# NARA Newsletter



Sponsor

## President's Message – Randy VE7FAA

NARA events for 2024 got off to a great start with Winter Field Day held at Meadow Drive Park in Nanaimo on Jan. 27. It was great to see a good number of NARA members and others attending and operating our club station VE7NA. Thanks to those that set up the stations and to all those who participated the event.

Field Day in June seems a long way off, but in the meantime NARA members can get together at two coffee klatches a week and one on the third Thursday of each month. No doubt there will be other events as well whenever members can get together. For now, NARA monthly club meetings will continue on Zoom, but as the weather improves perhaps some in-person meetings will be considered.

Don't underestimate the NARA coffee klatches, they are an excellent way of getting together with other NARA members, chatting about radio, informally planning our activities, and discussing the looming issues which we face in 2024. Two of these coffee klatches happen outside of normal working hours. The coffee klatches are there for you to meet up with other members, please come along and enjoy.

The NARA executive is very interested in how NARA members enjoy their amateur radio as well as how can we further improve the club in the future to meet your needs. So, we do need your input. To that end NARA is conducting an online survey of members. Information on this is given elsewhere in this NARA Newsletter. The results of the survey might well be used to initiate additional projects or activities, we encourage you to please take part.

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## NARA Coffee Klatches

BC QSO Party	Feb. 3 & 4	ORCA			
Merville Flea Market	Apr. 21	Comox ARS			
Field Day - ARRL	Jun. 22-23	NARA			
Canada Day Contest	Jun. 30-Jul 1	NARA			
NARA Picnic	Jul. TBA	NARA			
Nanaimo Bathtub Race	Jul. TBA	NARA			
NIARS Campout	Aug. 15-19	NIARS			
Velo Unpaved Bike Race	Aug. TBA	NARA			
Canada Winter Contest	Dec. TBA	NARA			
Vembership Survey – please participate					

Date

**Island Events** 

# Membership Survey – please participate

NARA has set up an online survey for its members. It will remain open until Feb. 15. You are encouraged to take part because NARA wants to serve its members as well as possible. You can identify yourself if you wish, or you can remain anonymous by simply not entering your email address or call sign.

To take part in the survey go to https:// s.surveyplanet.com/g613h9cg. The rest is straightforward. The more input NARA receives from its members the better. Those who are not NARA members may also complete the survey and these results, which could also be useful, will be looked at separately.

#### Here is a breakdown of the questions:

- $\Diamond$ What Canadian qualifications do you hold?
- $\Diamond$ How many years since you obtained your first call sign
- What age band (years) are you in?  $\Diamond$
- $\Diamond$ On which bands do you operate?
- $\Diamond$ Which are your favorite bands?
- $\Diamond$ Which modes do you use?
- $\Diamond$ What are your favorite modes?
- $\Diamond$ Are you able to put up an external antenna at your home?
- Have you ever had to deal EMI or RFI?

Day	Frequency	Time	Location
Tuesday	Weekly	10:30 am	South end Smitty's: #50 10 <sup>th</sup> Street
Thursday	3 <sup>rd</sup> Thursday of the month	7:00 pm	Tim Hortons: 2320 Northfield Road
Saturday	Weekly	9:00 am	North end Smitty's: 2980 North Island Hwy, in
			Rock City Centre

- *♦ Do you operate mobile?*
- ♦ Do you use APRS when mobile?
- *♦ Do you participate in any of the following?*
- ♦ How often do you use the local repeaters on VHF and UHF?
- ♦ Which NARA repeaters do you use?
- ♦ Are there any other types of repeaters you would like to see operational in the Nanaimo area?
- ♦ Do you use the Island Trunk System?
- ♦ How often do you use the Island Trunk System
- ♦ Would you intend to operate the new club station being set up by NARA?
- *Do you receive the monthly NARA Newsletter?*
- ♦ Do you follow NARA on Facebook?
- ♦ Do you use Discord?
- ♦ Do you take part in contests organized by NARA, or intend to in the future? (For example, Field Day, Canada Day, Canada Winter or other)
- ♦ Do you take part in other radio activities organized by NARA? (For example, fox hunts, special building projects, etc.)
- ♦ Would you be interested in POST Basic license training courses (not including Advanced or CW)
- *♦* Would you be interested in Advanced training?
- ♦ Would you be interested in CW training?
- Are there any other activities or services which the club does not presently offer which would be of interest to you?
- ♦ Any other comments about NARA you would like to pass to the NARA Executive?

