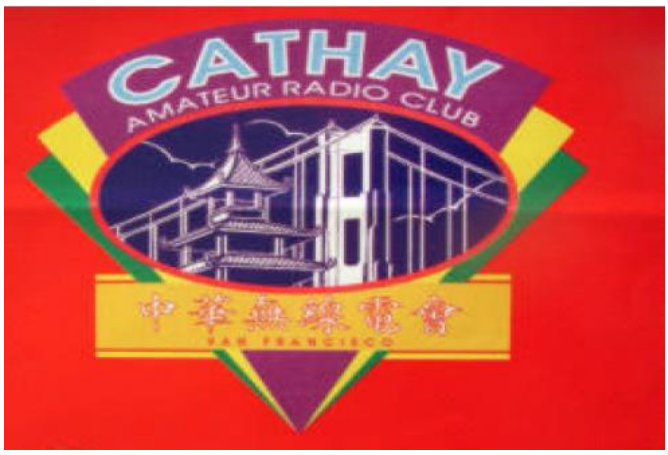

Cathay April 2025

www.cathayradio.org

President North: Leonard Tom, *NX6E* **email:**nx6e@sonic.net
Vice President South: Bill Fong, *W6BBA* - **email:**w6bba@arrl.net
Secretary/Membership: Rodney Yee, *KJ6DZI* - **email:**rodyee2000@yahoo.com
Editor: Rodney Yee, *KJ6DZI* - **email:**rodyee2000@yahoo.com
Treasurer: Rodney Yee, *KJ6DZI* - **email:**rodyee2000@yahoo.com
Web Master: Edison Fong – *WB6IQN* - **email:**edison_fong@hotmail.com
Mission: The Cathay Amateur Radio Club is basically an active social club of Ham Radio Operators and their spouses. We support local community requests for HAM emergency communications. Several of us are trained in CPR/ First Aid and are involved with community disaster preparedness.

Monday Night Net Time: 9 PM Local Time/PST, As of 8/21/2023 we are switching over from using Repeater: WB6TCS to **Nick Cassarino's Repeater: WA6GEL UHF 444.800 Mhz, Offset +5 Mhz, CTCCS/Tone PL 179.9 Hz on Monument Peak, Milpitas.**

If you cannot reach the fore-mentioned machine, please use Ralph Kugler's KC6YDH cross band repeater at 147.51MHz VHF (Simplex, Carrier Access) during the radio net time. Coverage is western side of San Francisco and central Daly City.

The CARC Monday night net is the best way to find out the latest club news. All check-in are welcome.

Message on Behalf of the President: Leonard Tom, *NX6E*

Hello CARC Members and Friends;

Many thanks to both Nick Cassarino for the use of repeater – WA6GEL and Ralph Kugler's cross band repeater - KC6YDH for our CARC Monday Night Net.

Additional folks are needed to help out with conducting the CARC radio net on Monday nights. Please contact Ed Fong (edison_fong@hotmail.com) if you are interested.

I wish to thank our CARC members that set aside their valuable time to participate in our Monday night's nets.

Introduction to Tech Section:

On April 2024, a DJI FlyCart 30 radio control aerial delivery drone demonstrated that it is capable of delivering supplies (using a cargo wench sling method) to a Mt. Everest base camp.

Spec on the drone follows:

DJI FlyCart 30 Aerial Delivery Drone

Weight with battery: 143.3 lb / 65 kg
Rotor Configuration: 54"
Operating Conditions: -4 to 113°F / -20 to 45°C
Operating Frequency: 2.4 GHz (2.400 to 2.483)
5.8 GHz (5.725 to 5.850)
Max Operating Distance: 12.4 Miles / 20 km
Max Flight Time: 18 minutes
Max Hovering Time: 28 minutes
Max Wind Condition: 26.8 mph / 12 m/s
Maximum Horizontal Speed 44.7 mph / 20 m/s
Maximum Ascent Speed 11.2 mph / 5 m/s
Maximum Descent Speed 11.2 mph / 5 m/s
Max Delivery Range with full payload is: 19.94 miles / 20 km
Max Payload Capacity: 88.2 lb
Cost is about: $20.5K
When fully unfolded its dimension are: 9.8ft by 10.12ft by 3.1ft (LxWxH)
When folded its dimension are: 3.66ft by 2.49ft by 3.37 ft (LxWxH). Folded adds height

Additional specs: https://www.dji.com/flycart-30

For more details about the done supply mission on Mt Everest, see the Tech Section of this newsletter.

