



Doc # 19

Amateur Radio on the International Space Station

ARISS Report to the ARRL Board of Directors

January 2025

Submitted by:

**The 2024 ARRL ARISS Committee,
Director Tharp, Chairman
details from Rosalie White**

ARRL ARISS Committee Members for 2024

Director Tharp
Director Wilson
Vice Director Nelson
Vice Director Temples
Ms. Rosalie White, ARISS Liaison to ARRL
Mr. Steve Goodgame, ARRL HQ staff liaison

Summary of ARISS Program

Amateur Radio on the International Space Station (ARISS) is a well-known international working group that promotes STEM education and Amateur Radio. In 1996 the ARRL CEO tasked ARRL Headquarters staff to help meet NASA's challenge to set up just 1 worldwide ISS ham radio team. The staff set about establishing ARISS-International by contacting IARU societies while AMSAT-NA contacted other AMSAT societies. The ARRL has been an ARISS sponsor since 1996. ARISS was built on the shoulders of human spaceflight radio activities since 1983 when national amateur radio groups began working with space agencies to fly Amateur Radio to support educational and ham radio activities on the Space Shuttle (SAREX), Mir (Mirex) and the ISS (ARISS).

The ARRL-led portions of these projects have always included leadership roles, advice to ARISS on items related to FCC and IARU regulations, public relations support to the ham community, and sometimes education activities related to school radio contacts.

Each year ARISS helps astronauts earn ham licenses and make multiple Amateur Radio school contacts and sometimes, radio contacts with hams. ARISS activity puts Amateur Radio in the lives of students, educators, media, communities, political leaders, and hams.

Hams are proud to know astronauts are licensed hams. Hams enjoy making thousands of Amateur Radio contacts each year via the ARISS cross band repeater and using ARISS packet. Hams capture ARISS SSTV images downlinked by ISS crews—very popular with hams and students, and educators enjoy involving their classrooms.

Authorizing Board Motion to Establish the ARRL ARISS Committee, Minute 27, January 2019

In January 2019 the ARRL Board of Directors established the ARRL ARISS Committee and tasked it with improving ARRL's support to the ARISS program. The ARRL Board motion:

Be it therefore resolved: A permanent ARISS committee is created by the Board to develop an interactive relationship with ARISS. Said committee should consist of three members of the Board, with assistance of the ARRL Lifelong Learning Manager and the ARRL Communications Manager as consultants, all to be appointed by the ARRL President. The committee will recommend the framework under which the ARRL will support ARISS to include recommendation of the ARRL representative to ARISS, standardized mission support, operational needs, ongoing mentoring and assistance to local Amateur Radio clubs in support of ARISS contacts, and a standardized set of Public Relations messages to ensure consistency of the ARRL message to ARISS, local Amateur Radio groups and the public at large.

ARRL ARISS Committee Activities for 2nd Half 2024:

With ongoing IT system disruption and committee members Tharp, Wilson and Temples entangled in an election, the likes of which we never hope to repeat, the committee did not formally meet during the second half of the year. We did exchange email and received updates from ARISS. With ARISS becoming its own entity in recent past, direct committee interactions are limited compared to when the committee was first formed. A internal committee review of the structure will be done in 2025 and possible changes to the committee presented at the July ARRL BOD meeting. A in-person meeting between Chairman Thar, CEO Minster and the ARISS-USA Executive Director, Frank Bauer is scheduled for after the January meeting.

ARRL ARISS Committee Communications

The Committee is appreciative of Ms. White continuing to update the Committee chair regularly about ARISS activities, and to notify him and Directors, Vice Directors, and Section Managers in the pertinent divisions and sections when an ARISS radio contact near them has been scheduled by NASA.

The Committee would like to note that many times these ARISS contacts receive final approval from NASA within days of a contact, and on occasion, the time of notification is even shorter. ARISS makes every attempt to put the word out soon after contact dates are finalized. Any last-minute schedule changes by NASA to space vehicle dockings and undockings will almost always affect ARISS school schedules.