This survey only takes a few minutes to complete.

## Winter Field Day 2024



With an atmospheric river passing through Nanaimo on Jan. 27, this year's Winter Field Day would have perhaps been better named "Wetter" Field Day. In addition, does a balmy 10C temperature really qualify as winter?

Two tents were set up, one for operating and the other as a food/discussion tent. Both tents were well heated thanks to Kevin VE7KGV who brought along a propane heater for the food tent and also a small diesel powered heater which was used for the operating tent.

Foodwise, Linda's appropriately named "chili" kept everyone warm at lunchtime. The triplexer was used in conjunction with NARA's trailer mounted beam so that the 20, 15 and 10m bands could all use the beam antenna at the same time.

The triplexer unit, along with the band pass filters, really have proven to be an asset to the club's contest operations.

The club operated in Winter Field Day on Saturday for about six hours of on air time and the club made over 150 contacts.



Linda, Jack and Gerry operating on the 10, 15 and 20m bands using the triplexer and the single NARA HF beam



General view of the Winter Filed Day site with the operating tent on the left and the food tent on the right

# **British Columbia QSO Party (BCQP)**

Feb. 3 & 4



The BC QSO party takes place over the weekend of Feb. 3-4. There are two blocks of activity, one on each day. From 8 am to 8 pm local Pacific time on Saturday, and on Sunday from 8 am to 4 p,, also local Pacific time. The BCQP is not exactly an HF contest but for stations in BC the object of this QSO party is to 'make as many contacts as you can with other stations in the province as well as the rest of Canada, into the Unites States and beyond.' The BC QSO Party is organized by the ORCA DX and Contest Club. Full rules and information are at https://www.orcadxcc.org/bcqp.html. Rebecca VA7BEC, contest coordinator for ORCA, reminds participants not to forget to call "CQ BCQP." Also, that BCQP is one of very

few regular events — maybe the only one — that puts BC in a spotlight. In this party, BC stations can contact anyone anywhere, including other BC stations while stations outside BC are on the hunt for BC stations.

## **AREDN Update**

For those using the AREDN IP telephone system the good news is that Kyle VE7ODG has recently completed his move and the primary telephone PBX has been reestablished.

#### **NARA Training Enhancements**

The NARA Training Group announces some changes to the training to be provided for the ISED Basic certificate exam and assistance for the ISED Morse test. The NARA Training Group intends to make its training course videos available to those interested in the Nanaimo area.



The NARA training group consists of David VA7DXX, Devan VE7LSE, Katherine VA7HN and Mike VA7WPM. Mike also coordinates the courses and acts as the student liaison. The group also wishes to acknowledge Tom VE7TOM, who has provided course content for two of the 10-course sessions.

For the past three years the NARA training group has provided a Zoom-based 10-week course each autumn. The course has been designed to be visual and builds up knowledge with each section and then uses typical exam questions to enhance the learning process.

The group has deliberately designed the course so that there are 10 sessions, each spread a week apart — this is not a cramming course. After each two-hour session the slides from the PowerPoint course are provided to the students so that they can review the content and go over any sections they need or want to study. The one-week gap also provides time to review the ISED question bank and, if necessary, consult an additional study guide which the group recommends to students.

Each year the group attempts to improve the course material and the autumn 2023 course sessions were

video recorded. In order to make the videos available to the students the Training Group has set up a Google shared drive. The slides and videos are uploaded to the student's Google drive to assist with their study.

