

TT8RR – TT8XX – TT8TT ... a new IDT adventure in Chad

Like in a movie, let us begin by listing the main characters:

- The team: I2YSB (Silvano), I1HJT (Alfeo), I1FQH (Franco), I2PJA (Tony), IK2CKR (Angelo) and IK2HKT (Stefano)
- Our contact in Chad: M. Karmel
- Sister Anna Rosa Casadei
- Sister Paola
- Sister Aimè
- Sister Silvana
- All Novices of the N'Djamena Nunnery of the Sisters of Divine Charity St. Jeanne-Antide Thouret.
- Guest star: a suffocating heat!



We had once operated from Chad in 2012 from the N'Djamena Novotel, with a lesser setup. It was a well - organized setting, sporting air conditioning, swimming pool and efficient generators available round the clock. Years later, with a budget unmatched to the local runaway inflation, plus a planned layout of 4 stations and about 10 antennas, too large for the that hotel complex, ruled out returning to the same location.

In mid-2023 we began considering Chad again, since, following our 2012 Dxpedition, this country had been activated sporadically just by holiday-style operators.

We got in touch with Sister Silvana, an old acquaintance of ours, well known in N'Djamena and available in the past to hosting us at the nunnery of her Congregation. Although not quite a hotel, it is a structure with many rooms available, wide spaces for antennas, a 20kW generator and an excellent level of security (the compound is completely fenced and guarded all day long). In touch with our local friend Karmel, we started our preparations for January 2024.

With all licenses and permits in hand, on a cold December morning the first setback strikes: unrests and an attempted coup in N'Djamena make Chad unsafe for foreigners. No way to enter the country with our huge amount of "sensitive" material. Safety first, let's wait for better times. After the unrests, the presidential elections were expected around mid-May 2024, to be followed, as customary in some African countries, by further disorders. So, our Dxpedition – if any - had to be over before the elections took place.

We had to take a quick decision, within few days. After a round of frantic calls, it was a go. We found 6 operators (unfortunately IK2RZP and JA3USA could not make it) and started for good. We got quickly visas from the Embassy in Germany, booked flights, tested all equipment (including a satellite station on QO100) and planned our family details in record time, within one week of departure.



A quick check of weather forecasts for N'Djamena predicted some heat (40 °C max), but based our experience nothing to worry about. A plain mistake, which later would affect heavily the whole Dxpedition.

On April 16th we left from Milano Malpensa with destination N'Djamena, the Capital City of Chad, via Paris. On arrival at 17:45 local (16:45 UTC) we are met by our friend Karmel. Thanks our prior arrangements, we get through customs quickly and smoothly, but with a strange feeling: maybe the expected 40

°C in reality are a bit more Outside the airport the thermometer displays 42, according to Karmel an improvement with respect to the roasting temperature of the afternoon. We don't dare to comment, recalling that the nunnery is blessed with many shady, cool places. After just 30 min drive we get there.

We are welcomed by Sister Anna Rosa Casadei with jars of fresh water to help us adapting to the temperature jump. It is already dark outside, time to get to our rooms for a shower and some rest. Around midnight we realize that the temperature is still 40 degrees... We end up with a series of showers and no sleep, waiting for sunrise.

At 5:30 we are all awake, ready for the antenna party. As customary, Stefano (IK2HKT) and Tony (I2PJA) concentrate on setting up the 4 stations, while all the others begin assembling the Xbeam and the 30m loop. Our plans were to mount the 40/80m vertical for CW, but by mid-morning the plan falters. The thermometer reaches 46 °C, making it dangerous to work outside. We take shelter in the radio room, the only place equipped with water sprays, insufficient anyway to reach temperatures below 40 degrees. We complete the PCs and Internet setup and operations begin in the middle of the afternoon.

Soon the local generator quits for overtemperature. We call Kamel for help and decide to connect the spare generator that we had previously rented. The electrician, however, shows up only after hours to start the contraption visible in the picture. Back on the air, but just for a few hours. After sunset the second generator gives up, for the same reason.