CARC Final News Wrap Up

Chat sub s'em to all you CARC members! - Leonard Tom, *NX6E*

Public Service Announcements

HAM CRAM / HAM Licensing

For upcoming HAM Licensing locations please refer to:
http://www.arrl.org/find-an-amateur-radio-license-exam-session

Auxiliary Communications Service (ACS)

The Auxiliary Communications Service (ACS) is a unit of trained professionals who supply communications support to the agencies of the City and County of San Francisco, particularly during major events/incidents. ACS goals are the support of gathering and distribution of information necessary to respond to and recover from a disaster.

The ACS Net begins at 1930 hours (7:30 p.m. PT) local time each Thursday evening, on the WA6GG repeater at 442.050 MHz, positive offset, tone 127.3 Hz. The purpose of this net is to practice Net Control skills,practice checking in with deployment status in a formal net, and to share information regarding upcoming ACS events. Guests are welcome to check in. ACS members perform Net Control duty on a regular basis. On the second Thursday of each month, the net is conducted in simplex mode on the output frequency of the WA6GG repeater, 442.050 MHz no offset, tone 127.3 Hz.

ACS holds its General Meetings on the third Tuesday of each month from 1900 hours to 2100 hours local time. Currently meetings are exclusively conducted over Zoom during the COVID-19 pandemic, ACS looks forward to meeting in person again as soon as possible.

Upcoming meeting dates in 2025 are:

- May 20, 2025
- June 17, 2025
- July 15, 2025

Location of in person future ACS meetings are yet to be determined as the regular location is under reconstruction. All interested persons are welcome to attend. For further information contact Corey Siegel KJ6LDJ <kj6ldj@gmail.com>.

For more information, please attend an ACS meeting, check in on the ACS radio net, or call 415-558-2717.

Free Disaster Preparedness Classes In San Francisco – NERT Taught by San Francisco Fire Department (SFFD).

https://sf-fire.org/nert/nert-calendar-meetings-trainings-events

Training Classes: see above website. TBD

+ Recertifications
TBD

***SFFD DOT** is the Fire Department Division of Training. All participants walking, biking or driving **enter through the driveway gate on 19th St.** between Folsom and Shotwell. Parking is allowed along the back toward the cinderblock wall.

Visit ***www.sfgov.org/sffdnert*** to learn more about the training, other locations, and register on line. Upcoming Special NERT Events.

San Francisco Police Department: Auxiliary Law Enforcement Response Team (ALERT)

The Auxiliary Law Enforcement Response Team (ALERT) is a citizen disaster preparedness program designed. The ALERT program is for volunteers 16 years of age or older, who live, work, or attend high school in San Francisco.

Graduates of the San Francisco Police Activities League (P.A.L) Law Enforcement Cadet Academy are also eligible to join.

ALERT volunteers will no longer need to complete the Fire Department's Neighborhood Emergency Response Team (NERT) (www.sfgov.org/sfnert) training and then graduate into two 8 hour Police Department course specifically designed for ALERT team members.

ALERT members will work closely with full-time and/or Reserve Police Officers in the event they are deployed after a disaster. The Basic ALERT volunteer will have no law enforcement powers other than those available to all citizens.

SFPD ALERT Training (New Members)

The next SFPD ALERT training class has been scheduled for: TBD

*Class date indicated are only for new members

IMPORTANT- All participants must complete the background interview process in order to be eligible to attend the ALERT training class.

Eligible ALERT participants may register fora training class by contacting the ALERT Program Coordinator, marina.chacon@sfgov.org, or by telephone at 415-401-4615.

SFPD ALERT Practice/Training Drill

All active/trained ALERT members are asked to join us for our next training drill, via scheduled for on TBD

For more information on the San Francisco Police Department ALERT Program, email us at sfpdalert@sfgov.org, or call Lt. Marina Chacon (SFPD Ret.), SFPD ALERT Program Coordinator, at (415) 401-4615.

For additional information on the web please refer to:
https://sfgov.org/policecommission/alert

Tech Article

Media Center

DJI Completes World's First Drone Delivery Tests on Mount Everest

News 2024-06-05

https://www.dji.com/media-center/announcements/dji-completes-world-first-drone-delivery-tests-on-mount-everest-en

https://www.youtube.com/watch?v=qwI-y_0qZi0

DJI has teamed up with Nepalese drone service company Airlift, video production company 8KRAW, and Nepalese certified mountain guide Mingma Gyalje Sherpa, to fly the world's first successful delivery drone trials on Mount Everest (Mount Qomolangma).

