



RCA Amateur Radio Club

Indianapolis, IN



ARRL Affiliated Club
www.w9rca.org

MARCH 2025

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE TUESDAY, MARCH 11,
6:30 PM AT NORTH SIDE EVENTS, FORMERLY THE KNIGHTS OF COLUMBUS,
2100 EAST 71st, INDIANAPOLIS, IN

RCA ARC NEWS

FEBRUARY MEETING SUMMARY – Thanks to all who attended the February meeting. Jim, K9RU, reported on some restoration work he is doing on the station previously owned by Beurt SerVaas, W9WVO. W9ZB and K9RU participated in the January VHF contest. Results will be published in Sept. QST. There still a couple of (fairly minor) repeater problems we need to get fixed. We had some discussion on the subject of using unused TV channels (white spaces) for Internet. Highlights of the recent Consumer Electronics Show will be presented at the upcoming Indianapolis Radio Club meeting. We are planning to get together Friday after the Dayton Hamvention at Nick's and will need to get reservations next month. This is the same place we been meeting for the last couple of years. Jim, K9RU will handle getting the reservation and needs to know how many will be attending.

AMATEUR RADIO LICENSE TEST SESSION

Date: Saturday, March 8, 2025
Time: Starting at Noon **by appointment only.**
Location: Salvation Army EDS Training Facility, 4020 Georgetown Rd
Indianapolis, IN 46254-2407
Contact: **James Kajder (505) 228-3704**
Email: testing@indyradioclub.org
Required: FCC FRN and a completed NVEC 605 license application form.

Laurel VEC test sessions: <https://www.laurelvec.com/?pg=exams>

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Salvation Army Open Net, Thurs. 7PM, W9RCA repeater, 146.88 MHz, tone 88.5 Hz
Mar 8 Stew Perry Topband Challenge <http://www.kkn.net/stew/>
Mar 15-17 BARTG HF RTTY Contest
Mar 29-30 CQ WW WPX Contest, SSB

WA7BNM expanded contest calendar, <https://www.contestcalendar.com/>

Visit the **ARRL Special Event Stations database** at www.arrl.org/special-event-station to find other on-the-air events and commemorations.

Hamfest or Convention: www.arrl.org/hamfests

Find a license exam in your area: www.arrl.org/exam

ARRL Home: www.arrl.org

INDIANAPOLIS RADIO CLUB ONE DAY AMATEUR RADIO TECHNICIAN CLASS

The Indianapolis Radio Club is hosting a one-day Amateur Radio Technician License class that will consist of a review of the license material immediately followed by an FCC license test session

Date: Saturday March 15 9am-6pm with a break for lunch and the FCC exam right after the review

Cost: \$20 (\$10 if you are under 18)

Where: The Salvation Army EDS Training Facility
4020 Georgetown RD, Indianapolis, IN 46254
<https://tinyurl.com/SalvationArmyEDS>

To register contact: Jim Rinehart, K9RU k9ru@arri.net

The Technician license is the entry-level license in amateur radio. To earn the Technician license requires correctly answering 26 out of 35 multiple-choice questions on radio theory, regulations, and operating practices.

The Technician license gives access to all Amateur Radio frequencies above 30 MHz allowing communications on satellites, local repeaters, and limited ability to talk across North America. It also allows limited privileges on the frequencies below 30 MHz used for world-wide communications.

To pass the exam requires self-study of the material BEFORE the review. You will NOT be able to pass the exam by just attending the review session.

We have found the most effective method to study for the exam is to use the Study Mode on <https://hamstudy.org/tech2022> Be sure to establish a login so the site will track your progress and drill you on questions you missed. When you are confident that you know the material, you can take the practice exams to see how you are doing.

Another effective method for some people is just to review the entire Technician Question Pool daily: <https://ncvec.org/index.php/2022-2026-technician-question-pool-release>

During the one-day review, we will be using KB6NU's Technician Class License Study Guide. It is like a "Cliff Notes" covering the questions and answers needed to pass the exam: <https://www.kb6nu.com/wp-content/uploads/2023/03/2022-no-nonsense-tech-study-guide-v2-20230204.pdf>

There is a corresponding video which goes along with the study guide:
https://www.youtube.com/watch?v=vG2S_xV3zJE&t=0s

Another good short question and answer manual:
<https://www.dropbox.com/sh/7vmewgolfowxf8c/AABbUVdjhMW53RHxpgRjUGNsa?dl=0>

RADIO EMERGENCY PREPAREDNESS ACT RE-INTRODUCED

Legislation Will Increase Communication Options During Natural Disasters

WASHINGTON – U.S. Senators Roger Wicker, R-Miss., and Richard Blumenthal, D-Conn., and Representatives August Pfluger, R-Tex., and Joe Courtney, D-Conn. announced their joint re-introduction of legislation in the Senate and House to restore the right to Amateur Radio operators to install the antennas necessary to serve their communities.

