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Photo edition: Mark Melzi

Radio Voice Missionária
Shortwave in 25, 31 and 49 m bands
Camboriu / SC - Brazil



Photo: Martin Butera, at the entrance door of the station.

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1. Brief Introduction to the History of Radio Voz Missionária

Rádio Voz Missionária transmits from the studios located in Camboriú – SC – Brazil.
(GPS coordinates) 27º01'36.18 S 48º38'53.33 0.

The station belongs to "Last Minute Missionary Gideons", also known as GMUH–the largest Pentecostal Protestant missionary organization in Brazil–and its main objective is to spread the gospel of Christ in Brazil and throughout the world.

The Last Minute Missionary Gideons were born in the late 1970s, by the hand of the Brazilian Gospel Minister Cesino Bernardino.

Since that time the number of believers has grown day by day.

They carry an important social action, in the Amazon region, with several ships, especially with a clinical-dental ship, called Gideão VI.

They also build shelters for children in northeastern Brazil and primary schools in the countries of Haiti and Peru.

Also, they have drilled wells in desert regions of Africa and northeastern Brazil, they have a mobile hospital, with doctors specialized in different areas such as cardiologist, dentist and clinicians in general with their own ambulances, all achieved thanks to the contribution of their faithful who believe in the project and thus give free assistance to the most needing, arriving in this way not only with the word of the gospel, but also with direct actions.

Cesino Bernardino

Cesino Bernardino (Imbituba, November 29, 1934 – Blumenau, July 30, 2016), was a Brazilian Gospel minister, teacher and writer. He was president of Last Minute Missionary Gideons Brazil.

Cesino Bernardino entered the history of the Brazilian evangelical church, being one of his greatest missionaries, not only in the farthest corners of Brazil, as well as in underserved regions of the planet such as Cuba, Haiti, Easter Island and remote areas of the African continent.

Cesino Bernardino teaches that you never have to give up dreaming, especially when your dreams fit God's purposes.

In March 2012, he was nominated for a Nobel Peace Prize.

2. Interview with Luiz Carlos Machado (Chief Radio Station Coordinator)

Without a doubt, radio is one of the main communication vehicles that exists. Luiz Carlos Machado is a passionate radio director with more than 50 years as a professional in the field.

Luiz Carlos Machado is in charge of this great communication structure, which is "Rádio Voz Missionária", since its inception, for more than 30 years.

Luiz Carlos Machado has always been linked to the shortwaveradio. Among the many radio stations where he's worked, and the most important for him were, the shortwave radio station called "Rádio Diário da Manhãna Ltda", located in the neighboring city of Florianopolis and an outstanding radio station "Radio Marumby" of the city of Curitiba.

To mention Marumby radio is to talk about one of the most respected evangelical radio stations in all of Brazil, with its signals in modulated amplitude, shortwave and tropical.

Working on Marumby radio, he met Bishop Cesino Bernardino, who was doing his evangelical programs at that station.

A few years later Luiz Carlos Machado, was invited by Cesino Bernardino to direct the radio station "Voz Missionária" in the city of Camboriú.



Photo: Martin Butera in the office of Luiz Carlos Machado (Chief Radio Station Coordinator).

MB: What was it like to make the decision to transmit on the shortwaves and not on AM or FM. Which would be much cheaper?

LCM: That decision was taken from the beginning by a very broad vision of the president of the Gideões, Cesino Bernardino. He was very clear that the word of God, had to reach the most remote places and knew that through the AM and FM, would be limited.

He always knew the high cost of maintaining 3 shortwave transmitters in this case, without advertising, only with voluntary contributions, seeing today the entire structure that "Rádio Voz Missionária" built, without a doubt it is a miracle of God, manifested in the faith of our president.

MB: Technically speaking, what can you tell us about your transmissions?

LCM: The radio station transmits 24 Hs with 10 Kilos and at night the power is reduced to 5 kilos, the three transmitters are of national manufacture those of 31 Mts and 49 Mts, are from a factory that is in the city of Sao Paulo, called Prestec and the 25 Mts, is from a company in the city of Porto Alegre called BT.