In addition to the annual autumn Zoom-based course, the NARA Training Group has decided to make the training videos and slides available to prospective amateurs in the Nanaimo area. Those who are interested in reviewing the videos to study on their own will be given access to the shared drive. The plan is to make the videos and slides available early this month (February 2024). Those interested in studying on their own will need to contact the group via the email adddress <a href="mailto:training.ve7na@gmail.com">training.ve7na@gmail.com</a> and provide their contact information and location. The group will give feedback to anyone who has questions during their self-study period.

So far as the ISED 5-wpm Morse (CW) test is concerned, the NARA Training Group will issue a document to anyone interested in learning CW. The document recommends methods of learning and practicing Morse code. If there is sufficient interest, on-air practice would be considered.

In addition to the above, the NARA Training Group now also provides a post-Basic ISED exam document to those who have recently passed the Basic exam and have obtained their call sign. This document concentrates largely on the next steps that a newly licensed amateur needs to take to purchase their first radio and to get on the air. This course also includes information on a variety of on-air activities.

The email address <u>training.ve7na@gmail.com</u> should be used for all communication with the NARA Training Group.

# Letter to RAC - Remote Operation

At the January NARA General meeting there was a discussion about remote operation. NARA will send a formal letter to Radio Amateurs of Canada (RAC) concerning the ISED regulations for remote station operation. NARA is concerned that under ISED regulations only amateurs with Advanced certification can operate a remote station. The executive is of the view that any amateur with HF privileges should be able to operate a remote station on HF. In several other countries which NARA has investigated there is no such restriction. A letter to RAC will be dispatched in early

February asking that RAC request that ISED amend these regulations. A number of other radio clubs in various parts of BC, who are also interested in remote operation, are supporting the NARA initiative.

#### Is Pluto a Planet?

The Northern Arizona DX Association will be using the



special call sign W7P between Feb. 10 and 18. This callsign was first used in 2021. This activity is part of a 10-year countdown to mark the discovery of Pluto 100 years earlier. The discovery was made at the Flagstaff, AZ, Lowell

Observatory on Feb. 18, 1930, by Clyde Tombaugh. Tombaugh's nephew, Doug Tombaugh, N3PDT, will be operating the radio at W7P/0 this year. More info. at https://www.nadxa.com/w7p\_pluto\_2030.html.

#### Don Cole VA7EY - Silent Key

NARA is sad to announce that long time member Don Cole, VA7EY, became a Silent Key on Jan. 7. He was 86.

Don was born in Manchester, England, and was raised in Stevenage, about 40 kilometres north of London. Though he came to Canada from the UK, it could also be said Don arrived here from the sea. At coffee klatches he would regale listeners with stories about working as a radio operator in the British Merchant Navy in the days when Morse code was still in use for maritime communication.

His love for amateur radio and boating never abated, as his obituary pointed out: "Donald enjoyed sailing with his love and was an active part of the Ham radio community wherever he lived."

Don was very active in NARA, attending meetings and events, and he was always wanting to advance his already considerable knowledge of radio. He was still operating in his 80s and had got himself set up on FT8 not long before his health began to decline. Don remains an inspiration to club members young and old.

He was also active in St. Peters Roman Catholic Church. A funeral service was held there for him on Jan. 24.



#### How is DX - David VA7DXX

Many of us make New Year's resolutions. We set ourselves a goal, something that we would like to achieve. There is nothing wrong with setting a goal and the same is true of having goals in amateur radio. If you operate on the HF amateur bands, why not make a pact with yourself to succeed in some task?

Many amateurs set an initial goal of working 100 countries on HF. Why be content in just working around North America when it's clear that you could work a lot further? This is where DXCC, the DX Century Club, comes into play. There is no doubt that most amateurs on HF with 100 watts and a wire antenna could work 100 countries. A friend in the UK who has been licensed for over 40 years has achieved over 320 counties with 100 watts and wire antennas, but it takes time of course as you have to wait for the right propagation conditions and other factors to be on your side. So, in early 2024 why not set yourself a goal in amateur radio?