At this point we try a solution with a makeshift radiator for the cooling water of the generator, using a 200-liter drum and a small water pump for circulating the liquid. While busy with it, at about 9 PM, a breathless novice runs to us: “an Italian collapsed and is not responding anymore!”. We rush there and find Tony (I2PJA) flat on his back, unconscious and seized by convulsions. Everybody in the nunnery was running there, aware that something serious had happened. We lifted Tony and brought him to bed. Sister Anna Rosa, a professional nurse, checking his vital parameters got a body temperature of almost 42 °C. Tony was shaking and shivering, senseless, unresponding ... Sister Anna Rosa decides quickly to move him to the hospital, luckily just 3km away from us.

The ambulance arrived within minutes, but don't be mistaken: it was a Toyota open pickup, with a rough tent and no stretcher. In the meantime all Novices were busy

soaking towels with fresh water and patting Tony's body to mitigate his temperature. He was then lifted on the ambulance with his mattress and sent for the hospital, accompanied by Sister Anna Rosa and Sister Aimè.

Skipping details, we thank the Spanish lady doctor Julia Martinez for giving Tony first-aid help in intensive care. This saved his life from a severe heat stroke which could easily be fatal.

At about 2 in the night, about 4 hours after his hospitalization, we receive a call by Karmel, who too was at the hospital: Tony is out of life danger, with decreasing fever and back to consciousness. At 3 in the night Sister Anna Rosa returned, while Tony was assisted by Sister Aimè who sat up to him for two full nights, until he began to improve. It took 5 days under strict control, before the lady doctor allowed him back to the nunnery, among cheers, tears and emotion. It could have been an irrecoverable tragedy, but he finally recovered, a terrible experience which we shall not forget. We thank all Sisters and Novices for all their selfless help and support, angels in our memories and in our hearts.



On the same night of Tony's accident, we moved all beds outside, into open air. This is the way in which we slept all nights, under the stars and with a temperature constantly above 37 °C. One could get asleep only late in the night, between 2 PM and up to daybreak at 5:30 ..., the remaining was time without rest.

Radio-wise, Tony's accident upset all our plans. Mounting antennas had to be limited to a few hours per day, between 5:30 and 7:15 in the morning. After that time, it was dangerous to stay outside (with temperatures reaching stable 47 °C in the shade) and it was much too hot even in the shade of the many mango trees. We

resorted to staying most of the time in the humified room and could finish mounting all antennas after 4 days. For the same reason, we had to begin dismantling antennas 4 days before departure. As a consequence, we could operate just 6 days with the full complement of antennas and all 4 HF stations, striving to optimize operations according to the available propagation on the various bands.

Meanwhile, Franco (I1FQH) was trying to set up the QO100 satellite station. Simple in principle, it made us struggle with the antenna aiming, since we had contrasting data about this procedure. We asked a friend of ours for help, Franco IK2DHS, who – thanks to his 30-year experience in the field, gave us the right suggestions. The QO100 beacon was audible and satellite mode became available. The heat wave had not finished, though, impairing the functioning of the DxPatrol transverter. In a few minutes of operation, it switched to temperature protection (which happens at 45 degrees; the room temperature



was 42). The only solution was to wrap the DxPatrol in a towel and put it in the fridge for 30 minutes at a time. In this way we could operate for about an hour, repeating this cycle the whole day. In this way Franco logged more than 700 QSOs. It was an interesting experience, but we do not plan satellite activity for the future. It is about contacts via a repeater, albeit a sophisticated one, and has nothing to do with actual propagation conditions, grey line, long-path mode and the like.



As you can see from the numbers in the Table, the lion's share was taken by the FT8 mode on the higher bands, frequencies favored by the season and the solar cycle. In fact, we didn't bring any antenna for 160m, while the 40/80 SSB vertical was not even installed. Operations were regularly made on SSB and CW, although during the period in which Tony was in hospital the SSB station was operated only by Stefano IK2HKT, with sporadic contributions by

Silvano I2YSB and Franco I1FQH. When back from hospital, Tony I2PJA had to limit his activity anyway, owing to his ongoing antibiotic treatment.