MB: And what can you tell me about the antennas?

LCM: The antennas are something that we have to improve a little, although we have a lot of height, because they are located on a mountain. The antennas we have are half wave dipoles, one for each band and they are not very high in ration to the floor of tower.

Saying that, as I mentioned, we have height in the mountains and are pointed towards the sea that we are very close to, taking advantage of propagation.

MB: How is the relationship with other platforms like the internet?

LCM: The radio is highly linked to all the digital platforms of the moment, both in audio and online video streaming, through applications and websites, updated at all times, but our priority is always the shortwave.

MB: Many DXers who are reading this report now, are asking about the delay on the responses of their reception reports, is this something that interests the station?

LCM: Yes, of course, that we are interested in receiving QSLs and more, while we are here doing this interview, I can show you that today I received correspondence with reception reports from very different countries in Japan, Canada and Australia.

Previously we confirmed with a nice certificate all the reports, now a while ago that for a matter of time we are not doing it, but we ask for your patience that we will confirm all the reports, you can write to: Joaquin Nunes, 244 Centro – Camboriú, SCCEP 88340-371, Brazil.

MB: What is it like to produce 100% religious programming?

LCM: It is something with a lot of responsibility is to touch the hearts of many people with the message of salvation in Jesus Christ.

It is not an easy task, to produce a contemporary and professional programming, to present the message of Jesus Christ, our commitment is not only directed among believers, but also in the general population. We want to have a biblical, educational and cultural program that, due to the quality of its programs, equipment and personnel, becomes increasingly heard.

MB: Any final words?

LCM: I just have to thank you for being here, interested in the “Queen of the Air”, as this station is known. I personally feel that this radio work became divine for me and I am excited to know that many people accepted Christ from this radio, thus making a difference in their hearts.

God bless you brother Martin!

3. Interview with Hueslen Santos (vice-president of Gideões Missionários)

I was very well received in the studies of the radio station where the vice-president of Gideões Missionários, the preacher Mr. Hueslen Santos, is waiting for me and we talked a little about the activity they carry out.



Photo: Martin Butera with Hueslen Santos (vice-president of Gideões Missionários).

MB: Who are the Last Minute Missionary Gideons?

HS: Last Minute Missionary Gideons, also known as GMUH based in Camboriú, Brazil, is the largest Pentecostal Protestant missionary congress in Brazil and its main objective is to spread the gospel of Christ in Brazil and in the world.

MB: What do members of Last Minute Missionary Gideons believe?

HS: We believe that there is only one way and it is called “Jesus Christ”, but we are aware that we cannot reach a lacking place, where people are hungry and just talk about the gospel, we have to do much more. The social action is developed with the vision of Jesus, the first was concerned with the restoration of the soul by applying the divine word, but then Jesus was orienting the disciples to feed the people. So what we do is evangelism and social action.

MB: I know that social projects are a lot, but if you had to list a couple, what would they be?

HS: All projects are exciting and very important, we have more than 40 distributed between Brazil and the rest of the world, maybe today I can mention two that are very revealing to me.

One is the Gideões Clinic ship, a missionary project in the great Amazon that began more than 34 years ago, initially preaching the gospel and then preparing, sending and maintaining missionaries both in the cities and in the countryside.

In the immensity of the Amazon, where the largest river basin in the world is located, the ship dictates the rhythm of life. Missionaries use boats as their main means of transportation, as the Amazon River connects hundreds of small riverside communities, small towns, larger municipalities and large capitals.

The work of evangelism and social action is a great challenge in this region. On the banks of the Amazon rivers there are people without life prospects, living in extreme poverty, isolated in the middle of the forests, people lacking medical services and sanitation, and most of them have never heard of Jesus Christ . For them, Missionary Gideons Last Minute boats are the only form of help and assistance.

Another exciting project is that of Haiti, for almost more than 19 years, Last Minute Missionary Gideons have been developing activities in education, providing education to approximately five hundred children.

