



## September Newsletter 2021

KCARC Meeting  
Monday, September 13, 7:00 PM  
Public Library @ Abilene Mall

WEEKLY NET TIME  
Thursday, 8 PM on 146.76 repeater  
(146.2 Hz tone)  
Club Website:  
<https://keycityarc.org/>

### 2021 Officers:

Allen Brooks, KF5SPQ, President  
Ron Harden , WT5X, Vice President  
Jacob Bachmeyer, KE5WHG, Secretary  
Peg Richard, KA4UPA Treasurer

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### **The Prez Sez ...CQ CQ CQ...**

At our next month's meeting, in October, it will be time again to nominate persons for club leadership. Then in November we will vote on those persons. It has been historically common to vote persons into office via "acclamation" without a lot of thought at the time often seemingly.

I would like to recommend that everyone talk with your candidate of choice BEFORE the meeting in October. Ask that person if they would be willing and able to serve in that particular position of leadership. Then at the October meeting present that person's name for nomination.

I want to thank everyone in the club for their individual leadership and participation in the club in the past year, i.e. Field Day, Steam N Wheels bicycle race, etc. this past year. I also want to say "Thank You" for allowing me to be your President for this club. I hope that I have enabled this great club and its great people to grow in some small manner.

I am looking forward to our September meeting and the program that will be presented. I enjoyed last month's presentation by Jim Chandler on the Arrow Antenna.

"73's everyone!".

Thanks!

Allen Brooks, KF5SPQ

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### **Pegged by Peg ...**

Reminder that 2021 dues are payable at \$20.00 per family, all living at one address, or \$15.00 per individual for the year. You can mail to:

Peg Richard, KA4UPA, KCARC Treasurer  
1442 Lakeside Dr  
Abilene, TX 79602

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## Upcoming Hamfests:

10/02/2021 - [HamEXPO Fall 2021](#)

**Location:** Belton, TX

**Type:** ARRL Hamfest

**Sponsor:** Temple Amateur Radio Club

**Website:** <https://www.tarc.org/>

10/22/2021 - 10/23/2021

[Hamarama Holiday 2021](#)

**Location:** Ardmore, OK

**Type:** ARRL Hamfest

**Sponsor:** Central Oklahoma Radio Amateurs (CORA) and Texoma Hamarama

**Website:** <https://hamholiday.com>

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### CONTESTS:

<http://www.arrl.org/contest-calendar>

### August 2021

7-8 [222 MHz and Up Distance Contest](#)

21-22 [10 GHz & Up – Round 1](#)

22 [Rookie Roundup – RTTY](#)

### September 2021

11-13 [September VHF](#)

18-19 [10 GHz & Up - Round 2](#)

### October 2021

18-22 [School Club Roundup](#)

23-24 [EME - 2.3 GHz & Up](#)

### November 2021

6-8 [Nov. Sweepstakes – CW](#)

20-22 [Nov. Sweepstakes – Phone](#)

20-21 [EME - 50 to 1296 MHz](#)

### December 2021

3-5 [160 Meter](#)

11-12 [10 Meter](#)

19 [Rookie Roundup–CW](#)

18-19 [EME - 50 to 1296 Mhz](#)

For a more extensive Ham Radio Contest Calendar, check this website:

<http://www.hornucopia.com/contestcal/contestcal.html>

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### HAM EXAM SESSION

Berry Lane Baptist Church

1515 Lakeside Dr

Abilene, TX at 1 p.m.

Saturday, \*\*\*\*Pending\*\*\*\*

Ron Harden Jr., WT5X is the VE Liaison. His email is: [wt5x@wt5x.org](mailto:wt5x@wt5x.org)

Phone: 325-513-3184

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### \*GENESIS Ham Satellites among Payloads Lost in Launch Failure

09/07/2021

The GENESIS-L and GENESIS-N ham radio satellites were among several carrying amateur radio payloads **lost** following the failure of the Firefly Alpha rocket during its first launch on September 2 from the Vandenberg Space Force Base in California. An anomaly occurred about 2 minutes into the mission, causing controllers to destroy the launcher in flight. The anomaly has yet to be explained.

This was sad news for AMSAT-EA (Spain), as GENESIS-L and GENESIS-N were the first satellites they had built themselves.

According to the AMSAT-EA website, the GENESIS satellites were destroyed after the Firefly Alpha vehicle presented an anomaly as it hit a velocity of Mach 1 and reached Max Q, a point of maximum aerodynamic pressure on the vehicle. The launch had been halted a few seconds before takeoff, but the countdown was subsequently resumed.

GENESIS-L and GENESIS-N were to conduct a series of telecommunications-related experiments, while a ground-station analysis of the received signals would try to attain Doppler variations in order to perform orbit determination and satellite identification from radio amateur stations around the world.

Also lost in the launch failure were the Serenity, Hiapo, the Cresst Dream Comet, and QUBIK-1 and QUBIK-2 satellites, and Spinnaker-3/Firefly Capsule 1. All were designed to use amateur radio frequencies for telemetry and/or communication.

Serenity, a 3U CubeSat, was developed by Teachers in Space (TIS) to provide low-cost opportunities to test educational experiments in space. TIS has previously guided high schools and other academic institutions in developing and flying sub-orbital experiments using high-altitude balloons, stratospheric gliders, and rockets. This was the first orbital satellite mission for TIS. Serenity carried a suite of data sensors and a camera to send data back to Earth using amateur frequencies.

Hiapo was an educational 1U CubeSat developed by the Hawaii Science and Technology Museum (HSTM). The Hiapo project was intended to provide hands-on STEM curriculum for Hawaii students in grades K – 12. Part of this curriculum involved obtaining data about solar flares, solar particle

events, and disturbances in Earth's magnetic field. Data would be available for amateur operators to download directly from the satellite.

The Cresst Dream Comet was a 3U CubeSat developed by the University of Cambridge as a small satellite for technology demonstrations.

QUBIK-1 and QUBIK-2 were picosatellites developed by the Libre Space Foundation, a nonprofit association developing PocketQube picosatellite technology. They were built following the [1P PocketQube](#) form factor. The mission of these satellites was similar to that of the GENESIS-L and GENESIS-N satellites.

Spinnaker-3 was a collaboration between the Cal Poly CubeSat Laboratory, Purdue University, and NASA. It was designed to provide rapid de-orbit capability for the second stage of Firefly Alpha's launch vehicle, using frequency shift keying (FSK) on 70 centimeters for communications. Firefly Capsule 1 consisted of nontechnical items from around the world, including photos, artwork, and books.

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**From ARRL website**