ARRL and ARISS Goals

The number one goal of ARISS is to be all about education and inspiring youth about STEM, especially space and radio communications. The agreement between ARISS and schools is for the schools to handle the media in their area. Schools do a fine job with that. ARISS prepares and distributes news releases prior to an ARISS school contact to the ham radio community and aerospace community. Naturally, these news releases have a balanced mix of information on radio and space. See Appendix B. near the end of this report for the list of media hits.

ARRL ARISS Contacts in the US in the second half of 2024

US ARISS radio contacts in the second half of 2024, not including ones in other countries were:

Arizona Science Center, Phoenix AZ
Kopernik Observatory & Science Center, Vestal NY
Pacific Science Center, Seattle WA
Tuskegee Airmen Inc. National Convention, Arlington VA

Bayou Academy, Cleveland MS
Greenville Jr High School, Greenville IL
TEACH-NW Charter School, Springfield OR
Coastal Community School, Satellite Beach FL
Bishop O'Connell High School, Arlington VA
South Carolina Regional Workforce Advisors for 4 schools, Columbia SC
Hillsboro Charter Academy, Purcellville VA
Sally Ride Elementary School, Orlando FL

***As Sally Ride Elementary School hosted its ARISS radio contact (Dec. 17, 2024) for students with astronaut Sunita Williams, ARISS noted that this was the 1,700th ARISS school radio contact!*

ARRL ARISS Committee Travel at Conventions, Conferences

Director Tharp provided handouts for ARISS and the ARISS-STAR program along with ARRL materials at a table exhibit for the Mike and Key Electronic Swapmeet in March, Sea-Pac, the NW Division Convention in July, the Wenatchee Hamfest in July, and the Pacific NW DX Convention in Everett.

See Appendix A., a table on ARISS volunteers' outreach at ham conventions, hamfests, club talks, school talks, interviews, and more.

Thank You, ARRL

ARRL thanks ARRL for its support of ARISS from July through December.

Respectfully submitted,

Mark J. Tharp, KB7HDX
ARRL ARISS Committee Chair

Rosalie White, K1STO
ARRL Liaison to ARRL

The Following Pages are—

Appendix A: Outreach Events

Appendix B: List of 88 *Known* Media Hits from Second Half 2024
Appendix C: Things of Interest

Appendix A.: Outreach Events

| ARRL Events for Hams, General Public, Youth & Educators, Space Industry |
|---|
| July 2 Nashua (NH) Area Radio Society-ARRL educator D. Deskur gave ARRL talk |
| July 17 Regional Workforce Advisors-ARRL SPARKI Workshop, Florence SC |
| July 20 annual Frontiers of Flight Museum Moon Day-ARRL exhibit, Dallas, TX |
| July 20 Wireless Technology Workshop-ARRL exhibit, Gujarat, India |
| July 22 ARRL Proposal Webinar-for any US educator to hear about ARRL, virtual |
| July 28 Casale Monferrato Italy STEM Conference-ARRL talk |
| last week of July Space Week for students, Scrivia Italy-led by ARRL educator |
| July 27 Casalese Italy Amateur Astronomers Group-ARRL talk |
| July 29 annual ISS R&D Research Conference-ARRL exhibit, Boston MA |
| Aug 1 ISS National Lab Education Partner Meeting-ARRL talk, virtual |
| Aug--six youth camps at Kopernik Science Center--with ARRL lessons, Vestal NY |
| Aug 7 two ARRL Interns' presentations-Goddard Space Flt Center, Greenbelt, MD |
| Aug 9 International Astronomical Union-ARRL talk, Cape Town, S. Africa |
| Aug 11 Pacific Northwest DX Convention-ARRL table, Everett, WA |
| Aug 11 Def Con Conference-ARRL talk, Las Vegas, NV |
| Aug 17 Tuskegee Airmen Youth ARRL Workshop, Arlington, VA |
| Aug 17-18 Huntsville Hamfest-ARRL table, forum, ARDC interview, Huntsville, AL |
| Aug--five youth camps at European Space Agency in Belgium-with ARRL lessons |
| Sep 9 Ham Radio Fun Podcast-Interview of F. Bauer, virtual |
| Oct 10 Coffee Connections Service-ARRL talk, Bloomington, IN |
| Oct 12 Believe in Girls girl scout conference-ARRL hands-on table, Grand Forks, ND |
| Oct 12 AMSAT Colloquium in UK-ARRL SSTV talk |
| Oct 13 AMSAT Colloquium in UK-ARRL School Contacts talk |
| Oct 18 Winchester Starbase-ARRL lessons to youth, Winchester, VA |
| Oct 25 AMSAT-NA Symposium-3 ARRL talks, Tampa, FL |

