



# NEWSLETTER-AMSAT-EA

05/2018  
MAY

[contacto@amsat-ea.org](mailto:contacto@amsat-ea.org)

[eb1ao@amsat-ea.org](mailto:eb1ao@amsat-ea.org)

Translation by Fernando EC1AME

## PICSAT: END OF MISSION

Launched on January 12 and with a ham radio FM transponder, Picsat lost its comms with earth, so the control team decided to announce the end of the mission. It all happened on March 20 when, after 2 passes over Europe with good signals, the sat became silent. On March 30 amateur radio ops in the Morehead State University received some weak signals but they were coming from the TIGRISAT satellite.



Picsat

## D-STAR ONE PHOENIX

After announcing the successful launch last February, on April 19 the "satellite lost" announcement arrived from German Orbital Systems.

## TIANGONG-1



The Chinese space station Tiangong-1, reentered the earth on April 2 burning over the South Pacific Ocean. Chinese first space station was launched by the CNSA back in 2011. This 8.5 tons space lab was used for medical experiments and to test several technologies in order to build a manned space station that China wants to settle in orbit by 2022. Tiangong-1 was the first step in the Chinese space race to equal Europe and the USA. China plans to inaugurate its new space station when the ISS enters its final days in orbit. China also launched another space lab named Tiangong-2 in September 2016 and plans to send humans to the moon.

## COMMERCIAL ISS HAMTV RECEIVER

The Minotaur-Express receiver created by the DATV-Express group to receive the ISS video signals is already available. This is a 144MHz to 2420MHz DVB-S/S2 receiver with speeds between 100k and 10M. It uses an open source software created by Jean Pierre Courjaud, F6DZP. More info here: <https://www.datv-express.com/>



## ANNOUNCED ACTIVITIES

**MI6GTY and ON4AUC** will activate , weather permitting, several grids in northern Ireland.

**9A90P**, The Radio Club Croatian Flora Fauna will be active on sats from Palagruza Island with these references: EU-090, CI-084, LH-0057 and locator JN82dj .Look for them between june 16 - 23

**VE3HLS & N6UA**, Ken and Doug have plans to be active between may 5 and 12 from the north part of Canada where they will try to activate all FO grids they are able to do (FO01/02/03/10/11/12/13/20/21/22/23).

**AC0RA & W5PFG**, Wyatt and Clayton will be active may 25-27 from EL58.

**NJ4Y, KE4AL & N4ESS**, Matthew, Robert and Rich will activate EL84 (never activated before) with the special call K4R from july 6 to 8.

**AL6D**, Gabe will be in the north of Alaska on may 10-11 activating grids



DC7KOW, Heiku bike-sat!, never give up humour



EA5ISO

## ACTIVATIONS DONE



F4DXV waiting A07



EA5TT y EB1AO from IM99/IN90/JM09/JN00



FS/FG8OJ, Bertrand

**EA4GSX**, Miguel was active from Im79.

**VE3HLS**, Ken activated line EN93/94 on april 14.

**EB1AO**, Jose was active from IM99 between april 6-10

**EA5TT, EB1AO** Manuel and Jose were active on april 15 from IM99/IN90/JM09/JN00 .

**F4DXV**, Jerome, was active on april 10-15 from JN13, JN03 and JN12 from EA.

**FJ /N0KV**, Saint Barts Dxpedition april 19-26 on FM and SSB satellites.

**FG8OJ**, Bertrand was active during the last days of april from FS, Pj7.

**CU2ZG**, Pedro was active from IM58 and JO40



CU2ZG, Pedro in DL



EA4GSX, Miguel's young blood

## WEIRD RUSSIAN GRIDS

Andrey (R3THA), active in ramdon from weird grids during his long trips in Russia. He operates with a HT and rubber duck. In april he was heard from several grids and from Volgograd.



## Mediterranean Rover - F4DXV

Hi AMSAT friends I took advantage of my Méditerranéen sea vacation from April 11 to 15 to activate JN13 (rare grid) on satellites. Also JN12 as EA3/F4DXV and finally JN03 during a break at Toulouse on my return trip. My radio activity was secondary after family outings.

Due to a bad weather, our outings were rather limited so I had more periods of availability as expected for the radio but 90% of the time under the rain!. I have been present first on some FM orbits: AO-91 (x3), AO-85 (x2) and SO-50 (x3) with a simple and quick full duplex HT: FT-530 (5w)+ ELK . And later on SSB: UKube , XW-2..., AO-7 passages with my usual pedestrian multimode setup: FT-817s (5w) + ARROW.



Multimode setup

After negotiating with my wife, I left specially on a high point in the mountain to give me the best chance to operate JN13 in the transatlantic AO-7 orbit (2.8 ° max from there) for friends SA / CA / NA. But unfortunately, the satellite was no longer in mode B on this orbit, I was really disappointed but this is the game with that amazing old bird !

Thank you to everyone I contacted during these 4 days with 92 QSOs done on 8 satellites, with many EA stations in my log ! I hope that i gave you the opportunity to confirm new squares. See you on my next rove !