What does joining the DX Century Club (DXCC) mean? It means that you have to be organized, committed and patient. You need to log all your HF contacts for a start. Also, you need to get your countries confirmed. Confirmation for DXCC can be either electronic, by using the ARRL's Logbook of the World, or by collecting physical QSL cards and submitting them to the ARRL. You can also submit QSL cards locally as there is an ARRL DXCC card check on Vancouver Island. Either way, being organized and committed is a worthwhile task in itself. I mentioned patience and that is what is also needed to achieve most goals. Perhaps we are used to or expect instant results these days but working 100 countries does require patience.

In reviewing DX activity during 2023 experts have looked at the data, and apparently 287 DXCC entities/countries were active during the 12 months of 2023. I am guessing that this number is based on DXCC data from the ARRL. So, of the present 340 possible DXCC countries available, 287 were active last year. That means that if you had started hunting for DXCC countries on Jan. 1, 2023, and had been active 24/7 (well not quite) and had succeeded in every pile up (well not quite), you could have worked 287 DXCC countries. Of course, 53 DXCC countries were unfortunately not active in 2023.

We know that sometimes there may be no activity from a DXCC country for a decade or longer, especially in the case of uninhabited or small islands. It is part of the fun, and the achievement of working all of the DXCC countries on the air, which is why patience is a virtue! It can take at least 15 to 20 years of radio activity to reach 330 countries, which is the threshold for the DXCC Honor Roll. At the other end of the scale a good friend in Oregon just worked DXCC on 40m in just over two weeks! Mind you, he has a superb setup with big antennas and he is a very experienced operator. The question here is how do you gain experience in working DX and pileups if you don't even try! You have to start somewhere.

Working to join the DX Century Club is also a reminder that were it not for all of the DXpeditions taking place each year by intrepid groups of amateurs, the world of DXing would be rather less interesting. Working 100 countries and gaining the ARRL's DXCC award is a great achievement. There were 16,000 DXCC applications to the ARRL in 2023. Maybe you could become one of them sooner than you think!

Last month I mentioned the solo DXpedition by Canadian IOTA activator Cezar VE3LYC. Cezar operated from two islands in Micronesia in the western Pacific, making a total of 6,464 contacts. Cesar kindly sent me a picture of his Satawal Atoll (OC-299) station and living quarters.



IOTA activator Cezar VE3LYC operating from Satawal Atoll in Micronesia as V62S

As we start a new year of DXing from the Pacific northwest, the most wanted countries from the west coast of North America are listed below in the order of the most wanted. On this list the one that I still need is in the No. 2 spot, Glorioso Island, which is slated, hopefully, to be on the air later this year. Each of the other

countries that I have worked on the list below has its own story.

- 1 P5 North Korea
- 2 FT/G Glorioso Island
- 3 FT5/X Kerguelen Island
- 4 YK Syria
- 5 BV9P Pratas Island
- 6 SV/A Mount Athos
- 7 EZ Turkmenistan
- 8 ZS8 Prince Edward & Marian Islands
- 9 BS7H Scarborough Reef
- 10 CEOX San Felix Islands

Here is my story of working the Prince Edward and Marian Islands, prefix ZS8. These islands are located well to the south of Cape Town, South Africa, at almost our antipode. The islands are uninhabited except for scientists stationed at a research/weather station on Marion Island.