Homeowner association rules often prevent Amateur Radio operators from installing antennas at their homes even though Amateur Radio has proven to be essential in emergencies and natural disasters such as hurricanes when other means of communication

fail.

“Mississippians should have access to every possible means of warning for natural disasters, including amateur radio operators. In an emergency, those warnings can mean the difference between life and death,” Senator Wicker said. “The Amateur Radio Emergency Preparedness Act would remove unnecessary roadblocks that could help keep communities safe during emergencies like tornadoes, hurricanes, and fires.”

“When disaster strikes, amateur radio operators provide vital, often life-saving information, which shouldn’t be hindered by prohibitive rules or confusing approval processes. The Amateur Radio Emergency Preparedness Act eliminates obstacles for ham radio enthusiasts, allowing them to continue their communications and serve their communities in the face of emergencies,” said Senator Blumenthal.

“Natural disasters and other emergency situations that hinder our regular lines of communication are unfortunately unavoidable, which is why we must bolster our emergency preparedness by removing the barriers amateur radio operators often run into when installing antennas. Amateur radio plays a vital role in public safety by delivering critical information to people at all times. My district is home to dozens of amateur radio operators ready to volunteer in the event of an emergency, and I am proud to lead this legislation,” said Congressman August Pfluger.

“As we know from recent natural disasters, amateur radio operators in Connecticut can be a critical component of disaster response and emergency management. It is in our communities’ best interest that we give them the capabilities to operate at the highest level, and with the re-introduction of this bill, we’ve taken a strong step in that direction,” said Congressman Courtney.

Background:

The Amateur Radio Emergency Preparedness Act of 2025 (H.R. 1094 and S. 459) would require homeowner associations to accommodate the needs of FCC-licensed Amateur Radio operators by prohibiting the enforcement of private land use restrictions that ban, prevent, or require the approval of the installation or use of Amateur Radio station antennas. Homeowner associations have often prevented installation and use of such antennas through private land use restrictions. This has hindered voluntary training for emergency situations and blocked access to necessary communications when disaster strikes.

Among other provisions, this legislation would:

- Prohibit homeowner association rules that would prevent or ban Amateur Radio antennas;

- Specify an approval process for installing Amateur Radio antennas;

- Provide a Federal private right of action to Amateur Radio operators in disputed cases.

On behalf of America’s Amateur Radio licensees, Rick Roderick, the President of The American Radio Relay League, re-confirmed the ARRL’s full support for the passage of the Amateur Radio Emergency Preparedness Act of 2025 and extended his thanks and appreciation to Senators Wicker and Blumenthal and Congressmen Pfluger and Courtney for their unflagging leadership of the bi-partisan effort to support and protect the rights of all Amateur Radio Operators.

The text of the House version can be found at this [link](#). --ARRL Letter

HIGH SCHOOL AND A SCI-FI MOVIE SPARK INTEREST IN AMATEUR RADIO

Steve Schickel was a young high school student in the late '80s and was introduced to amateur radio through his electronics classes. He also spent time working at a local RadioShack and watching science fiction movies at a nearby theater in his hometown of

Pensacola, Florida.

Amateur radio's next biggest influence on Steve came in 1997, on opening night of the movie "Contact," about a scientist who finds evidence of extraterrestrial life and is chosen to make first contact.

"I remember the entire theater erupted when, in the opening scene, amateur radio operator K4WLD responded to a call from W9GFO and stated his location was Pensacola," said Schickel. "It sounded like the home team had scored in overtime to win the game; it was so loud!

Fast-forward to November 2024. Schickel passed the exam for his Technician license and was assigned KQ4YXP on November 11. Then he passed his General license exam and on November 29 changed his to callsign to KQ4ZDR and then again to KZ4OW. After a month of study, he passed his Extra Class license exam. But there was still something missing from his newfound amateur radio hobby.