Through their own school, students receive daily education, food, and are also evangelized by teachers about the word of God.

MB: Any final notes?

HS: First, I wanted to thank you for coming to our station to do your job.
We live in a world in despair and the only way to end that despair is the word of Jesus that is love in action.

Our missionaries will not lower their arms, carrying the gospel from north to south, from east to west, in the farthest reaches of the earth.

The Last Minute Missionary Gideons, we know that it is time to pray with our hearts and work with our hands.



Photo: Gideão VI ship. (Photograph courtesy of this article by Gideões Missionários)

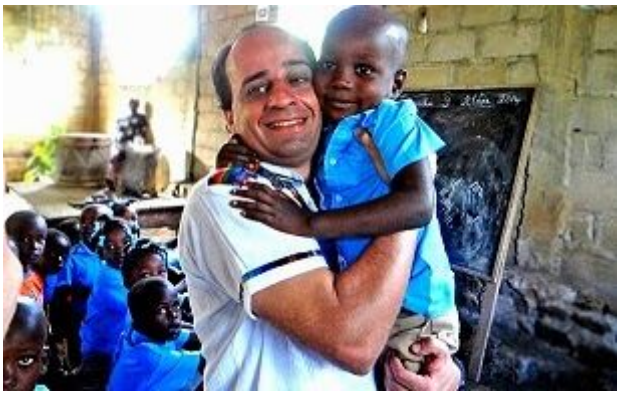


Photo: Hueslen Santos (vice-president of Gideões Missionários),
in Haiti. Photograph courtesy of this article by Gideões Missionários

4. Studio and Technical Control

The radio has a studio and a technical control center divided in the classical way, separated by an acoustic glass, making eye contact with the operator.

Study

The studio is very large, something fundamental so that you can work comfortably, it has a specially designed table, equipped with 6 Behringer condenser microphones and very good chairs, to work comfortably and well relaxed, maintaining a good body posture.

The walls and door of the studio are totally isolated from outside noise, with acoustic panels.

Studio Control

The control room is a simple of space, but well-designed to control various studio activities like live broadcasts and recordings (although not at the same time, because there is a single cabin).

Equipped with all the basic elements, such as: computers with radial automation software, sound console, audio processors, talkback microphone (to maintain communication between the studio and the operator through the headphones, without letting the communication air), monitors and even CD compact disc readers, something very nice to find that still in a station, the radio maintains an interesting disco.

Video, view of the technical control.
https://youtu.be/E0MhGyrQQ6Q



Photo: control of the Rádio Voz Missionária



Photo: Martin Butera, in control of the Rádio Voz Missionária



Photo: Martin Butera, next to the wall of CDs.

5. Radio Links

The system is located in a tower, very close to the entrance of the station.

It is a tower of about 30 Meters, with a Yagi antenna in the middle of the tower, the link connects the studios, to the antennas of the “Morro das Anenas” with a classic point-to-point system.

This tower is shared by a community FM station, also of the group “Gideões Missionários da Last Hora”, called Rádio Paz no Vale 105.9 FM.

It can be seen in the photographs at the top of the tower along with two dipoles of the Jampro type of said station.



Photo: Radio links “Rádio Voz Missionária”, you can see at the top of the tower two dipoles of the Jampro type, belonging to the community radio station Rádio Paz no Vale 105.9 FM.



Photo: Martin Butera, next to the “Rádio Voz Missionária” link tower, you can see the Yagi antenna of the point-to-point system.



Photo: Angel Lana Arpon (Martin's logistics assistant) and Martin Butera at the entrance of the neighboring radio station, "Rádio Paz no Vale 105.9 FM".



Photo: station entrance, the protection of the link tower can be seen.