| |
|---|
| Oct 26 SmallSat Education Conference-ARISS talk, Titusville, FL |
| Oct 25 Coastal Community School-ARISS hands-on lessons, Satellite Beach FL |
| Nov 2 Tuskegee Youth ARISS Workshop, College Park, MD |
| Nov 6-9 National Science Teachers Assn conference-ARISS exhibit, New Orleans, LA |
| Nov 7 Galileo Academy lessons on ARISS, ham radio telemetry, Eagle ID |
| Nov 11 HamJam ARISS forum, Alpharetta, GA |
| Nov 15 Bishop O'Connell School ARISS talk by Frank Bauer, Arlington VA |
| Nov. 11-18 ARISS SSTV Event for space enthusiasts, SWLers, hams, global |
| Nov 22 Sally Ride Elementary School lessons on radio and ARISS, Orlando FL |
| Nov 23 San Giorgio Monferrato Library-ARISS talk, Alessandria, Italy |
| Nov 24 Space.com interview of F. Bauer on ham radio and ARISS, global |
| Dec 25 ARISS SSTV Event for space enthusiasts, SWLers, hams, global |

- **The following are a selection of 4 photos from ARISS outreach activities:**

ARISS volunteer teaches Winchester STARBASE kids about ARISS



Some of the Tuskegee Youth at ARISS SPARKI Youth Workshop-College Park, MD



Florida kids learn about antennas



Educators at ARISS SPARKI Workshop in Florence, SC



Appendix B: List of 88 *Known* Media Hits from Second Half 2024

July: NASA Newsletter ran story on ARISS proposal window opening -- went to 61,002 subscribers, was shared through NASA Office of STEM Engagement's social media (411,044 X followers, 122,709 Facebook followers, 529,847 Pinterest followers)



Call an astronaut aboard the space station with amateur radio! ARISS is accepting proposals to host ham radio events connecting crew members in space with students in classrooms.

The next proposal window for US schools and educational organizations to host an Amateur Radio contact with a crew member on board the space station opened for contacts to be scheduled for Jan 1, 2025–Jun 30, 2025. Proposals are due by Sept 6th, 2024 at 11:59 PM Pacific Time.

[Read more](#)

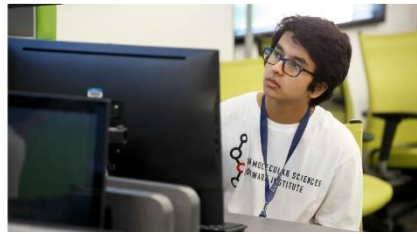
July: *Leader Union* newspaper story on ARISS educator's enjoyment of teaching STEM and an upcoming ARISS contact

July: Explore NASA web: story on ARISS intern and his interest in robotics and studying for his ham radio license

Unsh Rawal

Unsh Rawal joined SIP in 2022 as a rising high school senior. He came to the program with a passion for robotics and a desire to expand his interests and try new things.

Rawal's project contributed to the development of an interface that allows students to control robots over local and remote wireless connections. The interface is part of an educational activity for Amateur Radio on the International Space Station (ARISS) exploring telerobotics, or the distant remote control of a robot.