"To celebrate, I started researching vanity call signs in order to try and reward myself with a 1x2 call sign. I researched everything that had become available, and I was just about to file my application with the FCC with a list of about a dozen 1x2 calls when I paused and wondered if anybody actually had the call sign K4WLD from the movie."

It turned out K4WLD had just fallen out of a two-year grace period hold a couple weeks prior and was now available. Schickel submitted his vanity application and on January 11, 2025, was assigned the new call of K4WLD.

"I can proudly say that K4WLD was awarded to me in January 2025, and I still live in Pensacola! Now, life is imitating art," Schickel concluded, "and K4WLD has come home to Pensacola in real life ... just like in the movie."

All well and good except for one small detail. Most of his equipment has been on back order for several months! Schickel hopes to make his first "contact" in a few weeks. He is also a proud new ARRL member! --ARRL Letter

AMATEUR RADIO EMERGENCY SERVICE RENEWS RELATIONSHIP WITH RED CROSS IN PUERTO RICO

Amateur Radio Emergency Service® (ARES®) in the ARRL Puerto Rico Section has signed a renewal Memorandum of Understanding (MOU) with the American Red Cross Puerto Rico Region. The agreement establishes a framework of cooperation and a close working relationship with ARRL ARES volunteers.

Both ARES and the Red Cross agree that, with the resources of both organizations, the public will be best served during disasters, emergencies, and other public service related situations.

ARRL Puerto Rico Section Manager Carmen N. Greene, KP4QVQ, believes the new MOU benefits everyone. "The renewal of the existing MOU with the American Red Cross of Puerto Rico is a testament to the relationship and commitment we have at the local section level with the legendary organization," she said. "We feel that our communities will greatly benefit from the joint efforts to train and practice the ability to pass messages when the normal infrastructure is not available.

She added that as a new Section Manager, it feels great to have this experience with an important organization, as well as having great contact with all the hams around the island.

You can read the entire MOU here:

https://www.arrl.org/files/file/Public_Service/ARES/MOU/MOU_ARRL_Red_Cross_PR_2025.pdf.

RIG EXPERT'S ADMINISTRATIVE OFFICE DESTROYED IN RUSSIAN MISSILE ATTACK — PRODUCTION REMAINS INTACT

On February 12, 2025, RigExpert's administrative office, in Kyiv, Ukraine, was destroyed by a Russian ballistic missile. All employees are reported to be safe.

RigExpert is a leading manufacturer of antenna and cable analyzers and officials said they are committed to restoring operations as soon as possible.

"Our top priority is the safety of our team and the continuity of our operations," said Ashot Andeev, Chief Executive Officer. "While our administrative office is in ruins, our production facilities survived, allowing us to continue serving our customers and partners."

The company is working to minimize delays and fulfill its commitments while maintaining customer support operations. --ARRL Letter

REGISTRATION BEGINS MID-MARCH FOR THE 24TH USA NATIONAL RADIO-ORIENTEERING CHAMPIONSHIPS.

This year's event takes place June 18 - 22 in the Uwharrie Mountains of North Carolina and will be hosted by the [Backwoods Orienteering Klub \(BOK\)](#) at Morrow Mountain State Park. Radio-orienteers from across the country plus visitors from abroad are expected to attend. The on-foot transmitter-hunting championships begin Wednesday, June 18, with model events on two meters and 80 meters.

Thursday morning is the sprint, Friday is foxoring (a mix of foxhunting and orienteering), Saturday is the two-meter classic, and Sunday is the 80-meter classic. USA's ARDF Championships are open to anyone of any age who can safely navigate in the woods with hand-held radio gear for several kilometers. An amateur radio license is not a requirement.

Medals are awarded for each event in each of the [IARU age/gender categories](#). Winners of these championships will be under consideration for membership in ARDF Team USA, which will travel to future international competitions.

The name Radio Orienteering has been around for a very long time and has frequently been applied to the sport of Amateur Radio Direction Finding (ARDF). It hasn't been recognized in any official sense. However, because Radio Orienteering is more descriptive of the sport (especially to the orienteering community), and because Amateur Radio Direction Finding is often confused with other radio direction-finding activities (like mobile t-hunting), the [ARRL ARDF Committee](#) has decided to officially favor the use of the term Radio Orienteering, even renaming itself as the ARRL Radio Orienteering Committee. --ARRL Letter

GRANT WILL HELP YOUNG AMATEUR RADIO OPERATORS BECOME CONTESTERS

A \$10,000 grant to the University of Scranton, from the [Frankford Radio Club \(FRC\)](#) in Pennsylvania, will support the development of a contest dashboard that will leverage the popularity of amateur radio operator contests to benefit science, technology, students and [Ham Radio Science Citizen Investigation \(HamSCI\)](#) community members.

