortly after (namely: getting weapons and backing this

or that political faction of the government).

The office of the stn becomes the social center of the union-minded citizens of the area, since there are generally no local papers in those communities and, if any exists, it is generally from a lerger neighboring town and pro-government.

Even if this may partially explain the crowd always existing in those studios, there is no doubt that any of those 500 watter must have on staff more members than the Voice of America in Washington. Featherbedders abound. To visualize this better, I remember that one of the directors of Radio Libertad (since one director would not be enough, of course) had two secretaries "to take care of the correspondence". The odd aspect of this is that these two secretaries were never there, there was only one typewriter available in the office, and it was broken as I found out when don Rafael, the director, wanted to give me an introductory letter for another stn. Further, xx the frantic search for paper for the letter constituted a dramatic chapter in itself, because of so many difficulties involved, before finding some. He ended up stating that they "do not deal with too much mail", which I had suspected since the beginning when he tried to impress me with his two phantom secretaries.

The technical facilities are generally staggering: home built units fleeding surplus USA transmitters are the common trend, using Japanese mikes, German tape recorders, etc. VR tubes glow on and off, since the line voltage (even when supplied by the county, as in Santa Cruz) fluctuates so badly that those voltage regulators fall outside their operating range, becoming temporarily inactive; voltages of 80 volts are not uncommon at night, for a nominal 115 V.

The most popular aerial consist of a half wave dipole, hanging between huge bamboos (30 or more ft. high), fastened to city lightpoles. The natural powerty of this area is ironically present even on the aerials, under the form of a parasite grass that grows on light wires and on the feeders of the antennae,

giving to the whole set-up an odd looking appearance.

FORCED HOMOGENEITY OF ILLEGAL OPERATION. Even before the situation described, existed in Bolivia many commercial clandestines, that were heard on the air from time to time. Among these, some were frequently reported in USA, and some oldtimers will recall familiar slogans as "Radio Rural, la Voz del Agro Oriental", transmitting on 6240 kc. or thereabout, from Santa Cruz de la Sierra, Radio Libertad of Sucre on 6600 kc. (burnt and destroyed by mobs in 1959, later rebuilt and illegally operated on 9200 kc. under the new name of Radio Sucre), Radio Libertad on 6305 kc.(V), Radio Camiri on 9084 kc. (this installed in a sugar mill in the Camiri area), etc.

In those days, these illegal SW broadcasting ventures either operated successfully for some time, eventually resulting in legalization of the stn (either on SW or switching to MW) or were shut down by the government, generally under instigation of other broadcasters, rather than on direct government initiative.

A case to cite is probably that of the original owner of Radio Grigotá, who started illegally his broadcasting career (circa 1958) as Radio Libertad, on 6235 kc. This stn was later (about 1959-60) sold to another private (mr.Antonio Santillán Escalante), who operated it for a couple of years, until the Textile Union (that currently owns it) took over. That gentleman sold R.Libertad as soon as his request to broadcast was approved by the government, the reason being that his original transmitter could never meet the technical specifications (....) of the Bolivian authorities. This gave birth to Radio Grigotá, CP-70, still on the air under the same ownership, and that used nearly any channel between 4823 and 4338 kc. during the last 6 years or so.

But this time is now over: with Unions gaining power, armed and backed by the Government Party, the situation of small broadcasters (both legal and illegal) in small towns is a painful one, the definitely tougher for the illegal ones.

While legal stns may suffer pressure foom Unions, from time

to time, to transmit this or that message backing a certain name or political figure, their independence is generally respected. A stn owner may keep on making his own living with that business (the R.Grigotá was rampaged and sacked twice in few years....).

On the other end, illegal broadcasters are in troubles, and this explains why (compared to the past) in recent years so few private clandestines (besides those owned by the Unions) took the air. Aware of their weakness, owners of illegal stns are under increased Union's pressure, the last threatening to destroy the stn or to request government action....unless the stn supports the Union. The best thing, at this point, is simply to quit, because the Monitoring Dept. of the Ministry of Communications in la Paz is more active than many believe: many illegal stns are promptly closed down before they fail under Unions control, as soon as a trend in such direction is detected. This was the fate of "adio Horizonte on 1520 kc., located about 30 miles off Cochabamba.

STATUS QUO, as of Nov. 1966. Follows a list of stas that regularly operated on AM SWBC in the period 1958-66, as they were heard from my QTH in Southern Brazil (unles otherwise noted). Since this type of information is generally difficult to obtain, it is felt here that this list can serve as a guide for interested DX'ers.

All frequencies reported are in kc. and times in GMT;, stns starred are clandestine, in a sense or in another.