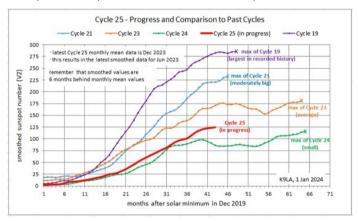
In January 2014, when I was living in Edmonton and operating as VE6DXX, I was comparing DXCC countries needed with a DXCC friend who lives near London, UK. We were chatting on the phone when ZS8 activity came up in the conversation. My friend told me that Carson McAfee, then licensed as ZS8C, came onto 15m SSB every Saturday afternoon (ZS time) to chat to some friends. I was given the frequency and wished good luck. The next Saturday I awoke, had an unhurried breakfast and strolled into the shack with a hot cup of coffee. On a whim I thought that I would see if ZS8C was around. I swung the beam towards South Africa and tuned to the frequency I had been given, which was 21.360 MHz. Low and behold, there was ZS8C, one of the staff at the weather station, chatting to his friends. I just could not believe that I heard him first try. I patiently waited for him to finish his sked and then called him. He immediately replied and gave me a signal report of 5 and 5. I completed a QSL card and mailed it direct that day to his QSL manager, who I believe was his XYL. The card is shown below.



Since my contact with ZS8C in 2014 I have never again heard the ZS8 islands on the air, and indeed that is why this DXCC country is still in the top-10 on the wanted list. I have to say that working a new country is not always that easy, but then as this story shows there is always an element of luck involved!

Lots of DXpeditions to look out for in February, they include: Vanuatu (JY), Antigua & Barbuda (V26CV), Georgia (4L), Juan Fernandez (CB0ZA), Solomon Islands (H44MS), Guyana (8R), Madagascar (5R), Wallis & Futuna (FW8), Mauritius (3B8), Temotu (H40WA), St Kitts & Nevis (V4) and Uganda (5X1XA).

Of course, the 11-year sunspot cycle is important to anyone who is trying to work long distances on the HF bands. The graph below compares the present Cycle 25 sunspot activity, shown in red, to other cycles.



One of my favorite contests of the year is the ARRL International DX Contest on CW. This takes place this year over the weekend of Feb. 17-18, with the Phone section taking place on Mar. 2-3. I like these contests because everyone outside of North America is beaming towards us! All you have to do — if you have a beam — is decide where you want to work and point the beam accordingly. I typically beam towards Europe in the mornings, southward around lunchtime, towards Japan mid- to late-afternoon, and then later down toward Australia and New Zealand. The well-known Beatles song "I'll Follow The Sun" sort of says it all; as a guide point your beam towards the Sun!

As predicted, the very well organized Clipperton TX5S DXpedition team departed San Diego on Jan. 11 in their chartered vessel *Shogun* and became active from Clipperton Island on the afternoon of Friday, Jan. 19. Having previously worked the island on all HF bands on CW I was not in a hurry to join the pileups, however there were strong signals into our area on Sunday,

Jan. 21 and I did work TX5S on four bands that day; subsequently on all bands 80 to 10m prior to the DXpedition closing down on Jan. 27. Bruce, VE7PTN in Nanaimo, worked Clipperton via satellite, a new country for him. Two others in Nanaimo, Burnie VE7IAD and Jack VE7GDE, also made contacts on SSB for a new country.

TX5S used a system called 'livestream', which meant that if you went to a particular Clublog website you could see the call signs, bands and modes of stations being worked in real time. Moments after your QSO your call sign would pop up on the screen. This is a great system and really assists a DXpedition to work more stations as it helps avoid duplicate contacts and also proves that you are not working a pirate. You immediately know that you are in the log.

20M	FT8	<b>W8JRK</b>
30M	CW	Y02MNZ
80M	CW	VA7DXX
80M	CW	AG5S
40M	FT8	IZ8BRI

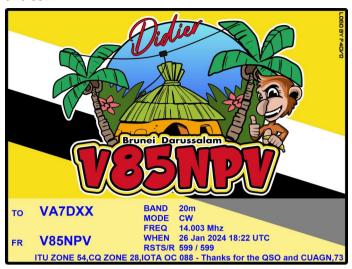
The livestream website for TX5S on Clipperton Island which moments after your contact showed that you were in the log



Pictures from the recent TX5S Clipperton Island DXpedition

Finally, on Friday, Jan. 26, I worked a station in Brunei, a country which is not that active. From time to time you work someone on HF and immediately after they reply to you they call you by your first name. Thank you QRZ.com! I have had that on CW many times and V85NPV in Brunei was no different. But something different did happen this time. About two minutes after the QSO I received an e-QSL card from Didier V85NPV by email, which I have reproduced below. To be honest, I prefer a real QSL card but receiving a card by email was certainly novel for me. Didier is stationed in Brunei for

for the next few years and will no doubt be active on CW and SSB.