Through the grant, a team of university students, faculty, and FRC members, along HamSCI community members, will collaborate to develop a real-time Contesting/DXing Dashboard for the HamSCI Personal Space Weather Station (PSWS). The PSWS is a modular, ground-based system that measures space weather impacts on the Earth's ionosphere.

The grant will fund Scranton University student researcher, Owen Ruzanski, KD3ALD, a first-year computer engineering major, for the summer and fall 2025 semesters to help develop the contest dashboard and is expected to conclude in the spring semester of 2026.

University of Scranton physics professor Nathaniel Frissell, Ph.D, W2NAF, said through the project, he hopes the university's W3USR Amateur Radio Club members, present and future, will become active radio contesters.

“We are already ahead of schedule for this project,” said Dr. Frissell. “This past weekend we hosted students from W3USR and the Frankford Radio Club to take part in a little contesting. We made over 400 QSOs worth over 250,000 contest points.”

Ray Sokola, K9RS, past president the Frankford Radio Club, said that amateur radio contesters are one of the most enthusiastic subset of ham radio operators, and participants span a range of ages from teenagers to over 90. --ARRL Letter

YLRL SCHOLARSHIPS AVAILABLE FOR STUDENTS

The Young Ladies Radio League (YLRL) has announced its Memorial Scholarship program for 2025. The scholarship program is aimed at female amateur radio operators studying radio, communications, electronics or amateur radio related arts and sciences.

There are three Memorial Scholarship award categories:

- The Ethel Smith, K4LMB, Memorial Scholarship — \$2,500 award
- The Mary Lou Brown, NM7N, Memorial Scholarship — \$2,500 award
- The Martha “Marte” Wessel, KØEPE, Memorial Scholarship — \$1,500 award

“YLRL is committed to investing in women in amateur radio, and we believe that every act of volunteerism through amateur radio, even a small one, helps turn the world into a better place,” said Vicki Zumwalt, N6KLS, President of YLRL. “We hope that our scholarships will not only encourage students to learn more about science, technology, and engineering but also inspire them to take pride in being an amateur radio operator and to encourage others to do so as well.

The YLRL believes that education in the fields of radio, communications, electronics, and amateur-related arts and sciences will play an important role in shaping the world’s future. Through these memorial scholarships, YLRL hopes to encourage female students to learn more about amateur radio.

To qualify, students must be female, have an amateur radio license, meet the requirements listed on the [YLRL website](#) and apply using the [online application](#). Applications are due by April 30, 2025. Winners will be announced in July 2025.

The Young Ladies Radio League (YLRL) is an international non-profit organization of female amateur radio enthusiasts. It was founded in 1939 and is the longest-running YL club in the world. --ARRL Letter

COLORADO HIGH SCHOOL STUDENTS VISIT THE PLISHNER RADIO ASTRONOMY AND SPACE SCIENCES CENTER

In late January 2025, 17 students and staff members from Las Animas High School (LAHS) in Colorado visited the [Deep Space Exploration Society Radio Telescope](#) (DSES) located at the Plishner Radio Astronomy and Space Sciences Center near Haswell, Colorado. They also got an introduction to amateur radio.

“This first field trip visit of high school students reflected the dreams of Michael Lowe, former DSES board president, who sought to create a center for radio astronomy and space science education in southeast Colorado,” said DSES President Myron Babcock, KL7YY. Since 2009, society members have devoted hundreds of hours to rebuilding the Plishner site. In 2024, a grant from Amateur Radio Digital Communications (ARDC) provided funds to complete a new building suitable for hosting groups.

DSES board member Ray Uberecken, AAØL, and DSES member Roger Oakey, W3MIX, showed students how the big dish was controlled to track and focus on deep space objects as Earth revolves. DSES Vice President Bill Miller, KCØFHN, gave an overview of the

organization's history and the years of effort required to revive the 60-foot-diameter radio telescope. He introduced radio astronomy and some of the studies DSES members have conducted since restoring the telescope, including detecting pulsars and masers, observing solar and planetary radio emissions, and mapping the hydrogen line to show which galaxies are moving toward or away from Earth.