Rumbers in brackets, after the frequency, indicate the period in which the stn has been logged on the corresponding channel. Usual SW abbreviations are used throughout.

(1) R. Universal[©] A commercial unlicensed stn located in 6240 kc (59) Santa Cruz. Probably low powered. Hd around 2300 and later

(2) R. Sucre. Sucre. (1965) 200 W

S/on at 2000 for years featuring much mx and commercials. Their slogan now indicates 9196 - 9210kg(V) the stn is operated by a Railroaders Union, the the use of a call (CP-25) might indicate possible legalization in late years. Veried in 1963 after many trials.

(3) R. Nacional de Huanuni, 5 5360-5862 kc (1965) 2 kW

S/off between 0300-0400 daily, and one of the earliest clandestines on SW. Veried in 1963, and many interesting infos were obtained thru the correspondence exchanged with mr. Ar mando Gutierrez, Director. This belongs to a Miners Union.

S/off frequently past 0300, this also being

(4) R. San José, * Casilla 314.

one of the earliest clandestines on SW, tho 6253 kc V (60) it seemed inactive in the period 1961-63. 5870-72 (1962-65) Veried in some occasions, with letters signed by mr. Guillermo Delgadillo, Director. Since their return on the air on 5872 kc. (of ficially a telegraphic channel of the Bolivian Post Office) the call CP-71 has been used on SW, indicating possible legalization of the stn, the it is associated with a Miners Union. Rpts from some sources (dated 1966) suggesting connection with a new stn on 4760 ke are not confirmed, the the new 4760 kc speaker has been fully verified.

(5) R.Libertad. " Santa Cruz. 6235 kg (60) 6300-08 (62) 6135 (1963) 150 watts

This has already been outlined in the text, being the channel announced on the air (6135 kc.) of the Sta. Cruz Post Office. The call CP-30 was "stolen" together with the channel. Now in the hands of a Textile Union. Was hd well when it was on 6235 kc, after 2200.

- (6) R.Guadalquirie, 6195 kc (1960) 6198 kc (1961)
-)7) R. Llimani, CP-6, la Paz 9552-55 (1965) 5 kW

- (8) R.Cobija, CP-59 Cobija. 4497 kc (1960) 4483 kc (1961)
- (9) R.Cochabamba, Cochabamba.
 5610 kc (1961)
- (10) R.Pio XII, Siglo XX. 5958 kc (1961-65) 5952 kc (1961) 5935 kc (1962)

Very bad spot for a low powered. Hd at times at 0000 and later. Infos from la Paz Communication Ministry were too old to be reliable.

This is probably one of the most rpted Bolivians, hd well around 2200 and later or opening at 1100. The 200 watter on 5950-55 (CP-5) is now officially leased to R.Pio XII of Siglo XX, but it can be hd at times when the 31 m. band outlet is off the air for maintenance. After the 1964 deposition of President Estensoro, veries are signed by an Army officer, suggesting possible control of the stn by military forces.

This was hd weakly after 2200, but it was never noted in recent years. Both WRH-66 and la Paz Communications
Ministry list this on 4855 kc.

This tested illegally on SW, being as a consequence temporarily shut down by the government. Returned to the air in 1964, legally, but on MW only.

This has 750 watts on SW when it veried in 19X61. Had later increased power and was widely rpted, before being partially destroyed by miners in late 1965. Currently said being in process their relocation to Oruro. This is listed with the same call as the stand-by antter of R. Ilimani (See n. 7 above).

- (11) R.Camiri, This belongs to the Gil Workers Union of Camiri. the Camiri area. No luck with rpts to them, 6526 kc (1961) tho I personally met the cousin of the stn 6175 kc (1963) director. Was generally hd after 2000.
- (12) La Voz del Mi Another in the kW range and owned by a nero, Oruro. Miners Union. Frequently running to past 5750 kc (1961) 0300. Never veried, in spite of help from 5350-51 kc (62-65) the Director of R. Macional de Huanuni.
- (13) R. Sumac Orcko, This seemed a commercial clandestine and if Potosi. any connection with miners existed, must 5755 kc (1961) have been a loose one. Had often lengthy 5757 kc (62-63) religious periods. Not hd lately. Observe 5821 kc (1965) how close remained for years to la Voz del Minero (12), that was only few kc. lower. BLT: about 0100 and later.
- (14) R. Indoamerica, Did not announce any call on 6202 kc, thus CP-74, Potosi. suggesting a clandestine start, later lega 6202 kc (1961) lized. Never sounded like the rated 1 kW on 4784-85 kc (62-64) the 60 m. channel and never veried. This is difficult to hear.
- (15) R. el Condor, This belongs to a Mailroaders Union, but it la Paz. CP-15 is a legal stn. Was hd well when closing at 6123-25 kc 0300 or latera, verifying with some delay. (1961-65) 600 W Their IS is the sound of a starting steam locomotive and can be easily identified.
- (16) R.Grigotá, CP70 Usual s/off is 0400, being frequently hd from Santa Cruz. Milwaukee in 1966. A planned 10 kW transmitter 4323-33 kc to be purchased with a government loan, never (1961-65) went to the air. Had recently veried many 4323-30 kc (66) listeners rpts, tho it was a stiff one in 350 watts the past.