July: Web story on DARC web page about ARISS forums at 2024 HAM RADIO conference

July: WIVT TV News [Kids at Kopernik call astronauts on International Space Station | WIVT - News 34 \(binghamtonhomepage.com\)](#)

WIVT's story (see just above) picked up by Yahoo

WIVT's story (see just above) picked up by MSN

July: WICZ Fox 40

[Kopernik Campers Get Chance to Speak with Astronaut Aboard Inter - WICZ](#)

Aug.: 98.5 radio interview & web story about ARISS and ARISS education activities

<https://www.sonshine.com.au/articles/connecting-earth-to-space-how-amateur-radio-links-us-to-the-iss/>

Aug.: DeltaNews-owns 4 TV stations

https://www.deltanews.tv/news/bayou-academy-students-talk-to-an-astronaut/article_ed60d288-60cd-11ef-bbab-a350add8dfff.html

Aug.: Delta News story used on TikTok!

Aug.: *Spot On Mississippi* carried DeltaNews story

<https://spotonmississippi.com/ms-delta/826400/bayou-academy-students-talk-to-an-astronaut.html>

Sept.: *Bolivar Bullet* story picked up from Delta News about ARISS contact

<https://bolivarbullet.com/bayou-academy-spaces-out/>

Aug.: news stories on Gymnasium der Stadt Meschede in Germany carried by--

- WDR TV
- *Sauerland Courier* newspaper
- WDR Radio2
- Radio Sauerland

Aug.: NASA ISS Research e-newsletter's Trivia Quiz touted ARISS. Quiz asked: "How are crewmembers connecting from space to Earth to inspire younger generations to pursue interests and careers in STEM and provide school communities with opportunities to learn about space technology and communications?"

| Useful Link of the Week | Trivia Quiz |
|--|---|
| <p>Crew Earth Observations</p> <p>In Crew Earth Observations (CEO), astronauts on the space station photograph our home planet from their unique point of view in low Earth orbit. Photos record how the planet is changing over time, from human-caused changes like urban growth and reservoir construction, to natural dynamic events such as hurricanes, floods and volcanic eruptions. A major emphasis of CEO is to monitor disaster response events. CEO imagery provides researchers on Earth with key data to understand the planet from the perspective of the station. Crews have been photographing Earth from space since the early Mercury missions beginning in 1961. Check out the magnificent imagery from the Gateway to Astronaut Photography of Earth!</p> <p>Direct link, please share around! https://bol.isc.nasa.gov/</p> | <p>This Week's Question:</p> <p>For more than two decades, astronauts aboard the orbiting lab have connected with students and hobbyists worldwide, sharing details about living and working in microgravity. In early August, Williams connected with students from Banda Aceh, Indonesia, and answered questions about station research as the orbiting lab passed overhead. How are the crewmembers connecting from space to Earth to inspire younger generations to pursue interests and careers in STEM and provide school communities with opportunities to learn about space technology and communications?</p> <p>Answer provided next week.</p> <p>Hint: appears in one of the stories above, in this week's edition.</p> |

Aug. stories about Astronaut Suni Williams handling ARISS contacts ran in:

- New Zealand Foreign Affairs' MIL-OSI section web page
- *USA Today*
- *Yahoo! News*
- ABP Live free-to-air TV channel
- Atlanta CBS Morning News using photo of Suni at the ARISS station mic

Sep.: Ham Radio Fun Podcast interview of Frank Bauer talking about ARISS done-- 205 views

Oct.: Media hits on Her Royal Highness the Duchess of Edinburgh, special guest at Girlguiding UK ARISS contact-- Royal Photographer and Press Association reporter shared content with national and regional media groups who ran stories:

- *London Evening Standard*
- *Daily Mail*
- *Express.co.uk*

- *spacegovuk*
- *Mail Online*
- *Mirror online*
- *Norwich Guardian*
- *Surrey Live*
- *Reddit*
- *The Herald*
- *Border Telegraph*
- *Woking News & Mail*
- *RSGB*
- *Royal Life Magazine*
- *PressReader.com*
- *Hellomagazine.com*
- *Daily Express*
- *The Independent*