# Artemis II NASA Moon flight

The Artemis II loop-around-the-moon flight, which includes Canadian astronaut Jeremy Hanson, was due to be launched this November but has been delayed. This was to have been the first crewed mission to the moon since Apollo 17 in December 1972. The new launch schedule has been pushed back to September 2025. The delay is because of three technical issues; heatshield erosion, component issues in the life support system, and problems associated with the launch abort system. Hanson holds the American call sign KF5KLU.



Canadian astronaut Jeremy Hanson holds the US call sign KF5KLU

#### **NARA Work Bees**

- Friday Jan. 5 Work on the new club station to wire up the rotator and fit new lights in the radio
- Saturday Jan 20 Work at the VE7NA station is ongoing. The main antennas are up and were first tested on air on by Mason VE7PMD on 80m SSB.

## Comox 2024 Ham Swap & Flea Market

An early reminder that the Comox Valley Amateur Radio Club hosts its annual Swap & Flea Market on Sunday, April 24. The venue is the same as in previous years, the Merville Hall at 1245 Fenwick Road on Highway 19A, just north of Comox/Courtney. Vendors need to book their tables (\$20) in advance. To book a table contact Brian VE7RD at sells795@telus.net.

#### **NIARS Summer Camp out**

The annual North Island ARS camp out and work bee, to fix and maintain some of the north Island Trunk System repeaters, will again be based at the Cluxewe Resort. The dates this year are Aug. 15-19, that is four nights. The resort is located northwest of Port McNeil on the coast off Highway 19.

Cluxewe offers a mix of cottages, RV, and tent-camping sites. Anyone interested in helping out should book ASAP at <a href="https://cluxeweresort.com/">https://cluxeweresort.com/</a>, and in addition contact Devan VE7LSE at <a href="https://cluxeweresort.com/">ve7lse@gmail.com</a>. To see which sites to date have been booked by radio amateurs, go to <a href="https://docs.google.com/document/">https://docs.google.com/document/</a> <a href="https://docs.google.com/document/">d/17tswPW4wGFPihlgD-eCYGZU-O5FmG0HHfhHw2J6HPWo/edit?usp=sharing</a>



Cluxewe camp sites and cabins

# **NARA's website is:**

http://www.ve7na.ca

Nanaimo Amateur Radio Association

#### **NARA Events for February**

February 1 - NARA Executive Meeting (Zoom)

**February 8** - NARA General Meeting (Zoom)



## The Satellite Downlink GreenCube Breaking News Bruce VA7PTN

Bruce, VE7PTN, was to have taken a break from his satellite column this month but then there was 'breaking satellite news.' Bruce explains:

On Jan. 25, Sapienza Space Systems and Space Surveillance Laboratory (S5Lab) at Sapienza University of Rome in Italy announced that the GreenCube digipeater satellite will be switched off on Feb. 5. Given that this satellite has become so popular with the amateur radio community since it was activated back in 2022, this news was met with much disappointment.

A petition on Change.org has been started to encourage a different option:

(<a href="https://www.change.org/p/save-the-greencube-satellite-digipeater">https://www.change.org/p/save-the-greencube-satellite-digipeater</a>?

utm content=cl sharecopy 37854098 en-GB%
3A4&recruiter=1328318331&recruited by id=87e1287
0-bc5b-11ee-9374-

d3a7e8e-

dea60&utm\_source=share\_petition&utm\_medium=cop\_ylink&utm\_campaign=psf\_combo\_share\_initial&utm\_te\_rm=psf&share\_bandit\_exp=initial-37854098-en-US).