Students braved intense winds and cold to venture to the underground bunker location of the DSES amateur radio station, KØPRT. Board member Paul Sobon, NOØT, demonstrated how long-distance contacts are made using high-frequency (HF) transceivers. Under his supervision, several students learned to call CQ. Unfortunately, because band conditions were poor, no student got a response. Later, Sobon was able to contact a radio amateur in the Canary Islands, and students observed two-way HF radio communication between stations over 5,000 miles apart.

About half the students who visited the site will participate in this year's Colorado Science Olympiad competition. Jennifer Pointon, Science Olympiad coach and LAHS counselor, said she wanted students to see the Plishner facilities and learn how DSES can provide opportunities for research and mentorship in astronomy, radio, electronics, and engineering.

The Deep Space Exploration Society is an all-volunteer group united by love for science, exploration, and learning about space. Its members include engineers (software, radio, electrical), professors, pilots, business owners, military veterans, construction workers, truck drivers, and amateur radio operators. DSES welcomes new members. Student membership is free. --ARRL Letter

HOW ABOUT SOME PI WITH THAT HAM RADIO?

The [David Sarnoff Radio Club](#) (DSRC) in Princeton, New Jersey, will operate special event station N3P on "Pi Day," March 14, 2025. The event celebrates the March 14, 1879, birthday of Princeton's most famous resident, physicist Albert Einstein, best known for his equation $E = MC^2$, which states that energy and mass (matter) are the same thing in different forms.

Why call it Pi Day? If you take the distance around a circle (circumference) and divide it by the distance across the circle (diameter), you always get the number 3.14, the value known as Pi, which also happens to be the date of Einstein's birthday.

N3P will be using CW and SSB, two modes in existence during Einstein's lifetime: 14.031 (CW), 7.031 (CW), and 7.227 MHz (LSB SSB), 14.314 (USB SSB), from 2:00 PM to 9:00 PM EDT (1300-1900Z). The DSRC will also be monitoring the club repeater, 146.46, for local contacts. To receive a special event QSL card, send a self-addressed stamped business envelope along with your QSO information (call sign, state abbreviation, band, UTC time of contact) to Bob Uhrik, WA2BSP, 104 Knoll Way, Rocky Hill, NJ 08553.

MT. ATHOS DXPEDITION HALTS AMID CONTROVERSY

The Mt. Athos SV1GA/A DXpedition team halted their activation shortly after it got under way, amid challenges over whether they had permission to be there. The coveted DX entity has been a World Heritage Site since 1988 and is listed as 28th on the ClubLog DXCC List.

The team went on the air for their planned 10-day operation in late January to mark the 50th anniversary of the first amateur radio activation there. The five-member team was led by two of the operators from the original Mt. Athos activation: Martii, OH2BH and Aris, SV1GA. The other team members were Adrian, KO8SCA, Gabi, YO8WW and Niko, OH2GEK.

Their signal went silent within a day, however, after they said they received a letter from the Mt. Athos Holy Community regarding the DXpedition's right to operate at the site, which is home to about 2,000 monks in 20 monasteries. On Wednesday, the 29th of January, the team issued a public statement through Bernie McClenny, W3UR, saying that they planned to

provide authorities with whatever information is needed for the issue to be clarified, saying that they would [quote] "wait for the relevant authorities to meet and review our case." [endquote]

On Thursday, January 30th, Martii released a public statement announcing that the team was leaving the island while awaiting a decision by the local authorities who had issued the hams their permit.

An earlier statement from the team, prior to their activation, had been one of hope. The team wrote: "We would like to think that this Mt. Athos activation is just a first step in opening the doors to other teams to activate this desired amateur radio entity. Our goal is to show that amateur radio DXpeditions have no impact on the monastic life of the Holy Mountain. On the contrary, it creates goodwill and allows the 3 million amateurs around the world to see this beautiful and serene place with different eyes." --DX WORLD, DX NEWS, BERNIE, W3UR, QRZ.COM

'HAP HOLLY' KC9RP, SK

Alanson "Hap" P. Holly, KC9RP, a respected longtime resident of Des Plaines who was involved in numerous local causes and organizations — all while blind — died on Monday, Feb. 24. He was 73.

Hap, who was born in La Jolla, CA, on April 11, 1951, was well-known for his kindness and intelligence, serving as a leader of the Des Plaines Lions Club and the Des Plaines Toastmasters Club.