<https://www.independent.co.uk/space/sunita-williams-girlguiding-sophie-edinburgh-patron-b2624386.html>

As an aside... the Royal Family YouTube channel video had 13k views in 5 days' time

<https://www.youtube.com/watch?v=jouaEv1jCyc>

Social Media posts tallied 178.9k Impressions, and were posted by:

- Girlguides
- UK Space Agency
- RSGB
- the Royal Family

And ARISS social media viewers skyrocketed, i.e., ARISS's X post got 26.5K Impressions!

Oct.: ISS Research web story (also YouTube, Facebook & Twitter) on Crew-8 science successes.

<https://www.nasa.gov/missions/station/iss-research/crew-8-concludes-space-station-scientific-mission/>

The story listed above was picked up by:

- *Mirage News*
- *Universe Space Tech*



CONTENTS

- Reversing resistant microorganisms
- Brain organoid models
- Bioprinting human tissues
- Growing better drugs
- Alloy solidification
- Fueling the flames
- Very long-distance calls
- Student robotics competition
- Immune function in space
- Getting weighed in weightlessness
- Satellites for science
- Remote-controlled robots
- The power of photography

Very long-distance calls

NASA astronaut Jeanette Epps wraps up an ISS Ham Radio session on April 10, with students in Italy. The program connects students and enthusiasts with astronauts in space via amateur radio. Participants study space, radio waves, and related topics to prepare questions before their scheduled call.



NASA

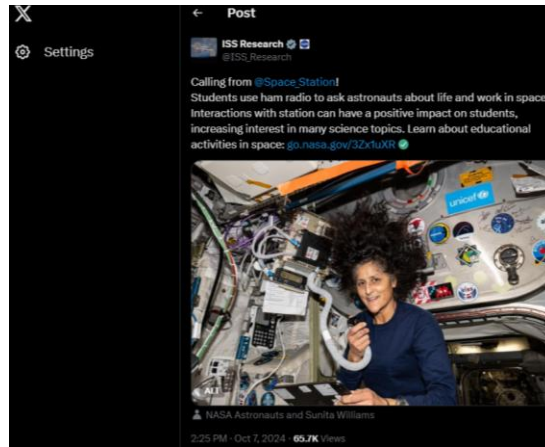
Oct.: South Carolina Department of Employment and Workforce very long story titled, "Operation Space Talk SC Connects Middle School Students with the International Space Station."

Oct.: ISS Research story “ARISS helps students use “ham radio to ask astronauts about life and work in space.”

<https://www.nasa.gov/missions/station/iss-research/educational-activities-in-space/>

Note: ISS Research’s post on X—generated 74.4K views in 48 hours!

The web story was picked up by *Mirage News*.



Oct: WBNG article on ARISS educator Drew Deskur/Kopernik Science Center Director’s \$1 million NY grant to expand youth STEM activities. Governor Hochul traveled to present the award—WBNG quoted her: “The connections you make with the astronauts and the space station are really making it come alive, not just for the adults, but for the kids.”
<https://www.wbng.com/2024/10/31/governor-hochul-visits-broome-county-delivers-1-million-kopernik-observatory/>

Nov: Three newspaper articles on ARISS school contact in Italy:

- *Il Popolo*
- *Il Comune della Bassa Valle Scrivia*
- *Settegiorni*

Nov.: NASA web story (and X post garnering 57.4K views) on Nick Hague’s 2024 ARISS contacts and doing another one during a mission in earlier years



Nov.: Media stories about girl and boy scouts at an ARISS contact

- *Kingsville Times*
- CTV News

<https://windsor.ctvnews.ca/have-you-been-to-the-moon-scout-groups-contact-international-space-station-1.7113275>

CTV story picked up by

- *Ground News*
- *Daily Guardian*

Nov.: Space.com article: "How Amateur Radio is Connecting Astronauts in Space with Kids on Earth," featuring ARISS

