CANSAT BOOTCAMP

Satellites as small as a soda can were the main protagonists on Sunday July 22 in the event CanSat BootCamp, held in Costa Rica. In the event, several students from the ITCT (Costa Rica Institute of Technology) flew these CanSats using a dron. They tested 5 satellites in a football court in Cartago.

Despite its small size, these satellites have a complex composition: all of them carry a camera, a GPS, humidity and temperature sensors and a radio antenna to communicate with the earth.

The event started with a workshop where the students built the so called “CanSats”. Around the world, CanSats are used as a learning tool to improve design, structure and operation of these space satellites.

This activity was organized by the Space Systems Lab (SETEC-Lab) at ITCR along with the company Imagine XYZ and it was sponsored by the BID, Banco Interamericano de Desarrollo and Intel. They also got support from some international organizations as Global Shapers, Unisec-México and Sulá Batsú.

As organizers said, one of the goals of this event is to motivate youth to get involved in aerospace themes.

NEW BOOK ABOUT AMATEUR RADIO SATELLITES

Pablo Cruz Corona EA8HZ made possible something many ham radio ops interested in satellites were asking for. He updated his book ‘Satélites de radioaficionados’ whose first edition is dated back in 1994 and it was an inspiration and guide to many hams that wanted to get into this amazing scientific hobby.

This new book remembers the early years and includes the new satellites used by hams, teaching us how to use the best antenna, the best operating techniques and the software we can use.

Pablo talks also about the ISS and remembers Skylab as well as the rockets and actual space programmes in the making. This is a book every amateur radio operator will love, as well as any space lover in general. The book Radioaficionados, satélites y Naves espaciales' by Pablo Cruz EA8HZ it’s available thru the URE website.
9A90P, was active from the Island of Palagruza EU-090, locator JN82dj.

CU2ZG touring Spain had the chance to activate several grids: HM76, IN61, JN12, IN91/92, IN82/92. IN81/91 and JN01.

F4DXV, Jerome was active from Monaco, 3A (JN33rr) and the grids, JN15, JN25, JN35, JN54, JN44, JN63, JN43, JN23, JN53.

NJ4Y, KE4AL & N4ESS, Matthew, Robert and Rich activated EL84 (never before activated) with the special call K4R between july 6-8.

N8HM, was active from Poland as SP/N8HM in JO94, july 12-16.

EA4SG, David, activated IM98 and JM08 july 14-15.

EB1AO, Jose, activated IN53, IN63, IN73 during 2 weekends in july

EA4GSX, Miguel activated IN82.

KM4LAO, Ruth was active in some FM sats from FM25.

KE4AL, Robert as active from EL87/97, EL86/EL96 and EL95 + EL94

KX9X, Sean called CQ sat from FN32, FN44 and FN45

Activations Done:

KX9X, Sean from FN45
DSLWP-B RECEPTION

As you know, China launched two sats into a lunar orbit. One of them seems to be silent as is not sending reports to earth, and the second one, named DSLWPB, is capable of transmitting in JT4G in two ham frequencies 435.400MHz and 436.4MHz.

The first transmission schedule was done in 435.400 and it was impossible for me to receive its signal due to a police frequency inhibitor I have nearby which is on 433.000. My friend David EA4SG informed me about the second transmission schedule, this time on 436.400MHz, and we had a window on june 30 between 05.00-07.00 UTC .. So we got up early and, as you can see in the image, the inhibitor still generated some qrm but I could decode some frames.

My working conditions in UHF: M2 436CP42UG antenna, 8m Ecoflex-15, LNA SHF-Elektronic 432-VOX, 25m of hard line 1/2", TS-790E and WSJTX. My experience working the moon on 144 Mhz help

Juan Antonio
EA4CYQ

We´ll wait for you:
9A90P, Palagruza Island

I had nice opportunity to work satellites at island of Palagruza and to spend nice time there.

The IOTA Expedition to the Island of Palagruza (EU-090, CI-084, LH 0057, ARLHS-012) from 16th until 23rd June 2018 was organized by Amateur Radio Club Croatian Flora Fauna. We used callsign 9A90P.

Operators were Emir (9A6AA), Radovan (9A2SC), Branko (9A3ST), Kiko (9A4WY), Marijan (9A1MB), Vito (9A5VS), Neven (9A5YY) and Zeljko (9A3DF). We operated in CW/SSB/DIGI mode at HF, 6m and VHF.

Branko, 9A3ST and Neven, 9A5YY operated at radio amateur satellites in SSB, FM and CW mode. We did 93 QSOs at satellites:

These satellite setups were used:

1) FT-817ND(RX), FT-817ND(TX), Arrow antenna
2) FT-817ND (RX), Baofeng VU-82, Arrow antenna
3) Yaesu VX-3E (RX), Baofeng VU-82 (TX), Mini-Moxon homebrew antenna

It was most easiest to do many QSOs at FM satellites. At some passes we did 6 QSO-s. Unfortunately at some SSB/CW satellite passes only 9A90P called CQ SAT.

We did QSOs with these DXCC entities: EA,I,G,OM,OH,RA,YO,9A,DL,YL,LZ,SV,UR,F,GM,IT9,SP and HB.

It was very interesting to activate very rare grid JN82DJ. We tried to operate at satellites almost all day and evening. When we didn't have any satellite pass we operated at HF, we were at the beach to swim, we explored the island of Palagruza, we took pictures from the lighthouse, we had lunch or we wash dishes in the kitchen etc. We hope we did SAT QSOs with everyone who wanted to work us at satellites.

We were lucky we had nice weather. So we operated sats all days during our stay at the island. Only at Friday 22nd we stopped to operate sats in the afternoon because of rain and strong wind. Also we didn't have any problems with satellite equipment.

We did QSOs with these EA satellite stations: EA4CYQ, EA7AHA, EA4SG, EB1AO and EA1JK.


You can send QSLs to our QSL manager Franjo, 9A2MF. Logs will be uploaded to the LoTW.

Finally it was really our pleasure to do sat QSOs at island of Palagruza.

Thank you very much to everyone who did QSOs with us. We hope to hear you next time at sats from an other Croatian island or rare grid.

73 de Neven, 9A5YY