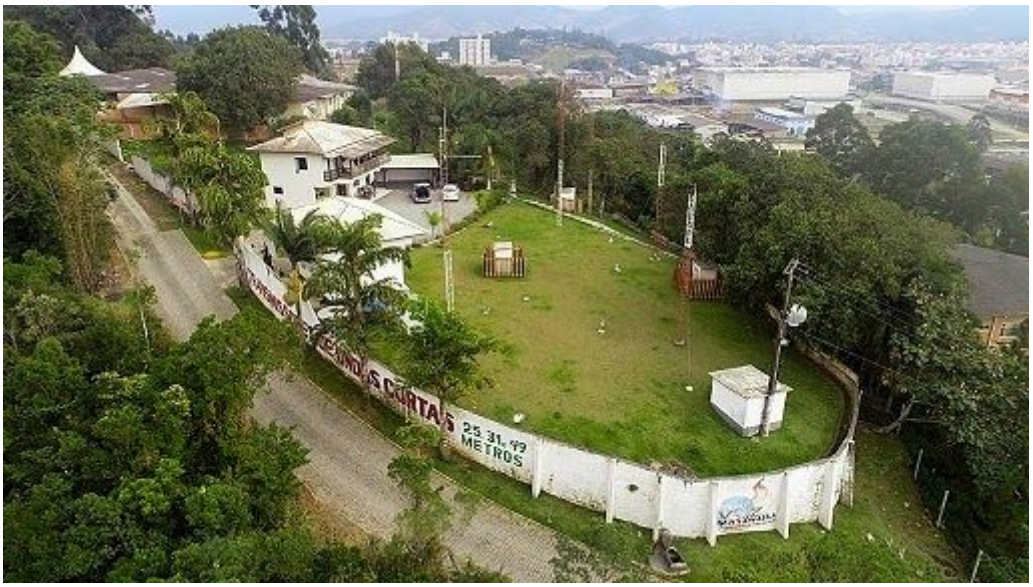
6. Antenna field and Transmission Lines

The antennas and transmitters are located at the top of the "Morro das Anenas" (GPS coordinates 27º02'24.48 S 48º39'17.27 0).

"Rádio Voz Missionária" Antenna Field, Camboriu Brazil – Exclusive Drone Footage

https://youtu.be/v2iEPJtYiXY

Antennas



The tidy field of antennas has a set of 3 dipole antennas designed for high-power transmissions.



Photo: Zeppelin antennas for the various work bands.



Photo: End of two Zeppelin antennas used by the broadcaster for different bands.



Photo: Rhombic antenna system for Tropical Bands.

Transmission Lines

Since each antenna is powered separately, each has its own transmission line. In the photographs we can see that they are bifilar lines of the cage type.