Completed in April, this historic milestone in aviation highlights the impressive capabilities of DJI FlyCart 30, which can carry 15kg (33 lbs) payloads even in the extreme altitude and environmental conditions of Mount Everest.

During the tests, three oxygen bottles and 1.5kg (3.3 lbs) of other supplies were flown from Everest Base Camp to Camp 1 (5,300-6,000m ASL / 17,598 -- 19,898 feet). On the return trip trash was carried back down.

"From the end of April, our team embarked on a groundbreaking endeavor to help make cleanup efforts on Everest safer and more efficient," said Christina Zhang, Senior Corporate Strategy Director at DJI. "We are thrilled to share that our DJI FlyCart 30 was up to the task.

The ability to safely transport equipment, supplies, and waste by drone has the potential to revolutionize Everest mountaineering logistics, facilitate trash cleanup efforts, and improve safety for all involved."

A Historic Achievement in Aviation

For the first time, drones have successfully completed the round-trip transportation of equipment and trash between Everest Base Camp and Camp 1 (17,598 -- 19,898 feet).

These camps are separated by the Khumbu Icefall, one of the most perilous stages of the ascent. While helicopters can theoretically make the same journey, they are rarely used due to the significant dangers and costs.

Before undertaking delivery flights, DJI engineers considered the extreme environmental challenges of Everest, including temperatures ranging between -15°C (59°F) to 5°C (41°F), wind speeds up to 15m/s (33.55 mph), and high altitudes over 6,000m AS (19,898 feet).

Rigorous tests of DJI FlyCart 30 were then conducted, including unloaded hover, wind resistance, low-temperature, and weight capacity tests with successively heavier payloads.

Delivering Safer Mountain Operations

Traditionally, the responsibility of transporting supplies and clearing trash on Everest has fallen on the shoulders of local Sherpa guides who may need to cross the icefall over 30 times in a season to transport supplies such as oxygen bottles, gas canisters, tents, food, and ropes.

"We need to spend 6-8 hours each day walking through this icefall," said Mingma Gyalje Sherpa, Imagine Nepal mountain guide. "Last year I lost three Sherpas. If we're not lucky, if our time is not right, we lose our life there."

The hazardous climb across the Khumbu Icefall typically happens at night when temperatures are lowest and the ice is most stable. An unmodified drone can carry 15kg (33.03 lbs) between camps in 12 minutes for a round trip, day or night. DJI's delivery drones aim to ease the burden on Sherpas, who repeatedly risk their lives navigating the treacherous Khumbu Icefall.

Mount Everest Trash Cleanup

Each climber is estimated to leave 8kg (17.637 lbs) of trash behind on Everest and, despite cleanup efforts, an estimated tonnes of waste remains on its slopes.

If drone technology can ease this burden on cleanup crews, DJI is eager to help. DJI FlyCart 30 can efficiently transport garbage and human waste down the mountain, reducing the volume of trips Sherpas must make across the Khumbu Icefall.

Changing the Game- The Future of Drone Delivery

The climbing season of Everest is restricted to April and May, and further activities and drone testing are restricted for the rest of the year due to adverse weather. However, because of recent successful trials, the Nepalese government contracted a local drone service company to establish drone delivery operations on the southern slope of Everest starting on May 22.

The deployment of delivery drones in high-altitude regions not only promises to enhance safety and efficiency in these challenging environments but also highlights the

importance of environmental conservation and sustainable practices within the mountaineering industry.

Launched globally in January 2024, DJI FlyCart 30 provides practical transportation solutions tailored to the unique needs and challenges of local users. It has been deployed to help plant saplings in steep hillside environments and line pulling in Japan, to transform solar PV installation in Mexico, to aid mountain fire rescue efforts in Norway, and to improve scientific research operations in Antarctica.

For more information, visit our:
Website: www.dji.com
Online Store: store.dji.com
Facebook: www.facebook.com/DJI
Instagram: https://www.instagram.com/djidelivery_official/
Twitter: https://twitter.com/DJI_Delivery
LinkedIn: www.linkedin.com/company/dji
Subscribe to our YouTube Channel: https://www.youtube.com/@DJIDelivery