- (17) R.Amauta, CP-9 This was a VFO controlled (instead than of la Paz. xtal....) in 1963, thus explaining its bad 6270-90 kc (62) drift. Always veried promptly. BLT: after 6355 kc V (63) 2200. This has been rather widely rpted, so 6250-55 kc (63-65) that more infos can be obtained from any SW bulletin. Used 300 watts in 1963.
- (18) R.Universidad, This was propably a clandestine on 6125 kc.

 Tarija. Uses now the call CP-85 and veried in 1966
 6125 kc (1961) after many trials. The power is not listed,
 5460 kc (64-65) but must be 500 watts or less. Alternate
 channel given (never hd) is 4100 kc.
- (19) R.Corocoro, This is also of a Miners Union, located in Corocoro. the Depto. de la Paz, but most infos are 5962 ke (1962) lacking. BLT: around 2200 or later. Signal 5393 ke V (63-65) level would indicate 500 watts or less.
- (20) R.el Condor, Same Union (Railroaders) as the la Paz out-CP-18, Oruro. let with identical name. hd after 2200, used 6070 kc (63-65) to verie quickly in 1964 or so. This is also l kW a legal one, the is operated by a Union.
- (21) R. 9 de Abril, This is the top of all clandestines, since MNR, Pulacayo. it was illegally operated by the Government 5910 kc (63-65) Party. Never veried, seeming another 500 wat ter or so, and often after 0000.
- (22) R.Altiplano, This opened early in 1963 on 9505 kc, moving CP-33, la Paz. later to 5045 kc, and being now a better veri 9503-05 kc (63) fier than in the past. Used a call originally 5045 kc (63-66) issued to la Cruz del Sur, later transferred them by the Government.
- (23) R. Macional LAB, This started as the stn of the employees of CP-44, Cochabamba. the Bolivian Government Airlines (Lloyd

5975 kc (62-65) 5025 kc (1963) 1 kW

Aereo Boliviano), but later converted to the Union of Airlines Workers, thus leaving the GTH given by most WRH. Address is: Casi lla 132. Hd evenings, tho the Brazilian and VOA make 5975 kc a tough channel.

- (24) R. Loyola, CP-41 This belongs to a school operated by Cathe Sucre.

 lic Fathers, and veries promptly. Suffers
 5994-95 kc (63-66) heavily from VOA on 5995 kc and is hd rather
 750 watts

 seldom around 0000 or later.
- (25) R.Cronica. Also hd ID'ing as "Rediovisión Cronica", it 5895 kc (1963) was hd very briefly in mid 1963, being probably located in the Oruro area. Their signal (500 watts?) was fair at times. Other data are missing, but surely a clandestine, probably commercial.
- (26) R. Iquitos. Another clandestine, surely commercial, 5830 kc (1963) whose location was never fully established. This should not be confused with any stn operating from Iquitos, Perú. However, transmission pattern, modulation and signal strength suggested this might be the same transmitter of R.Cronica above.
- (27& R.Colquiri, This also belongs to a Union, probably of Colquiri. Miners or Steel Workers. Must be 200 watts 6218 kc V (63-65) or less. Hd after 2200.
- (23) R.Amboró, This was a clandestine on 8910 kc, but it Santa Cruz. seems to have got a call for the 60 m. band 3910 kc (1963) outlet, where they announce 4915 kc and 1 kw.

 4898 kc V (66) The real power is only 500 watts however.

 Hd also in milwaukee, around 0100 or so.

(29) R.Chorolque, Chorolque. 6023 kc (63-64) 500 watts This is a legal stn, tho the call is missing. Veried promptly when heard, in 1963. Had mostly LA pop tunes and rare commercials. Never hd since.

- (30) R.Luiz de Fuentes Another legal one, with missing call. This Tarija. (CP-76?) opened in 1963 and veried promptly. Until 6215 kc V (63-66) recently it was hd, without apparently 150 watts having any political association.
- (31) R.Centenario, CP-25, Sta.Cruz. 3395 kc (62-63) 250 watts

The transmitter used in the 90 m. band was later converted to CP-25, MW only (They used the call CP-66 on SW). Inactive since late 1963 on SW.