After negotiating with my wife, I left specially on a high point in the mountain to give me the best chance to operate JN13 in the transatlantic AO-7 orbit (2.8 ° max from there) for friends SA / CA / NA. But unfortunately, the satellite was no longer in mode B on this orbit, I was really disappointed but this is the game with that amazing old bird !



Waiting AO-7 from JN13

73 Jérôme F4DXV

## SSTV FROM THE INTERNATIONAL SPACE STATION

Between april 11-15 the ISS celebrated the Cosmonaut Day with several SSTV transmissions on 145.800 (mode PD-120), using the Kenwood D710E. All images were part of the Interkosmos programme . If you received some image you can ask for the commemorative certificate here:



[www.paceflightsoftware.com/ARISS\\_SSTV](http://www.paceflightsoftware.com/ARISS_SSTV)

## ARROWS ARRIVED !!!

We have just received a new bunch of arrow antennas. With this order we reached 30 arrow antennas received by spanish satellite users. Now that the nice weather is coming, we hope many EA sat users go out there and activate grids from all the country. If you want us to publish your photo with the arrow, don´t hesitate to send it to AMSAT-EA.

## Radio Club EUREKA, VY0ERC

From late February to early April 2018, Alex (VE1RUS) and Pierre (VE3KTB) operated on FM satellites AO-91 and AO-92 from grid squares ER60, ER70, EQ69 and EQ79, using the call sign of the Eureka Amateur Radio Club, VY0ERC. This was the first FM satellite operation from VY0ERC and it happened because of the support of the world satellite community. It is likely the first FM satellite activation from around 80°N latitude.

Alex and Pierre are scientists that work with the Canadian Network for Detection of Atmospheric Change (CANDAC) and their facility the Polar Environment Atmospheric Research Laboratory (PEARL). PEARL is located close to the Eureka Weather Station that is operated by Environment and Climate Change Canada, a Canadian Government Department. PEARL consists of 3 separate facilities housing instruments that measure atmospheric properties from the surface to over 100 km in altitude. Together with John (VE3CXL) who served as a radio operator in Eureka during the 1950s, Alex and Pierre formed the Eureka Amateur Radio Club, “probably the most northern amateur radio club in the world”. VY0ERC has always been active on HF and has many EA calls in its log. Given the strong association with a research culture, VY0ERC is always open to attempting new amateur radio activities and so when approached about the possibility of FM satellite qsos quickly said ‘Yes!’.



VE3KTB from the 80th parallel

Contact was first made between VE1RUS and George, MI6GTY and shortly thereafter Gabe AL6D joined the conversation and started a “GoFundMe” page to raise money to purchase and mail an Arrow 2m/70cm hand-held antenna setup. Contributions were made by 18 of our fellow hams, and the antenna was purchased by Patrick WD9EWK who sent it to Yellowknife NT to meet our charter flight leaving for Eureka. Gabe also loaned us his Kenwood TH-72 hand-held. All the pieces joined Pierre in Yellowknife for the 5+ hour charter flight to Eureka, where Alex was already waiting.

The activation of these far northern grids started with that first contact on 21 February 2018 made by Alex on AO-92 with LA4FPA. The first few days were fairly moderate with temperatures in the range of -20 to -30C. Later, it became colder with temperatures approaching -45C. It is always necessary for care to be taken when working outdoors in these temperatures, especially in the presence of wind. Even the short time span of a low earth orbit satellite which usually lasts up to 12 minutes can result in very cold fingers and faces! Also as we expected for our QTH the most of the contacts were made when the satellites are low above the horizon which typically happens right after AOS and right before LOS so the preparations had been made to survive the time span. We generally had a heavy mitten on for the hand (or hands) holding the antenna, and to maintain dexterity, a lighter weight glove on the hand operating the radio so that the radio controls could be operated properly. In the first 2 weeks we were often operating in twilight as the Sun did not rise above the horizon until 20 February, and was quite low in sky, gaining about 20 minutes of daylight per day. An audio recording of most passes was created so that we didn’t have to deal with logging contacts while were operating outside. In total, 106 qsos were logged from 5 locations in and around Eureka. In all, 53 grids, 14 DX entities and 59 unique calls were worked. The last contact was made on 1 April 2018.

Location	Lat/Lon	Grid	QSOs
PEARL	80.05N 86.42W	Er60	81
Eureka Weather Station	79.99N, 85.93W	Eq79	13
EQ69	79.99N, 86.1W	Eq69	6
EQ69/79 line	79.99N, 86.00W	EQ69/79	7
EQ69/ER60 line (80N)	80.00N 86.07W	EQ69/ER60	5
Total			112

Table 1: QSO breakdown by location

Table 1 gives a partial break-down of the the qsos by location. Most were completed from the PEARL RidgeLab location in ER60, where Pierre and Alex spent most of their working hours.

Alex and Pierre would like to once again thank the satellite amateur radio community for their support, enthusiasm, and patience. We hope to continue to put the far north on the air with trips being planned for the summer and fall seasons. For those interested, qsl cards are via Charles Wilmott, M0OXO.