Nov.: ARISS contact in Azores

Acoriano Oriental

<https://www.acorianooriental.pt/noticia/alunos-do-colegio-do-castanheiro-comunicam-com-estacao-espacial-internacional-365655>

Correio Dos Acores <https://correiodosacores.pt/2024/11/27/alunos-do-colegio-do-castanheiro-comunicaram-com-astronauta-na-estacao-espacial-internacional/>

TV station RTP3

<https://acores.rtp.pt/local/alunos-do-colegio-do-castanheiro-estiveram-em-contacto-com-astronauta-donald-petit-em-missao/>

Dec.: ARISS contact in Spain

Euskadi.eus/noticia

<https://www.euskadi.eus/gobierno-vasco/-/noticia/2024/la-consejera-educacion-visita-indautxuko-eskola-motivo-proyecto-espacial-que-ha-desarrollado-alumnado/>

DEIA.eus/Bilbao

<https://www.deia.eus/bilbao/2024/12/04/alumnos-indautxuko-eskola-bilbao-conectan-9013384.html>

eotb/eus

<https://www.eitb.eus/es/noticias/sociedad/videos/detalle/9642870/estudiantes-de-indautxuko-eskola-conectan-con-estacion-espacial-internacional-y-hablan-con-astronauta/>

Dec.: ARISS contact at Podstawowa im. Walentego Stefańskiego

Poland Radio Ostrowiec

<https://radioostrowiec.pl/2024/12/05/uczniowie-podstawowki-w-bodzechowie-radiem-polaczenie-z-miedzynarodowa-stacja-kosmiczna/>

Dec.: Hillsboro Charter Academy ARISS radio contact:

Loudon Times-Mirror

https://www.loudountimes.com/0local-or-not/1local/hillsboro-students-connect-with-international-space-station-by-ham-radio/article_cabb4b64-b8c0-11ef-9ef4-1fb2fa8424ab.html
LoudonNow.com

https://www.loudounnow.com/news/hams-give-hillsboro-charter-students-a-space-station-hookup/article_d04aa764-b811-11ef-945d-975b52ccc1c5.html

NoVA Scanner

<https://www.novascanner.com/author/clecompte/page/2/>

DC News Now TV

<https://www.dcnewsnow.com/news/local-news/virginia/loudoun-county/hillsboro-academy-steam-students-get-to-chat-with-astronaut-on-orbiting-space-station/>

DC News Now story was picked up by Yahoo.com

Dec.: Sally Ride Elementary School ARISS contact

WUSF NPR

<https://www.wusf.org/science-space/2024-12-21/radioing-astronaut-iss-out-of-this-world-experience-sally-ride-elementary>

WFTV

<https://www.wftv.com/news/local/sally-ride-elementary-schools-aviation-aerospace-magnet-program-aims-stars/EILVYG7FAJGRZI3T52LEA4HUNU/>

WFTV story picked up by Yahoo News

<https://www.yahoo.com/news/sally-ride-elementary-schools-aviation-190143450.html>

WKMG

<https://www.clickorlando.com/video/news/2024/12/18/sally-ride-elementary-students-talk-to-nasa-astronaut/>

Telemundo TV

<https://www.facebook.com/NoticiasTelemundo/videos/ni%C3%B1os-de-una-escuela-de-florida-hablan-con-la-astronauta-sunita-williams/2603363239874086/>

Freelance journalist Ashley Cisneros on LinkedIn

https://www.linkedin.com/posts/ashleyannecisneros_ariss-activity-7274794335018094594_mB8/

Orange County Public Schools web site

<https://www.youtube.com/watch?v=HmiWFXcNsZA>

Florida Public Media

<https://www.cfpublic.org/space/2024-12-20/radioing-an-astronaut-at-the-iss-an-out-of-this-world-experience-at-sally-ride-elementary>