(32) R.Santa Cruz, Santa Cruz.
Santa Cruz.
6210 kc (1961)
40 watts

Operated illegally on SW using the MW (legal) call, CP-32, issued for 960 kc. On denial of authorization by the Government to issue a SW call, all plans to broadcast on SW were dropped, tho they could never go too far with only forty watts.

- (33) R.Rural,"
 Santa Gruz.
 6240 kc (59-61)
 250 watts
- This was a daily one around 1959. Changed name and went to NW; Then the Government ordered them to shut down. Veried many rpts.
- (34) R.Fides, CP-12 la Paz. 6164 kc (1962) 300 watts

This belongs to Catholic Fathers, who run a school. It is difficult to hear and did not seem too happy receiving listeners rpts. Was hd on 6170 kc in 1966.

- (35) R.la Plata, CP-21 Hd well around 1100 when it opens, but it

 Sucre. must run less than the rated 1 kW. This is

 9715 kc (63-65) tough to verie.
- (36) R. Uyuni, *

Operated by a Railroaders Union, was very

- 5990 kc (64-65) weak at 0300 or so. Veried with much delay 300 watts and could have been a legal one.
- (37) R. Hueva America Initially hd in mid 1964, veried promptly CP-73, la Paz. at the time. In 1965 suffered heavily from 4795 kc (64-65) the Brazilian on the channel and also from 1 kW Brazzaville.
- (38) R. Sararanda, CP77This opened in mid 1964, dualed by CP-17
 Casilla 20, on MW (1250 kc). Veried promptly. Was weak
 Camiri. after 2300, running 200 watts at the time.
 4742 kc (1964)
- (39) R.2L de Diciembre A Miners Union outlet of 500 watts or Katavi. less, daily to 0200. Never veried.

 5120 kc V (64-65)
- (40) R.Universo, CP48 This started testing commercially in late la Paz.

 1964 and veried well at the time. Also hd
 5013-15 kc (64-66) well in Milwaukee, after 0100.

 1 kW
- (41) R. Viloco, CP99 This belongs to a Miners Union, but its
 Viloco (la Paz) call would indicate legalization. It ran
 3340 kc (1965) daily to 0400 in 1965, and it did not sound
 like the 1 kW listed. Never veried. Some
 change might have taken place early in 1967
 on this channel, since R. acional de Huanuni
 (See n. 3) has been repeatedly noted on 3339
 kc.: a relay or a swap of channels?
- (42) Radiodifusora A political clandestine of undefined affiliat Libertad, Sucre ion. BLT: after 2300, with signal level well 5750 kc (64-65) below 500 watts. Featured exclusively political talks, with some ID's.
- (43) R. Ibare, CP100 This opened in 1966, signing off around 0100

Casilla 50, Trinidad. 4958 kc V (66) and announcing 4885 kc on SW. Probably a new commercial. Runs 700 watts according to verification.

la Paz. 4985 kc (62-67) 5 kw

(44) R.la Cruz del Sur This is so widely reported that is not necessary to go into details. Their original 9505 kc outlet is now leased to R. Altiplano (See n. 22). They used also 11765 kc in the past, where they suffered from the Brazilian on the same channel, but this 25 m. band out let has not been reported lately.

(45(R. Bolivia, Oruro.

4760 kc (66) 5 kW

This opened in 1966 and veried promptly. In spite some rpts indicate connection of this with R.San José (See n. 4) this is not fully demonstrated and their verie would rather indicate the contrary. Schedule is 24 hr. per day (given), with a short interruption from 1700 to 1800.

(46) R. los Andes, Tarija., CP-84 4576 ke (66)

This has been hd in mid 1966 and veried promptly. It runs 460 watts, announcing 4775 kc, but they are far away from that channel. S/off is 0400 daily.

LIST REMARK: no language was mentioned for any of the stns above, since they all use Spanish, with few exceptions.

CONCLUSION. The compressed hate existing in Bolivia should be apparent by this time and it can be summarized by the slogan used by FSB (Falange Socialista Boliviana, a left leaning party) during their 1962 political campaign; their political program was centered on the following statement, announced publically at their rallyes: "If we win the elections, we will hang all our adversaries". Although this is evidently an extreme, this is an evident indication of how unhappy the Bolivian people is, if such corrective measures are considered as solutions to their lasting troubles. It will take much time and much international agodwill to give that country the blessing of a democratic society in the sense known in the United States and in most countries of the free world.

THE END