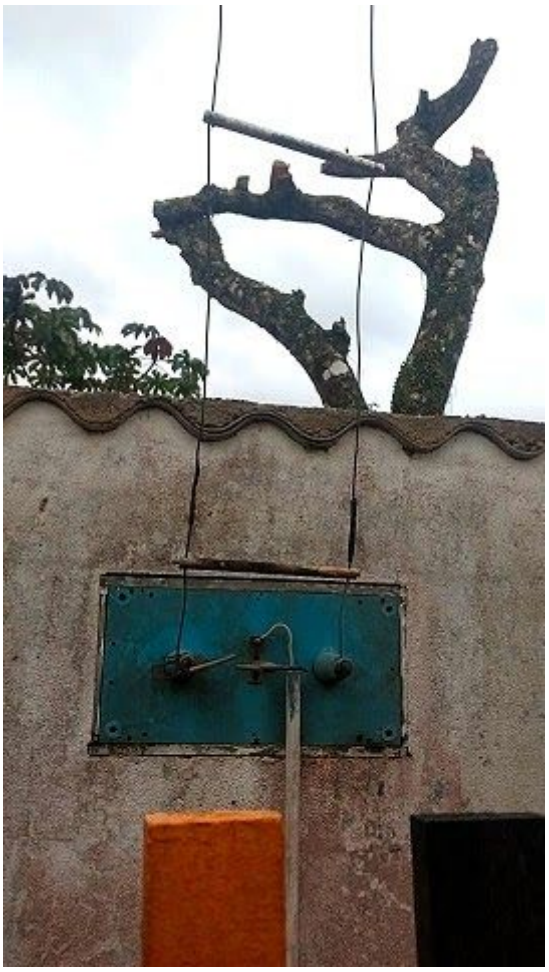


Photo: Detail of the output of the transmission lines of the coupler box

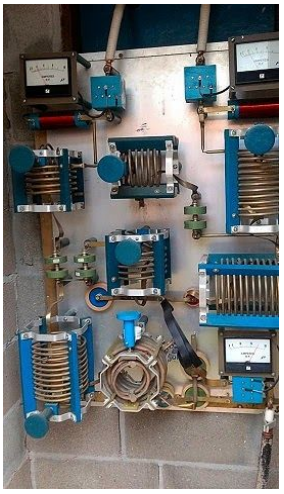


Photo: Coupling system of one of the antennas.



Photo: Box where the coupler for the 31M band is housed.



Photo: Box where the coupler for the 49M antenna is housed.



Photo: Martin Butera next to the box where the coupler for the 25M band is housed.

7. Transmitter room

They are three Brazilian national solid-state industry transmitters, prepared for DRM transmission and operating at 10,000 watts of power on 25M (11,750 kHz), 31M (9,665 kHz) and 49M (5,940 kHz).



Photo: Martin Butera and Luiz Carlos Machado, at the door of transmitter rooms.



Photo: 31 Mts and 49 Mts transmitters.



Photo: Martin Butera next to the 31 Mts transmitter.



Photo: Martin Butera and Luiz Carlos Machado, in the link racks and audio processors



Photo: link racks and audio processors

8. Final conclusion by Martin Butera

Writing about the fact that international SW stations are losing meaning, for the foreign policy objectives of many governments, would not be a novelty.

We all know that maintaining high power stations of SW is very expensive and many countries know about this, so they are implementing austerity programs and cutting their budgets.

The vast majority of international broadcasters end up opting out of the air and recycling on the internet, while only a few, they still maintain the air although in a rather "testimonial" way.

Then the question arises: why is the shortwave currently mostly occupied by religious stations?

The answer, I think I am more than answered in this report, the shortwave still maintains a place of importance, for religious stations, because they know, that in the vast majority of

places where they want to reach with their religious message and action, the Internet It is not available to most citizens, and even if some of them have access, it is very limited.

The short wave is practically, the only contact channel, that you have to reach these populations with your message.

The short wave may not have a large or lucrative audience for these stations. But it still has the most loyal listeners of the band and that is a value, they know very well what religious stations are all about.

9. Thanks to Martín Butera

I dedicate, thank and congratulate all the missionaries of "Gideões Missionários da Last Hora", for the tremendous work they do helping people find their spiritual path and assisting them directly with food, health, clothing, education and much more.

Thanks to the gentlemen: Zilmar Miguel (President), Hueslen R. Santos (Vice-President) and the kind Luiz Carlos Machado (station coordinator).
To my wife, Ligia Katze (in photographs).

To my friend Mark Melzi in photography edition.

To my Finn friend Mäkeläinen editor http://www.dxing.info/, for sharing this article.

To my dear friend Angel Lana Arpon (PP5GEL), for assisting me in logistics.



Photo: Martin Butera and Angel Lana Arpon at the door of the station.



Photo: Hueslen R. Santos (Vice-President), Zilmar Miguel (President), Martin Butera and Luiz Carlos Machado (Coordinator of the station).

10. About the author

He is a listener of Shortwave Radio and Amateur Radio since 1992 with the Argentine callsign LU9EFO and the Brazilian PT2ZDX.

Martin is a Radio Amateur with more than 29 years of experience, and has participated in DXpeditions throughout South America, with the Argentine radio callsign LU9EFO and the Brazilian callsign PT2ZDX.

Martin collaborates and writes for several Radio newsletters that cover the theme of world radio.

Martin is the founder of CREW called 15 point 61 (15.61).

Martín Butera is a journalist, documentary filmmaker and founding member of Radio Atomika 106.1 MHz (Buenos Aires, Argentina) www.radioatomika.com.ar

He currently lives in Brasilia, capital of Brazil.

11. references

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