Dec.: 10 media hits (most are on the next page) began with NASA web item on astronauts doing ARISS contacts and ISS activities <https://blogs.nasa.gov/spacestation/>



People magazine

<https://people.com/astronauts-return-to-earth-delayed-festive-holiday-photo-from-space-8764755>

People ENTERTAINMENT CRIME HUMAN INTEREST LIFESTYLE ROYALS STYLEWATCH SHOPPING

Suni Williams and Butch Wilmore posed while wearing Santa hats in a photo shared by NASA's Johnson Space Center on Dec. 16

By **Nicholas Rice** | Published on December 21, 2024 08:00AM EST

23 COMMENTS

Don Pettit and Suni Williams. PHOTO: NASA

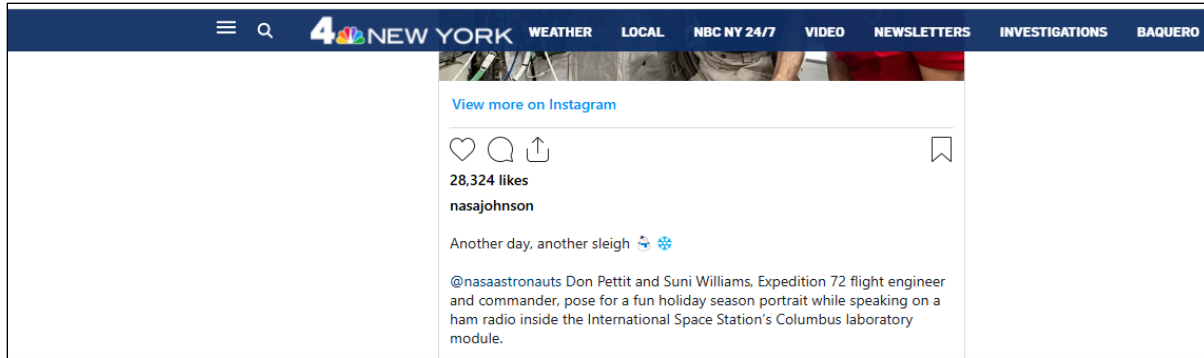
[Christmas from outer space!](#)

Suni Williams and Butch Wilmore, the two astronauts stranded in space since June, posed for a festive photograph ahead of the holidays in an [Instagram post](#) shared by NASA's Johnson Space Center on Dec. 16.

In the image, Williams, 59, and Wilmore, 61, can be seen [wearing Santa hats](#) while speaking on a ham radio inside the International Space

NY NBC TV

<https://www.nbcnewyork.com/news/national-international/stranded-nasa-astronauts-christmas-photo-is-raising-a-major-question/6085058/?os=rebeccakelsey.com%2Fblog&ref=app>



Livemint <https://www.livemint.com/news/trends/christmas-cheer-astronauts-butch-wilmore-sunita-williams-santa-hat-photos-in-space-ignite-new-theories-11735093719583.html>

News24 <https://news24online.com/world/ho-ho-ho-sunita-williams-turns-santa-aboard-iss-prepares-for-christmas-in-space/411213/>

SciTech Daily <https://scitechdaily.com/astronauts-prepare-for-christmas-with-work-and-wonder/>

Independent <https://www.independent.co.uk/topic/nasa>

The Economic Times

<https://economictimes.indiatimes.com/news/science/watch-sunita-williams-turn-santa-heres-how-shes-celebrating-christmas-in-space/articleshow/116403471.cms?from=mdr>

Picked up by *Yahoo News*

Picked up by *Marca.com*

Appendix C: Things of Interest

Oct. 5: VIP Duchess of Edinburgh & ARISS team member at ARISS contact—she asked the first question



***** As of November...

- Since the very first ARISS SSTV event, **people have posted over 170,000 images** at the ARISS SSTV Gallery!
 - ARISS SSTV is always hugely popular with hams, SWLers, youth, teachers, space fans.
 - In October, November, and December 2024, ARISS held an SSTV session.
- Oct., images of radio in space: 7,556 images downloaded/posted by 2,500 individuals, including 589 students and 704 educators
- Nov., images of ARISS's 40th Anniversary Conference on Amateur Radio on Human Spaceflight: 8,139 images downloaded/posted by 3,251 individuals, including 600 students and 745 educators--one of the most downloaded images is shown below
- Dec., images from each of the 5 ARISS Regions: participation numbers are being tallied.



