

TX7T - Report by Didier F6BCW



A team of eight operators was active from Hiva Oa (OC-027) in the Marquesas Islands from 6 to 19 November 2019. The team conducted 31,000 QSOs in 136 DXCC countries.

The CanAm DX Group is a team of Radio Amateurs that has conducted a number of DX expeditions over the past 15 years. The group has never conducted a DX expedition in tents and with generators. Rather, the focus has been on relatively few countries that are accessible by air and have electricity.

The TX7T group consisted of 8 operators



Robert Brandon K5PI, Team Manager; Madison Jones W5MJ; Keith Witney VE7KW; Neil King VA7DX; Bob Feldtman W5RF; Bill Priakos W5SJ; Bob Allphin K4UEE; and Didier Cadot F6BCW. This was Didier's first DX expedition with the group, although he worked with VE7KW on

Operation TM100VIMY, and organized the TX5EG expedition to the same location in 2017.

The Marquesas Archipelago is a group of 15 islands and islets located 1370 km northeast of Tahiti. The Marquesas Islands are a separate DXCC entity and are part of French Polynesia. The population of the Marquesas Islands is approximately 9,300. At the time of the DX expedition, the Marquesas Islands were ranked 59th on the Clublog's list of the world's most wanted people, and 28th for Europe.

The QTH Radio.



The first challenge for any DX expedition is to find accommodation and a place to operate. The team spent a lot of time looking for a location on the beach on the north side of one of the four islands served by Air Tahiti. There are no longer any boarding houses or hotels directly on a beach to the north. A lodging was finally found on the south side of Hiva Oa, (an island dear to Paul GAUGUIN and Jacques BREL) near the village of Atuona on a hillside 75m above the Pacific Ocean. There was an unobstructed view for several kilometers at the bottom of a valley to the North towards the Europe SP and the USA/Canada, and directly overlooking the Pacific via the Europe LP.

The direction due North and North/West was blocked by mountains over 1000m high. This was not ideal terrain, but Didier F6BCW who had operated with TX5EG from this site in 2017, was able to give valuable information on the exact location of the antennas. For the antennas, Didier negotiated an agreement to use an additional common land adjacent to the pension. With this information, VE7KW drew up an antenna plan that met the requirements of a three-station operation.



by Didier F6BCW was deployed just below the pension. This antenna could be switched from NE to SW (SP or LP EU). This antenna proved to be the most efficient for 40. A two-element beam for 80M was placed from the top of the hill to a point just above the pension. This antenna is described in the June 2018 issue of QST. An inverted L of 160M was installed on an 18m fiberglass mast with two elevated radials. It was just above the pension.



The antennas.



The radio.

3 Elecraft K3 radios, three Expert 1.3 and 1.5 amplifiers, and a Juma PA1000 were used, with one KX3 as backup. A total of 238 accessories, cables, tools, etc. were distributed among the team members. This included 650 meters of coaxial - everything was used! Donations and equipment loans were received from Expert Linears, DX Engineering, Radiosport helmets, Messi and Paoloni, Gigaparts and Quicksilver Radio.

A first Hexbeam was used for 12 and 20 meters and placed directly behind the boarding house.

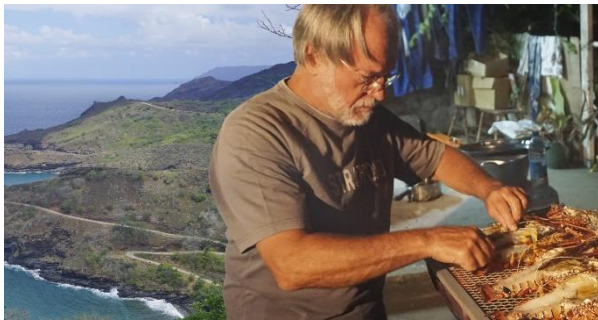
A second Hexbeam was used for 10, 17 & 40m. It was placed at the top of the hill, 50m above the pension.

A Moxon made VE7KW was installed for 15 and 30 at the South of the pension.

A vertical network of two elements for 40 (designed by the W4RNL) and manufactured

Miscellaneous.

The team met the VP6R team in Tahiti one evening on the way home. We organized a dinner with them. It was fun, and we got a lot of good information about their experiences. Didier F6BCW left for the Marquesas on November 3rd to prepare the radio shack and pass 3 times 100m of coaxial between the shack and the top of the hill 50m higher. The rest of the team joined Didier at Hiva Oa on November 6th.



Our stay at the pension KANAHAU and the radio

Accommodation at Pension Kanahau was modest but very comfortable. Tania was an excellent hostess and cook. The Marquesas Islands are the fruit and vegetable garden of much of French Polynesia, and we enjoyed a beautiful variety. Raw fish in all its forms is a staple food throughout French Polynesia, the whole team really enjoyed it.

The pile-ups were very good, but most of the signals were weak. We made a special effort to work on the European stations, and they were particularly weak. We found that CW and FT8 were the best modes given the conditions, although we used SSB during the good propagation conditions.

We had no radio or amplifier failure and almost no interference between stations. The distribution of the antennas, their distance and the optimization of the polarizations (vertical or horizontal) greatly contributed to the quality of the traffic.



We have deployed a beverage reception antenna for the 160m and a second delta loop for 20m.

All this was a challenge under the scorching southern summer sun, on the steep hillside, and with only two team members under the age of 70.

We reached our goal of 30,000 QSOs and are pleased that 13% of our QSOs were completed with Europe. Thank you all for the QRX during the limited EU openings. CW has been very productive with over 51% of QSOs.

FT8 and FT4 were also significant, with 35% of the QSOs. FT8's DX'P (Fox-Hound) mode sometimes worked well, but we had the same software problems as VP6R. It seemed that many stations did not have the correct configuration of the FT8 WSJT-X Hound, so we sometimes used the FT4. We also did some QSOs in the standard FT8, but this mode is very slow for a DX expedition. We encourage all FT8 operators to use RS232 to connect the computer to the radio, and to activate the Split (Rig or Fake It). For more information on the DX'P mode of the WSJT-X in several languages, follow the link.

<https://physics.princeton.edu/pulsar/k1jt/wsjt.html>

After operation TX7T :

FO/F6BCW stayed on Hiva Oa for a week.
QSL via F6BCW.



FO/K5PI operated from Fakarava (FO - OC-066) for about a week while scuba diving.
QSL via K5PI.

QSL TX7T via M0URX's OQRS service.
<http://www.m0urx.com/oqrs/logsearch.php>

Acknowledgements :

Thank you for the precious financial help of our Donors who trusted us.

Thank you for the good QSO done with Europe, France and especially in CW with the UFT buddies.

73 QRO and see you in 2021 for a new expedition organized by yours truly.
I'll tell you about it in a few months !!!

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