AMSAT US has sent an open letter to S5Lab offering to work with them and other AMSAT organizations to find a solution to keep the digipeater in operation. Hopefully a solution can be found.

In February I used the GreenCube satellite to make contact with the Clipperton DXpedition (TX5S), my only successful contact with them. I will certainly miss this satellite if it is switched off as planned. The satellite remains very busy as of this writing and I hope for a more positive update next month.

The volunteer group of NARA members producing this newsletter would like to thank all those who provided material for this month's issue.

The deadline for the March 2024 issue of the NARA Newsletter will be noon on Monday February 26 with an intended publication date of February 29.

News items and comments should be sent to:

news@ve7na.ca



#### Dear Friends,

after one year and a half of operations, it is time to conclude the GreenGube operations with the planned de-commissioning activities. After the conclusion of the nominal experiment and with the digipeater payload active for more than one year, we will perform the passivation operations for the satellite.

The planned passivation operations will be executed on Monday, 5 February 2024, at 00:00 UTC. From that day, GreenCube will be completely passivated and the digipeater will be switched off for good.

We want to **thank everyone** that endorsed, supported or participated in the mission and the **radio amateur community** that enthusiastically became a true part of our project. We hope that GreenCube will somehow be part of your memories of radio amateurs, space engineering enthusiasts, and we hope to involve you soon in many more adventures.

Thanks once again for the unbelievable memories shared together... See you soon!







This is a copy of the announcement that Greencube made to say that the satellite was too be closed down



Radio Amateur Satellite Corporation (AMSAT)
PO Box 27
Washington, DC 20044-0927
www.amsat.org

Keeping Amateur Radio in Space

January 25, 2024

Sapienza Space Systems and Space Surveillance Laboratory (S5Lab) Sapienza University of Rome Via Email

To The GreenCube Team

Over the past 13+ months, amateur satellite operators around the world have enjoyed the use of the digipeater on GreenCube (IO-117). As amateur radio's first satellite in a medium earth orbit (MEO), it has opened worldwide long-distance contacts via amateur radio satellite that had not been possible since the loss of AMSAT-OSCAR 40 in 2004. As this letter is being written, a DXpedition to Clipperton Island in the Pacific Ocean has made contact with several hundred amateur operators around the world — the first activation of this rare location on amateur satellite in over 30 years. AMSAT and the amateur satellite community greatly appreciate your team making this wonderful resource available.

Not only has this satellite been a great resource to the amateur community, but the amateur community has also assisted GreenCube's mission by uploading millions of frames of data received – including much data from when the satellite is not within the primary ground station's footprint.

Launches above low earth orbit are rarely available for amateur satellite missions. Since the first amateur radio satellite launched in 1962, fewer than ten have gone to orbits beyond LEO and only QO-100 (available to only part of the world) and IO-117 remain in service.

Due to the unique orbit and capabilities, we request that S5Lab postpone the scheduled passivation operation and keep the satellite's digipeater in service. Amateur satellites have a long tradition of extended lifetimes. Amateur radio operators sill utilize AMSAT-OSCAR 7 – laumched nearly fifty years ago in 1974 – for communications on a daily basis. Many other amateur radio satellites have been actively used for ten to twenty years. AMSAT stands ready to leverage our 55 years of experience in managing amateur radio satellites and work with S5Lab, AMSAT Italia, other AMSAT organizations, and the amateur satellite community at large to overcome any obstacles, regulatory or otherwise, to keeping GreenCube in service for as long as possible.

Sincerely

Thuthealule 2
Robert Bankston, KE4AL

President Radio Amateur Satellite Corporation (AMSAT)

The reply made by AMSAT, hoping to keep the Greencube satellite on the air