August: An ARISS team member and science colleagues presented a forum on Radio Space Science Activities for Students at the DEF CON Conference in Las Vegas to 60 people. The talk covered a variety of details about ARISS.

October: New York Governor Kathy Hochul traveled to Kopernik Observatory & Science Center (KOSC) to present a \$1 million state grant to an ARISS educator/director of KOSC to expand youth STEM activities, which include summer camp ARISS radio contacts. Hochul's building tour included studying a big exhibit about ARISS contacts inspiring youth in STEM, and seeing the ham station. WBNG-TV's article quoted Hochul: "The connections you make with the astronauts and the space station are really making it come alive, not just for adults, but for the kids." Both the New York Assembly and Senate passed 2024 resolutions commemorating 50 years of KOSC offering public events, from eclipses to summer STEM youth camps featuring ARISS contacts. Image below: NY Governor Hochul learned about ARISS contacts and STEM studies [photo credit—New York State Executive Chamber]



Oct.: Estes Park, CO middle school students who earned ham licenses in 2021 because of their ARISS contact, still use their ham licenses (during 2024 School Club Roundup).

SCHOOL NEWS

Middle School Students Get On The Air

By Bob Ernst (W8OEW)
 EVARC President
 Sixty-two middle school students participated in the national School Club Roundup during the week of October 21-25 and got a chance to talk on an amateur "ham" radio. They made contacts across the country and around the world! The Estes Valley Amateur Radio Club (EVARC) worked with individual groups of 2-3 students to teach them how to use the radio and make contacts. This took place at the Estes Park Memorial Observatory where a radio room has been set up for student use.

In total, the students contacted 17 states, two Canadian Provinces and 20 countries. The countries included 14 in Europe, two in Central America, and one each in Russia, Uzbekistan, Japan, and Australia. EVARC has a big world map to help students locate these far-flung countries. Where is Uzbekistan

anyway? They found it. Thus, geography was part of the student's learning experience.

EVARC has started weekly after-school sessions for interested students to learn more about ham radio and practice getting on the air. Some have expressed interest in getting their ham radio license. EVARC will look into offering a class next year. Through past classes and monitoring there are now 10 middle school students with ham radio licenses.

Many thanks to Middle School / High School Registrar Tania Dennis for scheduling the students and to EVARC members Bob Ernst (WB8MP), Mike Guernsey (KD0OEP) and Chris Kochenour (W8RTE) for conducting the School Club Roundup. We also want to thank the Village Thrift Shop and Sunrise Rotary for providing funds for these student activities. Their support is greatly appreciated!



July 16: ARISS student Grace Papay won the 2024 Bill Pasternak Amateur Radio Newline Young Ham of the Year—she had initiated an ARISS contact at a school (see photo), has talked at ARISS forums at conventions, and took part in 2 YOTA ARISS contacts.



July: Air & Space Forces Association (AFA) chose an ARISS educator as 2024 Illinois AFA State Teacher of the Year award for excellence in STEM teaching—the school had an ARISS contact in 2024.

16 students got their ham licenses before their Illinois school hosted an ARISS contact after they'd enjoyed many STEM lessons tied to space and radio. (Photo shows the first 7 licensed kids.) 6 years earlier, the school had hosted an ARISS contact and all students asking questions had earned their ham licenses, as well!



Oct. A 13-year-old student who earned his ham license mentored classmates at their Oregon school on several ham radio building projects, prior to their ARISS contact. Two of the items were used for the contact. A month earlier, he had won 2nd place in 1 of 5 categories at a national level student STEM Challenge.

US ARISS Contacts—only missing South Dakota