In addition, for much of his life he was a devoted amateur radio operator and organist. Hap was honored as "2002 Radio Amateur of the Year" by the Dayton Hamvention for his years of service to Amateur Radio.

He is survived by Stephanie Holly, his wife of 48 years. A memorial visitation for Holly will be held on Saturday, May 3 from 10 a.m. to noon at G.L. Hills Funeral Home, 745 Graceland Ave., Des Plaines.

Holly first arrived in Illinois to attend Principia College in Elsah, IL. He graduated in 1974 with a Bachelor's degree in Sociology. He and Stephanie moved to Des Plaines in 1978.

Hap and Stephanie were also active members of the Des Plaines Emergency Management Agency. He published a blog for the amateur radio community named the RAIN Report. He was employed for many years as an audio engineer and monitor for Horizons for the Blind.

According to a column written by an amateur radio operator several years ago, Holly woke up one morning when he was 7 years old only to discover he had no sight. Both of his parents were also blind, but none of his siblings were. Friends have said that he considered blindness not a disability, but rather only a challenge that fine-tuned his other senses.

A feature movie about Hap and the challenges his parents faced was made and first aired in 1996 on CBS. Its name was "What Love Sees" starring Richard Thomas. --Des Plains

Journal and Topics

TECHNICAL

HOME BREW PORTABLE 10-BAND MULTIMODE SDR RADIO – Making a multi-band amateur radio transceiver has always been a somewhat challenging project, and making one that also supported different modes would for many years have been of almost impossible complexity best reserved for expensive commercial projects. [Bob W7PUA] has tackled bot in the form of [a portable 10-band multi-mode unit](#), and we can honestly say he's done a very good job indeed.



As you might expect in 2025 it's a software defined radio (SDR), but to show how powerful the silicon available today is, it's all implemented on a microcontroller. There's a Teensy 4 with an audio codec board that does all the signal processing heavy lifting, and an RF board that takes care of the I/Q mixing and the analogue stuff.

Band switching is handled using a technique from the past; interchangeable plug-in coil and filter units, that do an effective job. The result is a modestly-powered but extremely portable rig that doesn't look to have broken the bank, and since the write-up goes into detail on the software side we hope it might inform other SDR projects too. We might have gone for old-school embossed Dymo labels on that brushed aluminium case just for retro appeal, but we can't fault it.

It's not the first time we've looked at [a small multi-band SDR](#) here, but we think this one ups the game somewhat. --Hackaday

SHORTS

TECHNICIAN CLASS COMING UP –Indianapolis Radio Club working with the Salvation Army offer 1-day Technician license preparation class with a VE tests session on Saturday, March 15, 9 AM to 6 PM.

Cost is \$20 and that includes the exam fee and lunch.

This will a review of the questions with explanations.

Coffee and donuts before the start of the class and there will be a break for lunch.

For more information or to sign up contact Jim Rinehart, K9RU; k9ru@arrl.net

HAM TO TRANSMIT SSTV IMAGES FROM 1ST POLAR-ORBIT SPACEFLIGHT – A ham radio operator is one of four astronauts who will be aboard the first spaceflight to orbit the Earth via the North and South poles. The mission aboard the Fram2 is scheduled to last anywhere from 3 to 5 days after its scheduled launch sometime after the 1st of March. The spacecraft 's name is a tribute to the Fram, a Norwegian-built ship used on expeditions to both poles during the late 19th and early 20th centuries.

The space mission's pilot Rabea Rogge of Germany is that nation's first female astronaut. She holds the amateur radio callsigns LB9NJ and KD3AID. She will transmit SSTV images using the amateur radio equipment on board. Although the images are to be sent as part of a high school and university competition for students, the images may also be received by any amateur radio operator capable of receiving SSTV transmissions. After the mission is complete, the images will also be available for viewing on the SSTV gallery of Amateur Radio on the International Space Station.

This is also an ambitious scientific research mission. Flying an estimated 425 to 450 km above both poles, the flight is expected to present unprecedented views of both polar regions. The crew will conduct a variety of scientific experiments on board.

Rabea's crew mates on the Dragon spacecraft will be commander Chun Wang of Malta, vehicle commander Jannicke Mikkelsen of Norway and mission specialist Eric Philips of Australia.

Additional details about the mission and each crew member can be found by following the link that appears in the text version of this week's newscast at ARNewsline.org

THANKS FOR READING

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