Needless to say, the CW shifts planned by Silvano were thrown out. Unforeseen circumstances such as delays in antenna setup and dismantling, intolerable heat and the paramount need to preserve the still available energies, forced the CW operators to rotate each 30/40 minutes when conditions were at their best, leaving the moments of lesser pressure to the FT8 mode.

Other mishaps due to temperature happened. One morning, we woke up with all our cellular phones down, some of them displaying "high temperature" warnings while others completely off. We put them in the fridge. To our surprise, the coax cables, with their black coating in constant sun exposure reaching well above 50 degrees, kept their full efficiency. Messi & Paoloni forever!

One morning an amplifier displayed an error message and quit. We discovered later that heat had managed to upset the very temperature sensor! In another amplifier a capacitor of the filter bank blew up, although we were operating the PA at half power to preserve it from collapsing. We took off all air filters to improve airflow without much improvement, an Elecraft K3 set at low-power got crazy, switching randomly to high

power and tripping the PA, computers at times went off, jamming our network... all in all a normal situation, considering that we were refreshing ourselves with the blower outflow of our PAs!



Our “guardian angels” tried to help us in any way to bear the harsh conditions. They prepared excellent meals, made us eat a lot of fruit and vegetables, and provided us with fresh water with vitamin supplements (mainly potassium and magnesium) to compensate for fluid losses.

Usually, time goes by quickly when on a Dxpedition, but not this time. Six persons in one 16 square-meter room, with a water vaporizer as loud as a steam engine, made this expedition quite miserable. We

were counting the days to departure, but in the end all's well that ends well. Overcoming difficulties, fears, heat and mishaps we managed to finish with a total of 83,500 QSOs. On April 30th, early in the afternoon with an outside temperature around 47 degrees, we left for the airport. There, a possible delicate step was lurking at the customs counter. We were rescued by Sister Paola, Mother Superior of all nunneries in the sub-Saharan region, of the Order of Sisters of Divine Charity St. Jeanne-Antide Thouret, who assured us that all would be fine.

Puzzled, we got to the airport. Just outside the Terminal, we were met by Mr. M. Abel, chief in charge of the airport Immigration services, who addressed us with “Are you the friends of Sister Paola?”. We understood that we were in very good hands and Silvano sighed in relief. We went through Customs in no time and we finally enjoyed the airport air conditioning, which for us was nearly heaven. After having thanked Mr. Abel for his help, at the Air France check-in counter we got a surprise, which made our return flight memorable: in order to fix some overbooking issues, three of us had been upgraded to Economy Premium Class, and three other to Business, free of charge. The latter option implied sleeping in a true bed for the duration of the night flight! After considering different arrangements, including alphabetical order or a draw, we chose seniority as a criterion. So, I2YSB Silvano, IK2CKR Angelo and I1HJT Alfeo enjoyed the coziness of Business Class, whereas the other three were accommodated in wider and more spaced seats than in Economy Class. A well-deserved prize after 15 days spent in extreme conditions, at the limit of survival. We landed around 12 local, May 1st at Malpensa airport. We celebrated, mostly for having Tony with us safe and sound. In retrospect, we appreciate every bit of this experience, mainly for the human contacts and the open, unselfish help offered to us. Next time we shall not underestimate the weather

Operation: April 17, 2024 09:19 UTC - April 30, 2024 04:58 UTC, 13 days (308 hours total)

Comments: TT8RR (SSB-CW-RTTY), TT8XX (FT8), TT8TT (SAT)

Operators: I1FQH I1HJT I2PJA I2YSB (Team Leader) IK2CKR IK2HKT

QSOs:	Total QSOs	Uniques	Uniques %	QSOs/day	QSOs/hour
	83,575	22,052	26.4 %	6,520	272

per Band:	80m	60m	40m	30m	20m	17m	15m	12m	10m	6m	SAT
	1,567	1,338	5,201	5,689	11,624	12,550	16,987	12,755	14,909	274	724

per Mode:	CW	Phone	Digital
	17,037	14,460	52,121

conditions at our destination and, first and foremost, whatever might impair our health.

We thank all our OM friends who help us with donations, together with enterprises and ARI Sections which make these DxPeditions possible.

Now, with enhanced experience, let's get ready for the next adventure to a new destination!

73, Italian Dxpedition Team

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